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INDEX

TO

THE CALCUTTA GAZETTE

FROM

JANUARY TO JUNE 1893.

Index to the Supplement

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SUPPLEMENT TO

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CONTENTS.

SCARCITY IN 1891-92.

REVENUE DEPARTMENT—AGRICULTURE.

Calcutta, the 2nd January 1893.

RESOLUTION No. 17Agri.

READ again—

(1) Correspondence with the Commissioners of the Patna, Bhagalpur, and Rajshahi Divisions regarding the recent scarcity in parts of those Divisions.
(2) Records of the relief operations of 1873-74 and 1888-89.
(3) Bengal Famine Code, revised edition of January, 1892.
(4) This Government's Resolution No. 1529Agri., dated the 16th April, 1892.

Read—

Final reports of the relief operations of 1891-92, viz.—

(5) Letters No. 577M., dated 1st September, 1892, and No. 592Mct., dated 31st October, 1892, from the Commissioner of the Rajshahi Division, with enclosures.
(6) Letter No. 728G., dated the 10th October, 1892, from the Commissioner of the Patna Division, with enclosures.
(7) Letters No. 2116R., dated 12th October, 1892, No. 2174R., dated 15th October, 1892, and No. 2270R., dated [illegible]th October, 1892, from the Commissioner of the Bhagalpur Division, with enclosures.

THE rainfall of 1891 was below the average over the whole of Bengal, but the deficiency was most marked in Behar and the districts of Bengal north of the Ganges. Although the *bhadoi* crop was not generally affected, much

damage was caused to the great winter rice crop of the Province. The information received from the localities suffering from drought indicated at an early stage possibilities of widespread distress, and the apprehensions which the Lieutenant-Governor had entertained were borne out by his observations when travelling through the Patna Division in November, 1891. It was, however, still possible then that a good fall of winter rain would enable a plentiful *rabi* crop to be reaped. This hope was disappointed; no rain fell in December or January, and the *rabi* crop, except on irrigated or low-lying lands, was almost a total failure. Full and periodical reports were called for from the local officers, and, in order to maintain the administration in readiness to meet famine should it come, the lists of works available for purposes of relief were prepared afresh, and a revised edition of the Bengal Famine Code was issued in January, 1892. In March and April, when relief operations were actually in progress, the Lieutenant-Governor visited the affected tracts in the districts of Monghyr, Bhagalpur, and Purnea, and found that on certain points the provisions of the Code were not precisely suited to the exact stage of distress which had then been reached. Detailed instructions were, therefore, issued in the Resolution of 16th April, 1892, quoted in the preamble, for the guidance of the officers concerned, as to the classification of relief works and workers, the calculation of the wage to be paid, the amount of work to be exacted from each labourer, the registers to be kept, and the returns and reports to be submitted in connection with relief works as well as gratuitous relief. The Lieutenant-Governor also reminded the District Boards that, as an integral part of the administration, they were required in times of scarcity or famine to do more than merely provide funds for relief works under Chapter XI of the Famine Code; that it was incumbent on them to recast their budgets; and that, after providing for all obligatory expenditure such as establishment, maintenance of works and buildings, and completion of works in progress which would suffer seriously from being stopped and entail great loss in the end, all the rest of their expenditure on public works should be devoted to such operations as could be classed as relief works.

2. Before the situation was fully developed, it was at first anticipated that the tracts which would suffer most would be the Gaya, Muzaffarpur, and Darbhanga districts, a portion of Shahabad, and the Monghyr, Bhagalpur, Purnea, Dinajpur and Bogra districts. Champaran, which had suffered severely in 1873-74 as well as in 1888-89, was subsequently included in the number of affected areas. Appendix I to this Resolution shows the rainfall in each of these districts from 1st May, 1891, to 31st July, 1892, the fall during the months of May to August, inclusive, in 1891, and for the two individual months of September and October, being compared with the normal rainfall and the actuals in 1873 and 1888. The short rainfall in 1891 was chiefly confined to the last two months of the ordinary monsoon period: the *bhadoi* or early rain-crop was probably a full average; and this fact, combined with the good harvest of the preceding year, mainly accounts for the comparative immunity from distress of all the districts in which the *bhadoi* is largely sown, in spite of the failure of the winter and spring crops. In the Patna Division, taken as a whole, and for the whole province the *bhadoi* crop was estimated by the Director of the Department of Land Records and Agriculture at 12 annas, an estimate which proved to be correct. But, except in the districts of Champaran and Bogra, and in the canal-irrigated portions of the district of Shahabad, the estimated outturn of the winter rice crop was nowhere above 6 annas in the districts about which anxiety was felt. There was a fairly general, though light, fall of rain in Bihár and Northern Bengal about the middle of February, but this rain was generally too late to do much good to the *rabi* crops. Happily no serious distress requiring the intervention of Government ever made its appearance in the districts of Bogra, Champaran, Shahabad, and Gaya. In Bogra, which was one of the districts considered likely in 1873-74 to be the severest sufferers, about one-third of the normal area had not been planted at all with winter rice for want of water at the time of transplanting. But the rain which fell in this district in September improved the prospects, and a 10-anna crop was obtained. The outturn of the *bhadoi* crop having been over 16 annas, there was no actual distress. The price

of common rice averaged 12 seers 11 chittaks, and test works opened at three places in the beginning of March, 1892, attracted very few labourers, and were closed on the 9th April. In Champaran the estimated average outturn of the winter rice was 10 annas, but, the *rabi* having generally failed, it was feared that there would be some distress among the labouring classes. In the Kesairi thana of the Sadar sub-division, the worst part of the district, test works were opened in June, and 516 persons attended on the 4th, and 490 on the 5th; but heavy rain fell on the night of the 5th, and, very few persons having come to work on the following morning, the works were closed on the 7th. In Shahabad, a great part of the district is protected by the Sone Canals; irrigation produced a magnificent rice crop and was extended to a much larger area of *rabi* than had ever been previously watered; still some anxiety was felt for the Bhabhua sub-division, especially the Chainpur and Mohania parganas, comprising an area of 1,000 square miles, and distress was also apprehended in a portion of Chausa (Buxar). In the Bhabhua tract, where population is sparse, the *bhadoi* outturn was estimated at 4 annas, and the winter rice from 1 to 8 annas. But the *rabi* yielded from 8 to 12 annas, and there were eventually no symptoms of distress. The improvement in this sub-division was attributed chiefly to the rainfall, such as it was, in February, but was to some extent the result of embanking a hill stream called the Dargaoti, to which Government contributed Rs. 2,000. By this means a considerable area of country was irrigated, and a fine *rabi* crop secured. In the Buxar tract also the danger was averted by the outturn of the *rabi* crop, which was estimated at 10 annas at least. The position of Gaya was at one time more alarming, the worst parts of the district being half of the Aurangabad thana, and a portion of the Jahanabad sub-division, out of the reach of canal irrigation. The outturn of the winter rice was only 5½ annas, and that of the *rabi* crop varied from six to eight annas. From March to June, 1892, the price of common rice varied from 12 to 10¾ seers, and that of wheat from 15 to 13 seers, for a rupee. Test works were opened in different places from time to time, but the population nowhere availed themselves of the opportunities of obtaining work, although in one case a daily wage of 2 annas was offered. The explanation is that relief was effectually provided by agricultural works of improvement and by the advances made to carry them out. Up to 31st March, 1892, Rs. 35,000 were granted under the Land Improvement Loans Act, and Rs. 12,000 under the Agriculturists' Loans Act, and from 1st April to the end of June, 1892, the advances under these Acts amounted to Rs. 12,950 and Rs. 1,396 respectively. In Gaya there is an excellent system of catching the surface rain water, and leading it by channels into shallow reservoirs held up by earthen embankments. To carry out this method of irrigation a large amount of earthwork is required, and, with the advances made by Government, there was no dearth of employment. The effects of the scarcity were felt among the classes not accustomed to severe manual labour; the number of beggars increased, and a tendency was noticed among the poorer classes to abandon their helpless relatives and dependents, but private charity met all the necessities of the case, and the Mahant at Bodh Gaya is reported to have given alms to all applicants.

The districts where relief operations were actually carried on for any length of time were Muzaffarpur, Darbhanga, Monghyr, Bhagalpur, Purnea and Dinajpur; and of each of these a detailed account is given below.

Muzaffarpur.

3. The tracts which suffered most in 1892 in the district of Muzaffarpur were the Lalganj thána of the Hajipur sub-division, and the Belsand and Shiuhar thánas, *i.e*, the south-western part of the Sitamarhi sub-division. There was also considerable distress in a tract to the west of Muzaffarpur between Paru, Sahibganj, and Bamraj, and in parts of the Katra and Muzaffarpur thánas in the Sadar sub-division. The outturn of the *bhadoi* of the year 1891 had been excellent, being estimated at 16 annas in the Sitamarhi and Sadar sub-divisions, and 14 annas in the Hajipur sub-division. Up to the middle of September of that year the prospects of the winter rice also were good, but from that time the crop began to be affected by want of rain, and to wither on the higher

lands. Early in October the reports became less favourable, and eventually the crop gave an outturn of 7 annas in the Sitamarhi sub-division, and of 5 annas and 3 annas in the Sadar and Hajipur sub-divisions respectively. In the Hajipur sub-division the rice crop is not important, but the *rabi* too failed, the estimated outturn for the district being 2 to 3 annas. Happily the northern part of the Sitamarhi sub-division, which had been the chief seat of distress in 1888-89, escaped entirely, being saved by the plentiful *bhadoi* crop, and the winter rice, the most important crop in this tract, was comparatively good. In March 1892, the Pupri thána of the Sitamarhi sub-division gave some cause for alarm, which, however, was never realised. When the distress was at its highest in May, the total area affected comprised 1,300 square miles, with a population of 1,173,785 persons. There was no lack of food in the district, and the imports and exports of food-grains by rail from the beginning of April to the middle of July 1892 were 1,52,438 maunds and 32,521 maunds respectively. Imports were largest in May and June, and exports increased as soon as the advent of the rains revived the confidence of the trading community. A comparative statement of prices of the principal food-grains for this as well as the other districts is given in Appendix II to this Resolution.

Relief works were opened in the first week of March, and the largest daily average number of persons employed was 14,147 (10,760 men, 1,568 women, and 1,819 children) in the week ending 4th June. From the second week of June the numbers steadily decreased until the works were finally closed on the 11th July, when field work became abundant. The relief operations have resulted in several valuable additions to the district communications. Many cart tracks, which were almost impassable in the rains, have been converted into raised roads of serviceable breadth. An embankment which protects the town of Muzaffarpur has been extended and strengthened, and the excavation of 17 tanks has been completed. A special feature of the relief operations in this district is that there were very few C class labourers, and no gratuitous relief was distributed. The average quantity of earth-work done by each labourer in one day was also large, being 92 cubic feet, and the average cost per 1,000 cubic feet, with a lead under 50 feet, was Re. 1-3-6. Mr. J. H. Bernard, who was Collector during the greater part of the relief operations, has recorded his opinion, based upon practical experience, that one rupee per 1,000 cubic feet with a short lead would be a sufficiently liberal rate for earth-work.

During the period of distress Rs. 25,616 were distributed as loans under the Agriculturists' Loans Act, and Rs. 200 under the Land Improvement Loans Act.

No death from starvation was reported or is believed to have occurred, though it may be accepted as a truism that it is likely that distress hastened the deaths of those who were already feeble from illness and old age.

In this district no private individuals assisted Government by opening relief works, but several indigo-planters rendered valuable service in supervising relief works, and also in the distribution of loans, which obviated the necessity of employing a large number of circle officers, and thus saved Government a considerable amount of expenditure on account of establishment. Their local knowledge was of the greatest assistance to the district authorities, and the punctuality and completeness with which they carried out instructions and sent in returns were most satisfactory. The Lieutenant-Governor desires that the thanks of Government may be conveyed to each of these gentlemen. Mr. A. Forbes was Collector of the district at the commencement of the relief operations, and was succeeded on the 17th May by Mr. J. H. Bernard. The latter has brought to the favourable notice of Government the good work done by Mr. E. V. Levinge, Sub-divisional Officer of Sitamarhi, and by Mr. L. F. Morshead, Sub-divisional Officer of Hajipur. Mr. G. W. Disney, as District Engineer, had immediate charge of the relief works, and by his knowledge of the district and able management rendered great help to the Collector.

Darbhanga.

4. The effects of the drought and consequent scarcity were more acutely felt in the Darbhanga district than elsewhere. The affected tracts were the Roserah and Bahera thánas, and a small portion of the Darbhanga thána to the east of the Darbhanga town in the Sadar sub-division; the Benipati and Khajauli thánas,

the northern half of the Madhubani tháná and parts of the Phulparas tháná, in the Madhubani sub-division. The Khajauli tháná formed a part of the tract along the Nepal frontier, 90 miles in length, which suffered severely in 1888-89. These tracts, comprising in all 1,185 square miles, or about one-third of the total area of the district, are especially liable to famine, as they depend mainly on the winter rice crop. The outturn of the *bhadoi* crop of 1891 was 14 annas and 12 annas in the Sadar and Madhubani sub-divisions respectively, but this crop covers a comparatively small area. The winter rice crop of 1891-92 on the high lands was a total failure over the greater part of the district, and the outturn of the crop was only about 5 annas in both sub-divisions. Enquiries made in various places, however, tended to show that there were stocks of grain in the district, and from April to July 1892, inclusive, 3,02,622 maunds of food-grains were imported into the district, and 75,529 maunds exported, by rail. No difficulty was at any time experienced in providing supplies of food for the labourers on relief works. The statement given in Appendix II to this Resolution shows how remarkably little the prices of food-grains fluctuated. During the period of eight months common rice varied only between 14 seers per rupee as a maximum and 12 seers per rupee as a minimum. When the distress was at its height in May and the beginning of June, the highest price of *marua* (*eleusine corocana*), the staple food of the lower classes, was 17 seers 9 chittaks per rupee. As the normal price of this grain at that time of the year is about 25 seers the rupee, the ruling rate of the bazar indicates no great pressure. The observation is probably correct that it was a famine of money and not of grain, for those who suffered were the labouring classes for whom there was no work and the petty cultivators who, in ordinary years, live on the produce of their fields, eked out with labour paid for in kind in preparing the lands of wealthier raiyats.

The distressed tracts were divided into seven circles, viz., Benipati, Murukhia, and Bheja in the Madhubani sub-division, and Salehpur, Bahera, Hati, and Buchauli in the Sadar sub-division. The first works, consisting of three tanks, were opened in the Bheja circle (at first called Nawada) in the beginning of March. The Murukhia circle (at first called Katowna) was opened on the 14th March. In the Sadar sub-division operations were commenced on the 28th March, and by the beginning of April all the circles were at work except Benipati, which was opened on the 16th May. The distress in this circle was never so severe as elsewhere, and the task of Government, including the District Board, was lightened by measures taken by the Maharaja of Darbhanga, who owns a large portion of the land in the Benipati tháná. Fears were entertained in May that the numbers of people on relief works were becoming so large as to exceed the capacity of the District Officer to organise them properly. Mr. D. R. Lyall, C.S.I., member of the Board of Revenue, paid a visit of inspection to Darbhanga, and his report satisfied the Lieutenant-Governor that the control over the masses of labourers was fairly efficient and that a good return was being obtained for the wages paid. The highest number of labourers, employed on the 11th June, was 47,452 (36,015 men, 6,162 women, and 5,275 children), but the rate of Re. 1-6-6 per 1,000 cubic feet of earthwork then allowed was suspected to have attracted a large number of professional diggers, such as *nonias* and *beldars*, and was reduced to Re. 1, the rate then prevailing in the district of Muzaffarpur. Consequently, by the 18th June the numbers had fallen to 25,815, and by the 2nd July to 12,89[illegible]. This may be ascribed partly to the reduction of the piece-work rate, and partly to the rain which, about this time, began to fall and induced the people to return to their ordinary occupations in the fields. The number of labourers continued to decrease, and circle after circle was closed until on the 19th of July there was no relief work open in any part of the district. More difficulty was experienced in this district, by reason of the greater numbers involved, than elsewhere in the organization of the labourers employed on relief works. As a matter of fact, the distinction between classes A and B, *i.e.*, labourers paid by piece-work and those paid by task-work, respectively, was observed only in the Murukhia circle, and there was no difficulty in arranging for two classes only, A (labourers at piece-work rates) and C (persons capable of very light work and paid by daily wages), the people classed by the overseers as B themselves

preferring to work in class A. The intention of Government is that class B should be confined to those who are unaccustomed to earth-work, or are temporarily enfeebled by want, and that as soon as they grow strong and skilful enough to earn a full wage by piece-work, they should be transferred to the A class. As the District Engineer, Mr. H. W. Stevens, has reported, two classes, A and C, are practically sufficient, and in this district the stage of distress was never reached at which the permanent maintenance of an intermediate class was required.

The relief works carried out consisted of tanks and roads. Altogether 67 tanks have been dug at an actual cost, excluding establishment and other charges, of Rs. 94,310, the total quantity of earth excavated being 39,952,124 cubic feet. The total storage capacity of the tanks for water is 47,433,825 cubic feet, which would irrigate 19,764 bighas with two inches of water, and Mr. Dalton considers this enough to save the rice crop in the event of its being endangered by any future failure of the October rains. Work was taken in hand on 994 miles of road, of which 582½ miles have been finished, the total amount of earthwork done being 81,986,820 cubic feet, at a cost of Rs. 1,00,902, exclusive of establishment, the average rate per thousand cubic feet being Re. 1-3-8.

Gratuitous relief was found necessary only in four circles—Bheja, Murukhia, Salehpur, and Bahera. In Bheja and Murukhia, where this form of relief was commenced towards the latter end of April, there was, however, no great demand for it. In the Salehpur and Bahera circles gratuitous relief had to be given on a large scale. In these circles, respectively, the average number of recipients of such relief was 357 and 147 daily. The attention of the local officers was at first directed chiefly towards the northern and southerly circles of the district; the country about Bahera and Salehpur was not believed to be in so much danger; relief works were not opened in these circles till the beginning of April, and the regular distribution of gratuitous relief was not commenced till the 15th of May, when many persons of the most indigent classes had been weakened by insufficient food. The largest number in receipt of gratuitous relief, viz. 1,550 (248 men, 692 women, and 610 children), was reached in the week ending 28th May, and this form of relief was finally closed on the 23rd July. The total amount expended on gratuitous relief was Rs. 1,577-5-10, which was more than covered by the following contributions:—

		Rs.
Maharaja of Darbhanga, Rs. 500 a month for three months	...	1,500
Raja Rameshwar Sing	...	500
Rai Ganga Prasad	...	500
Total	...	2,500

C class labour being only another form of gratuitous relief, the Lieutenant-Governor approves the Collector's proposal that, when the final adjustment of accounts is made, this amount should be set off against the combined cost of gratuitous relief and C class labour.

As few individuals of the better classes received gratuitous relief in this district, there was little scope for successful efforts in the direction of obtaining some return for the weekly dole. A small amount of cotton-spinning was done by some *parda-nishin* women in the Bahera circle. The quantity of cotton spun was sold for Rs. 33-6, leaving a small profit to the famine account.

There was a great clamour for agricultural loans, which was not confined to the affected area, and it is a question whether many of the applicants did not contemplate lending the money again at higher interest. Of 2,186 applications received, all except 349 were rejected, and, in accordance with instructions given by Government, loans were restricted to the affected area and limited ordinarily to Rs. 2 per bigha. The advances made amounted to Rs. 11,880 in the Sadar and Rs. 19,992 in the Madhubani sub-division. There is no doubt that these loans enabled many of the poorer among the Brahman and Rajput cultivators to afford employment to a considerable number of labourers, and no lands anywhere lay uncultivated for want of either seed or labour.

There was no authenticated instance of a person previously enjoying average health and strength having died from inanition, but in Darbhanga, as in Muzaffarpur, the Collector heard of cases of old men and women dying, whose death was in all probability accelerated by insufficient nourishment. During the period of scarcity cholera was raging in the district, and some deaths, reported to be from starvation, were found on enquiry to be due to that disease.

The Maharaja of Darbhanga afforded material aid in the relief of distress. Besides paying a total contribution of Rs. 1,500 towards gratuitous relief, as already mentioned, he opened four tanks in May in the Raj circle of Rahika in which Benipati is situated, and instructed his sub-manager to attend to individual cases of want. He also provided four doctors for the treatment of the sick in the affected tracts, gave advances to his raiyats, and distributed a large quantity of seed *dhan*. The Lieutenant-Governor has much pleasure in recognizing the valuable assistance which the Maharaja of Darbhanga afforded to Government.

Mr. G. J. B. T. Dalton was Collector of Darbhanga throughout the period of distress, and though in bad health, never spared himself in the most trying weather. The works were directly under the District Engineer, Mr. H. W. Stevens, whose long acquaintance with the district was of much service in the relief operations. Mr. A. E. Harward was engaged during part of the time in visiting the distressed areas and reporting on the works.

Monghyr.

5. In the district of Monghyr anxiety was felt chiefly for a low tract of country in the Sadar sub-division on the north of the Ganges, extending to the boundaries of the districts of Bhagalpur and Darbhanga. Local exaggerations at the outset created a wrong impression of the real state of affairs. Ultimately Government relief operations were found necessary only in the extreme north of this belt, within the jurisdiction of the Bakhtiarpur outpost of the Gogri thána, which was a relief centre in 1874. The recollection of that year was still fresh among the people, and led to some apathy on their part, as they fancied that Government would again interfere with trade and import grain in large quantities. Mr. C. E. A. W. Oldham, Assistant Magistrate, was in charge of the relief operations. The distress in the tract affected was accentuated by the extreme poverty of the population in all seasons, the sandy nature of the soil over the greater part of the area, and the failure of the rains for two successive seasons. In 1891 the *bhadoi* outturn in the Gogri thána was only a four-anna crop, the yield of the following winter rice in Bakhtiarpur was about four annas, while the *rabi* crop of 1891-92 may be estimated at three annas. No figures are available as to the movements of food-grains in this particular tract, but the figures for the whole district, from the middle of May to the middle of August, show 1,43,059 maunds exported and only 28,303 maunds imported by railway.

Work was opened on two roads on the 7th February, but failed to attract persons in need of relief, as would have been the case if there had been real distress, till the latter end of May, when the excavation of some tanks in the extreme north of the district was started with the result that there was a sudden rush of labourers. It is believed that the people of the affected tract at first had recourse to the relief works in the Bhagalpur district, which were very close, and came back when tank work was started on the Monghyr side of the border. The Lieutenant-Governor does not feel sure that the real cause of the low numbers in April and May has ever been ascertained, but though close enquiry was made, nothing was found to raise a suspicion that the works were badly managed and that the labourers did not receive a fair wage for their work, though certainly the average outturn of work was very small. Mr. Vowell, as Collector of the district, visited the relief works on the 3rd July, and is stated to have been of opinion that tank work tended to relax discipline, which could be better exacted along a line of road. The Lieutenant-Governor does not understand why this should be the case, and considers that, within the comparatively small area of a tank, supervision can be exercised better than over a line of labourers stretching along several furlongs of road. But, as observed by Mr. Quinn in his report on the district of Bhagalpur, the

labourers may secure some special, and probably illegitimate, advantage in tank work; this, however, should be prevented to a great extent by close supervision and strict measurement.

The highest average attendance on relief works was reached in the week ending the 2nd July, when the average daily number was 1,815 (1,060 men, 500 women, and 255 children). The rains set in from the beginning of this month, and by the middle of it the situation was so far relieved and the prospects of the *bhadoi* crop were so assured that the labourers rapidly dwindled away and the works were closed on the 23rd. The works undertaken consisted of three tanks, and the raising of five, and construction of two roads, of which only the tanks were finished. The rate during the first week or two was 1½ annas per 100 cubic feet to males, and one anna to females for a corresponding task. Subsequently the rate was lowered to 1¼ annas for males. In Mr. Oldham's opinion this rate was not the least too high, and afforded as perfect a test as possible. Gratuitous relief was commenced in the latter part of February, and was continued till the 20th August, *i.e.*, a month longer than the works. The highest figure was reached in the week ending 5th March, when 250 persons were relieved. When the Lieutenant-Governor visited this district in the beginning of April, he saw the distribution of relief at Bakhtiarpur, and was pleased with the order and method observed. For the relief of women above the lowest orders, 30½ maunds of cotton were distributed to be spun into thread. The cost of the cotton was Rs. 542-13, and the value of the thread is estimated at Rs. 623, so that there is a probable gain of Rs. 80-13. Loans were confined to cultivators holding from 10 to 30 bighas of land. The total amount distributed was Rs. 19,088. There was no death from starvation, but the officer in charge of the relief operations came upon cases, of destitution, discovered by personal enquiries, in which private charity had failed and state aid had to be given. There is nothing to indicate that the death-rate of the affected tract was in any way increased by the distress. In this district, as well as in Bhagalpur and Purnea to a certain extent, two roots, known as *chichar* and *bisaur*, proved a great help to the poorer classes. The former (*cyperus rotundus*) is a bulb somewhat like a very small potato, growing in low-lying swamps, and the latter is the root of an aquatic plant. Mr. Oldham has described how in every village a crowd of women and children might be seen digging up these roots and drying them for food, and he calculates that about 5,000 people were living more or less entirely on these roots.

The following zamindars came to the favourable notice of Government for their considerate treatment of their raiyats and their willing co-operation with the officials in the administration of relief:—Maharaja Ravaneswar Prasad Singh Bahadur of Gidhour, Babu Lachmi Prasad Singh of Saharpara in the Beguserai sub-division, Babu Kamaleswari Prasad of Monghyr, Babu Tarini Prasad and Chaudhri Mahbub Ali of Bakhtiarpur. They helped their raiyats by providing employment chiefly on irrigation and protective works, as well as by showing consideration in other ways. The estates of these proprietors, except the last, lie outside the Bakhtiarpur outpost where the Government relief operations were carried on; but there was quite sufficient pinching among the raiyats and labouring classes in the south of the district to afford scope for the benevolence of the zamindars The Lieutenant-Governor appreciates the value of the services rendered by the gentlemen above-named, and desires that the thanks of Government may be conveyed to them in suitable terms.

Mr. R. M. Waller was in charge of the district until the 25th June, when he was succeeded by Mr. C. H. Vowell. During the latter's absence on short leave, the final report of the scarcity and relief was submitted by Mr. C. E. A. W. Oldham, who had been locally in charge of the relief operations, assisted by Babu Annada Charan Gupta, Sub-Deputy Collector.

Bhagalpur.

6. Three tracts were specially affected in the district of Bhagalpur. The first was a small area on the northern frontier of the district, lying west of the Birbandh; the second lay immediately round Supaul. In these tracts, each extending over an area of about 20 square miles, the distress was never very acute. The third tract of about 400 square miles was by far the largest and most seriously

affected. It extended from the Darbhanga boundary through the Bangaon thana of the Supaul sub-division and the Sadar thana of the Madhipura sub-division. The worst parts were those west of the Dimra, along the Darbhanga boundary and in the corner between Darbhanga and Monghyr. The three tracts together comprise 485 square miles, with a total population of 283,000. The Collector, Mr. Wace, who conducted the relief operations from February to May, was of opinion that the area affected was much larger, and the failure of each crop in it worse, than in 1888-89. The outturn of the *bhadoi* crops of 1891 was estimated by the local officers at only 3 or 4 annas in the affected tracts. An equally low estimate was formed of the winter rice crop in the affected parts, and it is stated that in the Bangaon thana the failure of this crop was all but complete, and that the yield of the *rabi* crops was less than 3 annas. But throughout the worst period the exports of food-grains by railway considerably exceeded the imports, the figures furnished for the months of December 1891 to August 1892, inclusive, being, exports 2,34,885 maunds, and imports 65,688 maunds (including 3,834 maunds of potatoes). This comparison shows that, though the food-stocks of the poorer classes were to a great extent depleted, while they stood in need of help in the shape of wages or loans to buy fresh supplies, the general store in and about the affected tracts was sufficient for local requirements. It has also been inferred by the Collector that the grain required for the food of the people in North Bhagalpur is very small in comparison with the quantity produced in normal years; for, although there was a failure of over 75 per cent. of the three principal crops, the prices, in spite of the quantities of grain exported, never reached famine point.

Work was first opened in the latter end of January on the Rajanpur embankment, in the Supaul sub-division, but was mismanaged, the work actually done being much too little and the wages paid too high. This was therefore no proper test of distress. Some tanks were taken in hand in February in both sub-divisions, but the relief operations cannot be said to have fairly commenced till the beginning of March; by the middle of that month 1,376 people were at work on them. Mr. H. R. H. Coxe, who succeeded Mr. Wace, reports that the first half of May was the most anxious time of the whole period of distress; there was hardly any rain, and it appeared probable that the young crops would wither, and that the rain would not come in time to allow the *bhadoi* rice to be properly sown. Rain, however, began to fall towards the end of May; the situation was then completely changed, and by the end of June the severity of the distress had passed. The daily average number of persons on relief works was highest in the second week of June, being 12,370 (6,333 men, 4,083 women, and 1,954 children); the numbers then declined owing to the vigour with which agricultural operations were carried on, and the excellent prospects of the crops, but it was not found possible to close the works finally till the 20th August, when the *bhadoi* rice came into the market. The works completed include one embankment, 26 tanks, and 10 roads. The Commissioner remarks that the fact that the value of the work done calculated at the normal rates considerably exceeds the amount expended in wages is evidence of good organization and supervision.

Gratuitous relief was not organised so soon in Bhagalpur as in other districts; the intention at first was that those who required such assistance should receive it at the works. A regular distribution of doles was commenced in the end of April, and closed in the third week of August simultaneously with the close of the relief works. The highest number of persons in receipt of gratuitous relief was 1,527 (399 men, 799 women and 329 children) in the week ending 23rd June. The recipients of gratuitous relief were in return required to spin cotton and, subsequently, to make string out of *sawai* grass. At first some pressure was required to get the work done, but, when the system was in full working order, it did not result in as large a diminution of attendance as might have been expected, thus showing that those who were not entirely helpless had by that time been more or less eliminated from the register.

The total sum advanced as loans was Rs. 37,180, of which the bulk was distributed between the middle of April and the middle of June.

There were no deaths from starvation, and it is evident that the distress never reached such a degree of intensity as to influence the death-rate materially.

The Lieutenant-Governor notices with great satisfaction the important part played by private relief in this district. The greatest assistance was given by the Maharaja of Sonbarsa, who spent Rs. 10,000 on the construction of a road, and excavated two large tanks. He has been made a Companion of the Order of the Indian Empire in recognition of his good services rendered on this occasion. The Maharaja of Darbhanga, who owns property in the tracts affected, spent Rs. 4,000 on tanks and Rs. 10,000 on advances, in addition to the expenditure incurred by him in the district of Darbhanga. Babu Ganput Singh distributed charitable aid and gave employment to labourers in the pargana of Harawat at a cost of about Rs. 5,000. He also made advances to cultivators to an almost equal amount. The Banaili Raj spent about Rs. 2,000 on relief works, and Rani Sitabati, Raja Padmanand Singh, and Babu Janardhan Singh of Barail each gave Rs. 1,000 in charity, the last-named gentleman devoting his own time and services to the distribution of his charity in accordance with the principles adopted by Government. Babu Tejendra Narain Singh distributed about Rs. 5,000 in the relief of distress. The total sum thus contributed towards the relief of distress was about Rs. 47,000, and His Honour desires that the thanks of Government may be conveyed to the donors individually for their liberality and public spirit. Sir Charles Elliott's thanks are due also to Mr. H. D. Christian, an indigo-planter of Bangaon, whose charge of the relief work near his factory took the place of official supervision. Mr. Maguire was officiating as Collector when the first measures for the administration of relief had to be taken: he was succeeded in February by Mr. Wace, who thoroughly organized the system to be followed and was in charge until 28th May, when Mr. Coxe relieved him. The Sub-divisional Officers of Supaul and Madhipur, respectively, were Babu Surya Kumar Sen and Babu Purna Chandra Gupta.

Purnea.

7. The area of actual distress in Purnea lay within well defined boundaries in the Kadwa and Amour thánas of the Sadar sub-division, and comprised in all 644 square miles, with a total population of 261,770 souls. The greater severity of distress in the Amour thána as compared with Kadwa is ascribed to the fact that the former is not so favourably situated as regards supplies as the latter, through which the railway runs with two stations, Katihar and Sonali, within the thána. The *bhadoi* crop of 1891 in the Sadar sub-division was estimated to have given an outturn of 6 to 12 annas. This was followed by a very poor winter rice crop in 1891-92, the estimated outturn in the affected tracts being only 2 annas, while the *rabi* ultimately yielded from 5 to 6 annas. The stock of food-grains had been much reduced by heavy sales in the previous year. This is borne out by the fact that there was no exportation of food-grains from the affected thánas, while between January and August about 1,76,090 maunds were imported from North Bihár, Bhagalpur, Malda, Bolepur and Nepál (until the Government of the country last-named prohibited exports). Numerous conflagrations occurred also, caused, it is said, by labourers with a view to stimulating the demand for labour. Some increase in crime also took place, attributable to the scarcity.

In this district relief was commenced about the same time as in Bhagalpur, and closed earlier than elsewhere, work having been opened on the 27th January and finally closed on the 28th May. The laying out of the works and the organization of labour were carefully carried out, but for a long time there was difficulty in exacting sufficient work from the labourers. Their numbers were too large for the officers available to supervise. This was noticed by the Commissioner, Mr. C. C. Quinn, early in March, and the introduction of the piece-work system under his orders effected some improvement in this respect from the latter end of the month; but the work done by each labourer continued to be very small till towards the end. In explanation of this, he states that the people of Purnea have never shown much aptitude for road work, and that the classes employed on the works were

enfeebled by fever which was very prevalent at that time. The cost of 1,000 cubic feet of earth work was at first so high as Rs. 6-2-5, and was gradually reduced to Re. 1-6-2 as better supervision was secured. The normal rate of cost in the district is Re. 1-12 to Re. 1-14 per 1,000 cubic feet. The highest daily average number of labourers employed was 4,826 (3,207 men, 917 women, and 702 children) in the week ending 12th March. Towards the end of April some 1,000 persons left the works on the introduction of lower rates of wages. About this time there was a sufficient fall of rain, which made work available at better rates elsewhere. Henceforward there was a steady reduction in the number of labourers. The works undertaken consisted of the raising of nine roads, of which three were finished.

Gratuitous relief, which in this district bore a larger proportion to works than elsewhere, was commenced on the 30th January, *i.e.*, about the same time as the relief works, but was continued nearly a month longer, having been closed on the 17th June. The highest number of persons on the register was 1,360 in the week ending 9th April. Some light work in the shape of making string from hemp and thread from cotton was done in return for the weekly doles. The total amount spent on gratuitous relief was Rs. 3,410 (including contingent expenditure of Rs. 211-12-7), of which Rs. 2,380 were borne by private subscriptions, the remainder devolving upon Government.

Enquiries in connection with the distribution of loans were more promptly undertaken in Purnea than in the other districts of the Bhagalpur Division. The advances amounted to Rs. 22,691, of which only Rs. 140 were granted under the Land Improvement Act, and the remainder under the Agriculturists' Loans Act. This form of relief was not, however, confined to the Kadwa and Amour thánas, but was extended to a tract in the Sadar thána, a small portion of Gondwara, and the khas mahal estate Belwa in Manihari. Except in very exceptional cases no loans were allowed to cultivators who owned much less or much more than 20 bighas: the amounts varied from Rs. 2 to Rs. 30.

The rate of mortality was high in March and April, being just over 4 per cent., but this was due to the sickliness of the year. A high death-rate, chiefly caused by fever, had set in long before the scarcity, and continued throughout. There were no deaths from starvation. Mr. C. H. Vowell was Collector of the district during the period of the relief operations; Mr. F. W. Duke, the Joint-Magistrate, was directly in charge of them, and worked with praiseworthy assiduity and energy. The completeness of the report of the scarcity and relief, submitted by Mr. Faulder, as Collector, is appreciated by Government. His subordinates, Maulvi Muhamed Habibullah, Deputy Collector, and Maulvi Shah Muhamad Azam, Sub-Deputy Collector, have been specially mentioned to Government for the performance of their duties. The services rendered by Babu Dharam Chand, a zamindar of this district, who gave loans and remitted rents where necessary, have already been acknowledged by Government.

Dinajpur.

8. Mr. A. C. Tute, by whom the final report has been submitted, has, in the absence of official documents, found difficulty in describing the earlier course of the scarcity and the measures taken to meet it. He assumed charge of the district on the 23rd November 1891; up to that date his predecessor and the District Engineer were in constant communication, but their correspondence was not brought on record. The want of such records must always cause great inconvenience, and the Lieutenant-Governor directs that, when distress is anticipated, and even before it is declared to exist, all the initial stages and steps taken should be carefully recorded for future reference.

The district of Dinajpur depends for its food-supply almost entirely on the winter harvest. The autumn rice is ordinarily a little over one anna of the whole produce, or about one-twelfth of the winter rice, while the *rabi*, which consists chiefly of oil-seeds, is of importance only as a money-producing crop like jute. The area affected in this district lay north of the Dinajpur branch of the Northern Bengal State Railway, extending over 1,030 square miles, with an estimated population of 447,000 persons. It comprised Western Thakurgaon, Ranisankoil thána, a part of the Pirganj thána in the Thakurgaon

subdivision, the Hemtabad thána, excluding Raiganj outpost, and a part of the Birganj thána in the Sadar sub-division. The tract lies between a line drawn from Birganj to Pirganj and the Railway. In this area there were bumper crops of winter rice and jute in 1890-91, the outturn of the autumn rice of 1891 was about 11 annas, and the yield of the winter rice of 1891-92 was estimated at three annas. As the ordinary condition of the people of Dinajpur in regard to the means of subsistence is distinctly above the average of Bengal, the distress in this district was never so acute as in Bihar. The Commissioner twice offered to find very remunerative work on the Duars Railway for the people of the tract where the failure had been greatest, but no one cared to migrate for this purpose. On the other hand, the villagers, who during the scarcity worked on roads for about half the current rate of wages, ordinarily decline such work on any terms, leaving it to immigrants from Bihar. This shows that, although the pressure never passed a certain point, there was unusual dearth of employment. No precise figures have been furnished by the Collector as to exports and imports, but it appears that from the district, as a whole, there was steady exportation to other districts, and that there was some importation of food-grains into the affected tracts from the south of the district. In Appendix II to this Resolution a table is given showing the prices of common rice which is the staple food of the district. But, as the Collector observes, as Dinajpur is a large exporting district, and two railways run through it, local prices are not governed by the quantity of grain stored in the district which would be available in a year of famine, but by the prices ruling in Calcutta or elsewhere, and are not therefore an infallible test for guidance. The ordinary cultivator always keeps a year's stock in hand before he sells anything, and is not affected by the prices ruling in the market until his stock is exhausted, when it is possible that he may have no money to buy, whatever the price may be.

About the 7th November, 1891, some relief works were opened in the extreme north of the district, and a daily wage of 3 annas was fixed, this being three-fourths of the ordinary rate in the district. In the course of a few days it came to light that the labourers would do no work, and Mr. Tute, soon after he had taken charge of the district, passed orders for strict task-work, which had the effect of closing the works altogether. The test applied by these works showed that an exaggerated idea had been formed of the distress then perceptible in the district. Mr. Tute stopped the preparation of formal lists of persons to be relieved, as improper claims for relief were advanced, and took other steps to allay the panic which prevailed at the time. He also noticed that the people were under the impression,—an idea fostered by persons who intended to profit by the situation,—that Government was going to stop exports and interfere with trade. He accordingly convened a meeting of all the traders in Raiganj, and told them that even if they brought out all their rice and burnt it he would not interfere. The opening of relief works was ultimately rendered necessary by the absence of the winter rain required to save the very large area sown in *rabi*. Relief works were opened in January, but there were no large numbers at work till about the middle of February, when the *rabi* had perished and the prospects of the *bhadoi* became gloomy. Heavy rain began to fall on the 16th March and changed the whole situation. The highest daily average number of labourers employed was 2,406 (1,995 men, 231 women, and 180 children) in the week ending 7th May. The number then gradually diminished until the works were closed on the 2nd July. During this period the rates of payment for labour were constantly regulated so as to prevent people from coming on the works who were not absolutely in need of employment. Work was undertaken on 16 roads and 3 tanks, none of which were finished during the period of distress.

No gratuitous relief was found necessary till after the close of the works, when, of the labourers who remained at the works till the last moment, about a dozen widows were found fit objects for charity. These women were taken care of until they were handed over to their zamindars, and the total amount spent under this head was Rs. 3-15. It was a satisfactory feature of the situation that the helpless poor were looked after by their zamindars, and in this respect all the zamindars in the district did their duty loyally, so that at no time was there an influx of beggars or cripples at the Government centres.

Several small *jotedars* (cultivators), who in ordinary years would have been helped by their mahajans, were at first refused assistance by them. They were in danger of having to sell their cattle and thus be deprived of the means of cultivating their fields. Steps were promptly taken to grant loans, and no sooner had a sum of Rs. 4,540 been thus advanced, than the mahajans and zamindars, knowing that the repayment of a Government loan would be a first charge, came forward, and thus the class of *jotedars* who might otherwise have suffered never came on the relief works at all. The total sum advanced was Rs. 5,838. There were no deaths from starvation. Mr. Tute makes the following deductions from the operations carried out, with which the Lieutenant-Governor desires to express his full concurrence:—

1st.—One year of scarcity will not cause a famine in this district. It may, and probably will, necessitate helping landless labourers to some extent, but as long as a *jotedar*, who cannot cultivate all his own land, has the means to do so, he will employ landless labourers;

2nd.—takávi loans are the best form of relief for small *jotedars* when mahajans refuse to lend; otherwise they are unnecessary. The issue of such loans has the effect of bringing out the mahajan's money, and the raiyats prefer dealing with him to dealing with Government for loans;

3rd.—in a year of scarcity like this, the zamindars of the district, if properly appealed to, are able and willing to cope with actual starvation and provide for the helpless;

4th.—the people of this as of all other districts are very easily demoralized, but are able to perceive that exceptional measures will not be taken solely because interested people desire them.

The Lieutenant-Governor desires to acknowledge Mr. Tute's judicious and efficient management of the scarcity and relief administration from almost the beginning to its close. Mr. Tute has brought to the notice of Government the services rendered by Babu Atul Krishna Mukharji, the District Engineer, who was indefatigable in visiting the works, watching their progress and controlling expenditure. The zamindar of Churaman is the only local resident specially mentioned for his charitable actions, but all the zamindars are said to have done their duty to the helpless and the poor.

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9. Appendix III to this Resolution shows the progress of the relief operations in each district week by week, and in Appendix IV a diagram is given to illustrate the rise and fall of the numbers on relief works. The following is an abstract statement of the principal figures compared with those of 1873-74 and 1888-89 :—

District.	Area of the district in square miles.	Total population of the district.	Number of square miles affected.	Population of the affected area.	Duration of relief operations.	Relief works. Largest number of labourers employed on any day. Number of labourers and date.	Relief works. Percentage on population, column 5.	Relief works. Total amount disbursed as wages.	Gratuitous relief. Largest number relieved on any day. Number relieved and date.	Gratuitous relief. Percentage on population, column 5.	Gratuitous relief. Total amount disbursed.	Advances. Under the Land Improvement Loans Act.	Advances. Under the Agriculturists' Loans Act.	Advances. Total.	Advances. Per 100 of population: percentage of column 15 on column 5.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
								Rs. A. P.			Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Muzaffarpur ...	3,004	2,711,445	1,300	1,173,785	From end of February to 11th July.	14,147 in week ending 4th June.	1·2	67,584 2 9	......	...	.....	200	25,616 0 0	25,816 0 0	2 3 2
Darbhanga	3,335	2,801,955	1,185	150,000	From beginning of March to 23rd July.	47,452 on 11th June ...	31·6	2,03,514 0 2	1,550 in week ending 28th May.	1·3	1,541 6 4	1,700	30,172 0 0	31,872 0 0	21 3 11
Monghyr	3,922	2,036,021	1,066	216,000	7th February to 20th August.	1,815 in week ending 2nd July.	·84	4,152 13 11	250 in week ending 5th March.	·11	1,166 10 9	.....	19,088 13 0	19,088 13 0	8 13 5
Bhagalpur	4,226	2,032,696	485	283,000	From middle of January to 20th August.	12,370 in the second week of June.	4·4	62,066 15 8	1,527 in week ending 23rd June	·54	5,441 3 9	700	36,480 0 0	37,180 0 0	13 2 2
Purnea	4,994	1,944,658	644	261,770	From 27th January to 17th June.	4,826 in week ending 12th March.	1·9	20,577 15 0	1,360 in week ending 9th April	·52	3,198 5 11	140	22,551 0 0	22,691 0 0	9 2 4
Dinajpur	2,329	1,313,336	1,030	447,000	From January to first week of July.	2,406 in week ending 7th May.	·54	23,075 14 3	12 in the first week of July.	...	3 15 0	......	5,838 0 0	5,838 0 0	1 4 11
Total for 1891-92 ...	21,810	12,840,111	5,710	2,531,555	From January to latter end of August.	83,016	3·3	3,80,971 14 9	4,639	·18	11,351 9 9	2,740	1,39,745 13 0	1,42,485 13 0	5 10 11
1873-74	...	......	40,109	17,764,630	March to end of November.	1,770,732, middle of June...	9·9	13,80,000 0 0	749,943	4·3	2,80,000 0 0	..	..	46,00,000 0 0	25 14 3
1888-89	......	......	1,819*	1,049,147	January to end of October.	41,612	3·96	4,49,228 2 11	4,190	·4	27,669 12 10	69,957	2,21,698 12 0	2,91,655 12 0	27 12 9

* Includes 117 square miles affected by floods outside the drought-stricken area in the district of Champaran.

10. The Lieutenant-Governor considers that in each district the necessities of the case were fully met by the measures taken. No poor-house relief or suspension of land revenue was found necessary at any stage of the distress. As far as is known, there were no deaths from starvation, and the people generally were as fit to work and as strong as they ever were, and the works carried out were sufficient to afford employment to those who required it. At the earlier stages there was a tendency to give too high wages, but as time went on, and experience was gained, they were sufficiently reduced to render the works attractive only to those who were really in need of relief. His Honour wishes to place on record his appreciation of the services of the Commissioners* and District Officers concerned, all of whom, during a trying period, loyally carried out the orders of Government and acquitted themselves to his entire satisfaction.

* Mr. D. R. Lyall, C.S.I. } Patna.
Mr. A. Forbes.
Mr. C. C. Quinn. Bhagalpur.
Mr. P. Nolan. Rajshahi.

ORDER.—Ordered that this Resolution be published in the *Calcutta Gazette*, and that copies of it, bound up with copies of the final reports, be forwarded to all Commissioners of Divisions and submitted to the Government of India.

By order of the Lieutenant-Governor of Bengal,

C. E. BUCKLAND,

Secretary to the Government of Bengal.

Appendix I.

Registered Rainfall in inches.

District and sub-division.	1st May–31st August. Normal.	1873.	1888.	1891.	September. Normal.	1873.	1888.	1891.	October. Normal.	1873.	1888.	1891.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.
Gaya—												
Sadar ...	32·68	37·27	41·97	26·25	7·32	4·13	7·85	4·24	2·36	Nil	0·40	1·81
Aurangabad	32·12	30·25	46·28	21·29	7·21	1·89	5·97	2·65	2·75	Nil	0·71	0·36
Nawadah .	29·91	38·95	43·27	32·86	6·97	3·32	4·41	4·20	2·67	Nil	Nil	0·40
Jahanabad ...	31·27	36·52	35·01	22·77	5·66	1·43	6·66	1·85	3·55	Nil	0·03	1·99
Shahabad—												
Arrah ...	29·71	33·28	36·96	19·67	6·87	3·00	5·68	6·40	3·28	Nil	0·43	1·21
Buxar ...	27·28	19·48	28·89	13·11	7·19	1·60	11·25	5·05	3·35	Nil	0·60	1·20
Bhabhua ...	30·44	27·76	32·37	23·66	6·67	3·45	7·20	5·54	3·28	Nil	Nil	0·46
Sasarám ...	29·55	32·58	33·94	17·44	6·94	1·67	7·13	5·27	3·68	Nil	Nil	0·77
Champaran—												
Motihari .	32·37	No record	29·20	39·13	9·16	No record.	6·71	4·16	3·49	No. re-cord.	Nil	3·98
Bettiah ...	36·19		37·04	27·72	9·44		8·54	2·50	3·58		Nil	3·39
Muzaffarpur—												
Sadar ...	32·40	21·21	36·89	28·35	9·97	2·82	3·78	0·90	3·47	Nil	Nil	0·23
Sitamarhi ...	31·03	29·65	29·07	44·50	9·76	[illegible]	2·59	2·12	2·74	Nil	Nil	2·44
Hajipur ...	30·68	32·99	40·36	24·37	7·23	1·24	4·82	3·55	3·98	Nil	Nil	0·59
Darbhanga—												
Sadar ..	33·78	18·33	30·83	34·18	9·58	2·78	4·39	3·31	2·99	Nil	Nil	1·02
Madhubani	32·75	18·16	35·07	20·22	10·17	5·59	5·65	1·26	2·62	Nil	Nil	1·59
Samastipur	32·47	24·54	33·74	40·98	8·01	3·25	6·06	2·12	3·16	Nil	Nil	0·17
Monghyr—												
Sadar ...	34·10	32·37	43·29	34·17	9·01	3·68	9·95	3·02	3·52	Nil	0·03	4·26
Begusarai ...	29·58	30·14	37·52	28·44	7·27	4·01	7·67	1·86	3·17	Nil	Nil	1·71
Bhagalpur—												
Sadar ...	31·61	23·27	47·51	37·00	7·60	3·67	6·20	3·11	3·20	Nil	0·07	0·19
Madhipura	36·00	29·49	46·45	28·01	10·30	3·30	9·83	1·63	4·31	Nil	Nil	0·81
Supaul ...	36·49	19·39	36·16	22·19	9·77	[illegible]	6·10	2·84	2·88	Nil	Nil	1·62
Purnea—												
Sadar ..	44·30	28·36	40·76	28·62	14·02	6·75	4·32	6·20	3·97	Nil	Nil	0·98
Kishangarj...	54·35	32·26	40·34	41·58	14·08	3·49	6·36	5·71	3·36	Nil	0·18	0·11
Araria .	48·27	24·85	42·27	35·33	13·76	5·19	8·23	5·42	3·53	Nil	Nil	1·62
Dinajpur ...	40·35	No record	51·99	39·85	11·14	No re-cord.	4·30	2·04	5·13	No re-cord.	Nil	0·62
Bogra	48·54	Do.	35·64	34·21	10·75	Do.	5·69	3·21	3·98	Do.	0·27	1·00

District and sub-division.	November and December '91. Normal.	Actual.	January 1892. Normal.	Actual.	February 1892. Normal.	Actual.	March 1892. Normal.	Actual.	April 1892. Normal.	Actual.	May 1892. Normal.	Actual.	June 1892. Normal.	Actual.	July 1892. Normal.	Actual.
	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In	In.
Gaya—																
Sadar ...	0·32	Nil	0·61	0·12	0·50	0·67	0·35	Nil	0·31	Nil	1·64	0·57	6·16	5·33	12·86	12·98
Aurangabad	0·60	Nil	0·60	0·37	0·33	1·21	0·38	Nil	0·23	Nil	1·68	0·06	5·82	5·18	12·10	10·48
Nawadah .	0·42	Nil	0·70	0·01	0·46	0·46	0·47	Nil	0·30	Nil	2·02	0·38	5·45	6·32	11·71	8·38
Jahanabad ...	0·44	Nil	0·71	Nil	0·40	0·11	0·35	Nil	0·15	Nil	1·74	Nil	5·06	2·29	12·24	11·22
Shahabad—																
Arrah ...	0·36	Nil	0·71	0·09	0·45	1·35	0·34	Nil	0·22	Nil	1·80	0·70	5·95	5·00	11·03	10·09
Buxar ...	0·40	Nil	0·79	0·06	0·36	1·21	0·28	Nil	0·17	0·05	1·03	0·15	4·96	8·32	11·07	8·81
Bhabhua ...	0·65	Nil	0·68	0·43	0·49	2·38	0·56	Nil	0·13	Nil	1·16	0·29	5·26	5·42	12·31	8·75
Sasarám ...	0·50	Nil	0·50	0·06	0·46	0·67	0·27	Nil	0·17	Nil	1·17	Nil	5·17	7·44	11·33	8·86
Champaran—																
Motihari .	0·20	Nil	0·65	Nil	0·35	0·11	0·37	Nil	0·78	0·16	2·50	3·54	7·89	15·89	10·45	19·14
Bettiah ...	0·25	Nil	0·69	Nil	0·41	0·15	0·36	Nil	0·75	0·12	2·08	1·21	8·49	10·43	12·68	14·42
Muzaffarpur—																
Sadar ...	0·13	Nil	0·79	Nil	0·41	0·82	0·42	Nil	0·58	Nil	2·72	0·73	7·53	8·39	11·81	10·44
Sitamarhi ...	0·22	Nil	0·53	Nil	0·30	0·23	0·65	Nil	1·18	1·46	2·66	1·81	8·03	12·46	10·59	13·16
Hajipur ...	0·26	Nil	0·65	0·08	0·46	1·08	0·38	Nil	0·19	Nil	1·99	0·26	6·69	4·79	11·85	9·35
Darbhanga—																
Sadar ..	0·23	Nil	0·53	0·03	0·43	0·91	0·29	0·03	0·69	0·56	2·58	2·00	7·93	7·80	11·69	11·19
Madhubani	0·11	Nil	0·74	Nil	0·39	0·81	0·39	0·39	1·01	0·52	2·96	2·06	8·39	10·08	10·69	17·41
Samastipur	0·17	Nil	0·64	Nil	0·38	0·47	0·23	Nil	0·36	0·15	2·35	0·50	7·58	6·40	12·19	9·47
Monghyr—																
Sadar ...	0·23	Nil	0·48	Nil	0·50	0·17	0·31	Nil	0·42	0·48	2·51	0·35	6·55	5·32	12·35	12·57
Begusarai ...	0·33	Nil	0·56	Nil	0·53	0·71	0·24	Nil	0·36	1·43	2·29	0·27	6·24	4·39	11·11	9·08
Bhagalpur—																
Sadar ...	0·37	0·01	0·48	Nil	0·48	0·19	0·33	0·57	0·77	0·66	2·59	0·47	7·71	5·20	11·16	8·18
Madhipura	0·15	Nil	0·47	Nil	0·56	0·31	0·39	0·35	1·03	2·48	4·06	2·02	8·66	10·63	11·49	13·57
Supaul ...	0·16	Nil	0·46	Nil	0·39	0·23	0·40	0·55	0·89	1·70	3·89	2·71	9·33	12·64	10·95	11·35
Purnea—																
Sadar ..	0·24	Nil	0·46	Nil	0·56	0·08	0·40	0·17	1·50	2·53	4·51	5·24	11·46	8·36	13·89	22·44
Kishangarj...	0·20	Nil	0·63	Nil	0·44	0·31	0·66	0·90	1·87	3·08	6·32	6·99	15·33	9·49	16·49	18·90
Araria .	0·15	Nil	0·48	Nil	0·53	0·13	0·62	0·64	1·50	1·82	5·92	5·28	12·71	17·21	15·98	21·88
Dinajpur ...	0·22	Nil	0·40	Nil	0·50	0·31	0·97	1·10	1·87	2·33	7·22	7·98	16·50	13·22	13·45	22·27
Bogra	0·40	3·60	0·45	Nil	0·85	0·31	0·82	3·66	2·21	4·65	8·37	6·13	14·27	9·49	13·97	15·02

APPENDIX II.

COMPARATIVE STATEMENT OF PRICES OF THE PRINCIPAL FOOD GRAINS IN 1874, 1889, 1891 AND 1892.

Muzaffarpur.

PERIOD.	Common rice.				Wheat.				Makai or Indian-corn.				Marua.	
	1874.	1889.	1891.	1892.	1874.	1889.	1891.	1892.	1874.	1889.	1891.	1892.	1891.	1892.
	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.
January ... 1st fortnight ...	11 8	12 0	17 0	13 0	11 0	13 0	16 0	13 0	13 0	17 0	19 0	21 0	23 8	......
January ... 2nd ditto ...	10 0	13 0	15 0	12 0	12 0	12 0	16 0	12 0	12 0	17 0	18 0	20 0	20 4	......
February ... 1st fortnight ...	10 0	12 8	16 0	12 0	11 8	12 0	13 0	12 0	13 4	17 0	18 0	20 0	20 0	......
February ... 2nd ditto ...	10 0	12 8	15 0	12 0	12 0	12 0	12 0	12 0	12 8	18 0	17 8	20 0	20 0	22 8
March ... 1st fortnight ...	9 8	13 0	15 0	12 0	12 0	13 0	12 0	12 0	12 8	19 0	17 8	20 0	21 4	21 0
March ... 2nd ditto ...	8 8	13 0	14 0	12 0	10 0	15 0	13 0	12 0	13 0	20 0	17 0	21 0	25 0	......
April ... 1st fortnight ...	9 0	12 8	16 0	11 0	10 0	14 0	16 0	11 0	13 0	18 0	17 0	20 0	22 0	19 8
April ... 2nd ditto ...	8 8	11 0	15 0	11 0	10 0	12 8	16 0	11 0	12 8	16 0	16 0	18 0	20 0	18 0
May ... 1st fortnight ...	8 0	11 0	14 0	11 0	10 0	12 0	16 0	12 0	12 8	16 0	15 0	16 0	23 0	18 0
May ... 2nd ditto ...	8 8	12 0	15 0	11 8	11 8	13 0	17 0	13 8	13 0	16 0	16 0	17 0	20 0	18 0
June ... 1st fortnight ...	10 0	12 0	13 0	11 8	11 0	13 0	16 0	13 0	13 0	16 0	16 0	17 0	......	18 9
June ... 2nd ditto ...	11 0	12 0	14 0	11 0	14 0	13 0	16 0	13 0	17 0	16 0	16 0	17 8	......	18 4
July ... 1st fortnight ...	13 0	12 8	14 0	12 0	12 0	13 0	16 0	13 0	16 0	16 0	15 0	17 8	......	19 0
July ... 2nd ditto ...	14 0	11 0	14 0	12 0	13 0	14 0	16 0	13 0	16 0	16 0	16 0	17 0	......	......
August ... 1st fortnight ...	13 0	12 0	13 0	11 8	13 0	13 8	16 0	13 0	15 0	16 0	15 0	17 0	......	......
August ... 2nd ditto ...	14 0	12 0	14 0	12 8	13 0	14 0	14 0	13 0	16 0	16 0	19 0	18 0	......	......

Darbhanga.

Period.	COMMON RICE.				WHEAT.				MAKAI OR INDIAN-CORN.				MARUA.			
	1889.	1891.	1892.		1889.	1891.	1892.		1889.	1891.	1892.		1889.	1891.	1892.	
			Darbhanga.	Madhubani.			Darbhanga	Madhubani.			Darbhanga.	Madhubani.			Darbhanga.	Madhubani.
	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.
January ... 1st fortnight ...	13 12	17 0	14 0	14 0	15 4	13 8	14 4	14 0	18 0	18 8	20 14	21 0	19 12	25 0	19 12	18 0
January ... 2nd ditto ...	14 0	17 0	13 3	14 0	12 0	13 0	13 3	14 0	19 12	18 0	20 14	22 0	19 0	24 0	19 12	20 0
February ... 1st ditto ...	15 8	17 9	13 0	14 0	16 0	10 8	13 3	14 0	18 0	18 11	21 0	22 0	20 4	24 3	20 0	26 0
February ... 2nd ditto ...	15 8	17 0	12 1	13 8	16 8	13 0	12 1	14 0	17 8	18 8	19 0	19 0	19 12	25 0	18 11	19 0
March ... 1st ditto ...	14 4	15 0	12 1	13 0	14 4	10 0	12 1	13 0	19 12	18 0	19 0	19 0	19 12	23 0	18 11	19 0
March ... 2nd ditto ...	15 0	14 0	12 1	13 0	18 4	14 0	13 3	12 8	21 6	18 0	19 12	19 0	20 0	27 0	18 11	18 8
April ... 1st ditto ...	14 13	14 0	12 8	12 0	13 11	14 0	13 3	12 0	20 0	18 0	18 11	19 0	20 0	27 0	18 11	18 0
April ... 2nd ditto ...	13 2	15 0	12 5	12 0	13 11	14 0	14 4	12 0	19 6¼	18 0	17 0	17 8	18 4½	25 0	18 11	18 0
May ... 1st ditto ...	12 9	15 0	12 1	11 12	13 11	16 8	13 3	12 0	16 0	18 0	17 9	18 8	18 4	25 0	17 9	18 0
May ... 2nd ditto ...	13 4	15 0	12 0	12 0	14 4½	16 8	13 3	10 4	16 0	18 0	17 0	15 12	17 5½	25 0	17 10	16 0
June ... 1st ditto ...	12 9	15 0	12 0	12 0	13 11	14 0	13 3	10 4	16 0	18 0	17 0	15 12	17 10	24 0	18 0	15 8
June ... 2nd ditto ...	11 6	14 4½	12 0	12 0	14 13	15 6	13 3	10 8	14 13	17 9	17 0	16 0	17 2	25 4	17 10	15 8
July ... 1st ditto ...	12 8	15 6	12 1	13 0	14 4	15 8	12 10	13 0	17 2	17 8	17 0	17 0	17 2	24 0	17 10	16 0
July ... 2nd ditto ...	13 6	14 4	12 10	13 0	15 5	15 10	12 1	12 0	......	19 0	16 8	22 0	17 2	26 8	16 8	17 0
August ... 1st ditto ...	12 5	13 12	12 10	......	14 13	16 8	12 1	......	......	19 12	17 0	......	17 2	23 2	17 1	......
August ... 2nd ditto ...	12 0	14 4	13 12	......	13 12	15 6	12 10	......	17 2	22 0	18 0	......	20 9	26 0	27 8 (new)	......

Monghyr.

PERIOD.	COMMON RICE.					WHEAT.					MAKAI OR INDIAN-CORN.				
	1874.	1889.	1891.	1892.		1874.	1889.	1891.	1892.		1874.	1889.	1891.	1892.	
				Monghyr.	Bakhtiarpur.				Monghyr.	Bakhtiarpur.				Monghyr.	Bakhtiarpur.
	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.
January ... 1st fortnight ...	11 5	15 4	17 13	12 0	......	13 6	14 11	15 3	13 0	......	14 7	17 13	21 4	19 8	......
January ... 2nd ditto ...	12 6	17 1	16 13	12 9	......	13 6	15 3	12 10	13 10	......	14 1	16 13	21 0	20 7	......
February ... 1st fortnight ...	11 5	16 8	16 12	12 9	12 0	13 6	15 0	12 9	13 10	......	14 7	16 4	18 14	21 0	......
February ... 2nd ditto ...	12 3	16 8	15 12	11 11	12 0	14 7	15 12	11 9	13 10	......	14 7	16 4	18 14	18 14	19 0
March ... 1st fortnight ...	11 5	15 8	14 11	11 0	12 0	13 6	15 12	15 12	14 2	......	14 7	16 12	22 0	19 6	15 0
March ... 2nd ditto ...	12 6	13 12	13 10	10 8	12 0	14 7	17 9	15 12	13 14	......	14 7	19 14	...	14 0	......
April ... 1st fortnight ...	12 6	13 12	13 9	10 4	10 8	15 2	18 14	15 11	13 12	13 4	14 7	19 14	19 2	19 12	15 0
April ... 2nd ditto ...	10 5	13 2	15 0	10 8 to	10 8	16 7	16 13	16 0	12 9 to	13 0	15 7	21 10	16 0	16 0 to	......
May ... 1st fortnight ...	10 5	11 9	13 14	11 5 11 0	10 8 10 8	17 8	16 4	16 4	14 2 13 6 to	13 0 13 0	15 7	16 12	14 12	17 13 16 12 to	15 0 ......
May ... 2nd ditto ...	10 5	11 9	13 10	11 4	10 8	15 2	16 4	16 13	14 7 13 10 to	12 0 12 8	15 7	9 8	15 12	17 1 15 12	....
June ... 1st fortnight ...	12 7	14 0	14 11¼	10 12	11 0	15 7	17 5	17 1	14 7 13 8	12 8	15 2	8 6	16 12	15 0	......
June ... 2nd ditto ...	13 7	13 1	14 3	11 0	10 8	15 7	16 4	17 12	14 3	11 0	15 2	10 8	16 13	15 12	......
July ... 1st fortnight ...	12 6	12 1	13 14¼	10 0	10 0	16 8	16 12	17 5	13 0	12 0	16 8	16 12	16 13	15 0	......
July ... 2nd ditto ...	13 6	11 14	14 6	11 14	10 0	16 8	16 12	17 5	13 5	......	16 8	21 0	...	15 0	......
August ... 1st fortnight ...	13 6	11 10	14 8	10 0	......	16 8	15 15	17 0	13 0	......	16 8	17 14	...	20 0	......
August ... 2nd ditto ...	10 5	12 1	14 8	11 8	......	15 7	15 12	15 0	13 8	......	13 1	21 0	...	22 0	......

Bhagalpur.

Period.		Common rice. 1874.	Common rice. 1889.	Common rice. 1801, average.	Common rice. 1892, average.	Wheat. 1874.	Wheat. 1889.	Wheat. 1891.	Wheat. 1892.	Makai or Indian-corn. 1874.	Makai or Indian-corn. 1889.	Makai or Indian-corn. 1891.	Makai or Indian-corn. 1892.	Marua. 1892, average.	Kurthi. 1892, average.
		S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.
January ...	1st fortnight ...	13 10	16 13	18 15	14 5	13 4	15 2	15 2	12 10	15 12	17 10	20 3	18 15	22 13	25 0
	2nd ditto ...	12 10	16 6	18 15	14 5	11 10	15 2	13 14	12 10	14 8	17 2	20 3	18 15	29 0	28 5
February ...	1st fortnight ..	11 6	15 12	17 11	13 13	13 4	15 2	13 6	12 10	14 8	17 0	20 3	18 15	23 0	23 12
	2nd ditto ...	11 6	15 2	17 11	13 5	13 15	15 2	13 4	12 10	14 8	16 6	20 3	16 12	21 2	23 8
March ...	1st fortnight ...	11 13	15 2	17 11	12 8	14 8	15 12	12 10	12 10	15 2	17 10	20 3	16 6	20 13	22 0
	2nd ditto ...	11 6	14 8	15 12	11 11	15 2	16 10	15 7	13 4	15 2	17 10	20 3	17 10	20 5	20 0
April ...	1st fortnight ...	11 6	14 8	15 2	11 12	15 2	16 11	15 12	13 4	15 12	17 10	20 3	17 10	17 12	18 15
	2nd ditto ...	10 1	13 4	15 2	11 14	13 14	16 6	15 2	12 10	15 12	17 10	20 3	16 12	19 3	19 0
May ...	1st fortnight ...	10 1	13 4	15 2	11 14	13 14	15 2	16 6	13 10	15 2	16 12	20 3	16 6	18 5	19 0
	2nd ditto ...	10 11	12 10	14 8	12 0	13 14	15 7	16 6	13 14	15 2	16 6	20 3	16 6	17 5	18 14
June ...	1st fortnight ...	11 6	13 4	15 2	11 12	13 14	14 8	16 6	13 14	14 0	16 6	25 4	15 12	16 0	18 8
	2nd ditto ...	11 6	12 8	15 2	11 12	14 8	15 12	17 0	13 14	15 2	16 6	22 11	15 2	16 5	18 0
July ...	1st fortnight ...	12 10	12 10	15 2	11 5	15 2	15 12	16 6	13 14	15 2	16 6	......	15 2	16 8	16 3
	2nd ditto ...	12 0	12 10	15 2	11 9	14 8	15 12	16 6	13 14	15 2	17 10	20 3	13 14	19 0	16 0
August ...	1st fortnight ...	12 10	12 10	14 8	11 12	15 2	16 6	16 6	13 14	18 15	21 7	24 0	15 2	21 8	15 1
	2nd ditto ...	12 0	12 10	14 8	15 0	15 2	16 6	15 2	13 14	24 7	21 7	25 4	25 4	29 0	14 14

Purnea.

Periods.		Common Rice. 1874.	Common Rice. 1889.	Common Rice. 1891.	Common Rice. 1892.	Wheat. 1874.	Wheat. 1889.	Wheat. 1891.	Wheat. 1892.	Makai or Indian-corn. 1874.	Makai or Indian-corn. 1889.	Makai or Indian-corn. 1891.	Makai or Indian-corn. 1892.
		S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.	S. CH.
January ...	1st fortnight ...	11 0	17 0	19 0	11 0	11 0	13 0	16 0	11 0	12 0	......	......	17 0
	2nd ditto ...	9 0	17 0	19 0	11 0	11 0	13 4	16 0	11 0	......	......	......	17 0
February ...	1st fortnight ...	8 0	17 0	19 0	11 0	10 0	13 0	16 0	11 0	......	......	18 0	17 0
	2nd ditto ...	10 5	18 0	19 0	11 0	11 0	12 0	14 0	11 0	......	......	20 0	16 0
March ...	1st fortnight ...	13 0	16 0	18 0	11 0	12 0	13 0	14 0	11 0	......	10 0	20 0	16 0
	2nd ditto ...	13 0	15 0	18 0	11 0	12 0	13 0	14 0	11 0	......	......	20 0	16 0
April ...	1st fortnight ...	10 8	16 0	18 0	11 0	12 0	16 0	14 0	11 0	13 4	......	20 0	16 0
	2nd ditto ...	11 0	15 0	18 0	12 0	12 0	14 0	16 0	16 0	16 0	......	......	16 0
May ...	1st fortnight ...	11 0	17 0	18 0	12 0	12 0	20 0	16 0	16 0	14 0	......	......	16 0
	2nd ditto ...	9 0	16 0	18 0	11 8	11 0	16 0	16 0	12 0	13 0	......	......	15 0
June ...	1st fortnight ...	10 4	14 0	18 0	12 0	11 8	15 0	16 0	12 0	12 0	......	20 0	16 0
	2nd ditto ...	10 0	13 0	18 0	10 0	12 0	11 0	20 0	11 0	......	......	......	15 0
July ...	1st fortnight ...	10 8	11 8	19 0	11 0	13 0	16 0	18 0	11 0	......	......	......	16 0
	2nd ditto .	11 0	13 0	18 0	12 0	13 0	11 0	18 0	11 0	......	......	......	18 0
August ...	1st fortnight ...	14 0	11 0	18 0	12 0	16 0	15 0	18 0	12 0	......	......	......	16 0
	2nd ditto ...	13 0	11 0	16 0	16 0 (New bhadoi.)	14 0	15 0	18 0	11 0	......	......	......	16 0

Dinajpur.

Period.		Common rice. 1874.	Common rice. 1889.	Common rice. 1891.	Common rice. 1892.
		S. CH.	S. CH.	S. CH.	S. CH.
January ...	1st fortnight ...	13 4	19 3	19 4	12 8
	2nd do. ...	13 4	17 1	18 0	12 0
February ...	1st fortnight ...	14 0	17 0	18 0	13 0
	2nd do. ...	14 0	19 3	18 0	12 0
March ...	1st fortnight ...	12 12	19 3	18 0	11 0
	2nd do. ...	10 12	19 3	18 0	12 0
Apri ...	1st fortnight ...	9 0	19 4	18 0	12 0
	2nd do. ...	8 2	15 8	16 0	11 0
May ...	1st fortnight ...	8 8	15 8	18 0	12 0
	2nd do. ...	8 8	15 8	16 12	12 0
June ...	1st fortnight ...	9 0	14 4	16 12	11 0
	2nd do. ...	9 0	13 4	16 12	10 3
July ...	1st fortnight ...	11 0	13 12	15 0	10 3
	2nd do. ...	12 0	14 8	15 8	11 0
August ...	1st fortnight ...	13 0	14 8	16 10	11 0
	2nd do. ...	12 12	15 8	16 10	15 10 (new bhadoi.)

APPENDIX III.

APPENDIX

Statement of famine relief

District.	Month and week.		A and B labourers. Average number of male units employed daily.	Total amount of earth-work done.	Total wage paid.	Average work done per male unit per diem.	Average daily wage per male unit.	Average cost per 1,000 cubic feet.	C la- Average number of male units employed daily.	Total wage paid.
1	2		3	4	5	6	7	8	9	10
				* C. FT.	Rs. A. P.	C. FT.	Rs. A. P.	Rs. A. P.		Rs. A. P.
Muzaffarpur.	March	Week ending 5th	150	32,050	32 0 7	102·96	0 1 8	1 0 0	......	......
		" 12th	945	533,307	543 5 11	80·62	0 1 4	1 0 3	......	......
		" 19th	1,253	852,866	869 12 3	97·24	0 1 7	1 0 3	......	......
		" 26th	1,550	1,137,926	1,153 3 3	104·88	0 1 8	1 0 3	......	......
	April	" 2nd	2,533	1,913,868	1,969 0 11	107·94	0 1 9	1 0 5	......	......
		" 9th	2,967	2,316,037	2,365 15 9	111·51	0 1 10	1 0 4	......	......
		" 16th	3,444	2,667,259	2,654 3 10	110·63	0 1 9	0 15 11	......	......
		" 23rd	4,324	3,208,431	3,560 15 4	106·00	0 1 9	1 0 9	......	......
		" 30th	3,703	2,245,244	2,567 1 2	84·36	0 1 6	1 2 3	......	......
	May	" 7th	4,104	2,580,933	3,097 3 4	89·84	0 1 8	1 3 2	......	......
		" 14th	5,759	3,938,763	5,133 3 11	97·70	0 2 0	1 4 10	9	4 4 9
		" 21st	9,462	5,729,120	7,386 9 7	86·75	0 1 9	1 4 7	32	13 14 3
		" 28th	11,120	7,066,902	9,256 8 2	91·15	0 1 11	1 4 11	54	22 1 0
	June	" 4th	12,726	8,280,137	11,007 3 0	93·42	0 2 0	1 5 2	......	......
		" 11th	8,428	5,729,380	7,013 1 11	97·90	0 1 11	1 [illegible] 6	......	......
		" 18th	6,595	3,839,021	4,405 0 1	83·87	0 1 6	1 2 2	......	......
		" 25th	4,806	2,222,366	3,231 9 7	66·06	0 1 6	1 7 3	......	......
	July	" 2nd	1,803	932,008	1,250 1 11	73·85	0 1 7	1 5 5	......	......
		" 9th	286	109,324	228 5 9	54·60	0 1 10	2 1 5	......	......
		" 16th	26	8,540	17 1 6	46·40	0 1 6	2 0 0	......	......
	Total		......	55,343,482	67,543 14 9	......	......	......	......	40 4 0
	Average		4,304	......	......	92·13	0 1 9	1 3 6	4	......
Darbhanga.	March	Week ending 12th	146	64,589	142 0 6	63·2	0 2 3	2 3 8	......	......
		" 19th	1,352	650,130	1,268 1 8	66·9	0 2 1	2 1 8	244	106 10 6
		" 26th	2,871	954,629	2,192 15 10	47·5	0 1 9	2 4 9	273	119 5 9
	April	" 2nd	3,656	1,385,480	2,609 9 7	54·1	0 1 7¼	1 14 0	406	187 7 9
		" 9th	8,096	2,808,751	4,894 2 6	49·5	0 1 4¼	1 10 0	761	340 15 0
		" 16th	5,522	2,118,724	2,887 15 9	54·8	0 1 2½	1 5 8	383	170 12 9
		" 23rd	11,721	3,886,775	5,763 2 6	47·3	0 1 1¼	1 7 9	996	439 6 3
		" 30th	15,939	5,548,647	7,214 1 3	40·1	0 1 0¼	1 4 0	1,129	490 8 6
	May	" 7th	17,606	5,406,989	8,489 4 6	43·9	0 1 1¼	1 9 2	738	305 12 0
		" 14th	22,162	8,012,453	14,647 5 6	51·6	0 1 6	1 13 3	414	180 12 0
		" 21st	29,056	11,162,293	20,295 0 4	54·8	0 1 7	1 13 1	1,316	576 0 11
		" 28th	29,062	12,092,149	21,484 10 5	59·4	0 1 8	1 12 5	1,211	532 7 9
	June	" 4th	34,972	14,822,734	26,265 9 7	60·5	0 1 8¼	1 12 4	2,237	986 12 7
		" 11th	36,350	15,945,607	26,110 10 4	62·6	0 1 7¾	1 10 2	2,921	1,282 2 0
		" 18th	29,178	12,537,651	19,105 7 0	61·3	0 1 6	1 8 4	2,691	1,009 7 6
		" 25th	20,885	9,193,954	12,584 11 4	64·9	0 1 4¼	1 5 2	2,209	636 9 9
	July	" 2nd	13,490	6,095,046	8,162 6 5	64·5	0 1 4¼	1 5 5	1,509	434 13 3
		" 9th	9,922	4,509,828	5,921 6 2	64·9	0 1 4¼	1 5 0	1,010	300 0 3
		" 16th	6,774	2,816,468	3,884 13 9	59·4	0 1 3¾	1 6 1	555	168 11 9
		" * 23rd	4,794	1,026,007	1,288 15 9	71·3	0 1 5	1 4 1	287	32 13 8
	Total		......	121,338,943	1,95,212 6 8	......	......	......	......	8,301 9 6
	Average		15,485	......	......	57·6	0 1 5¾	1 9 9	1,120	......
Monghyr.	February	Week ending 13th	156	14,026	105 10 7	13	0 1 6	7 9 0	......	......
		" 20th	301	193,034	189 14 6	91½	0 1 4	0 15 0	......	......
		" 27th	574	318,292	335 2 3	79	0 1 5	1 1 0	......	......
	March	" 5th	93	46,301	47 5 6	70	0 1 2	1 0 6	13	2 14 9
		" 12th	166	63,550	67 5 5	55	0 0 11	1 1 0	17	3 5 3
		" 19th	76	34,994	34 2 3	65½	0 1 1	0 15 6	11	2 3 0
		" 26th	49	12,073	16 2 0	35	0 0 9	1 5 0	3	0 12 6
	April	" 2nd	65	17,308	21 11 9	38½	0 0 9	1 4 3	16	1 11 9
		" 9th	25	7,271	8 14 9	40	0 0 11	1 2 6	4	0 13 3
		" 16th	26	4,883	7 3 0	27	0 0 8	1 6 0	3	0 11 0
		" 23rd	35	8,443	12 6 9	35	0 0 9	1 7 0	6	1 8 6
		" 30th	34	9,653	13 12 0	40	0 0 11	1 7 0	14	3 0 0
	May	" 7th	31	11,655	12 12 3	53	0 0 11	1 2 0	16	7 3 9
		" 14th	22	4,463	4 9 6	20	0 0 6	1 2 0	18	5 1 9
		" 21st	36	12,042	14 14 6	48	0 0 11	1 [illegible] 0	7	2 8 6
		" 28th	779	117,218	204 15 0	22	0 0 7	1 12 0	9	2 15 8
	June	" 4th	962	207,789	383 4 3	31	0 0 11	1 13 6	11	3 2 9
		" 11th	1,007	119,145	226 11 0	17	0 0 6	1 15 9	33	6 0 9
		" 18th	745	209,647	427 15 9	40	0 1 3	1 9 0	53	15 0 6
		" 25th	591	221,493	517 14 9	53	0 2 0	2 5 5	108	24 11 9
	July	" 2nd	1,400	500,338	725 6 6	51	0 1 2	1 7 2	145	50 3 0
		" 9th	700	313,509	374 10 6	64	0 1 2	1 3 1	113	33 15 9
		" 16th	300	69,450	201 9 3	33	0 1 6	2 14 6	39	11 13 6
		" 23rd	32	13,192	17 14 3	59	0 1 3	1 5 9	2	0 12 0
		" 30th	......	......	......	......	......	......	......	......
	August	" 6th	......	......	......	......	......	......	......	......
		" 13th	......	......	......	......	......	......	......	......
		" 20th	......	......	......	......	......	......	......	......
	Total		......	2,529,769	3,972 4 3	......	......	......	......	180 9 8
	Average		342	......	......	44	0 1 1¼	1 9 1½	30	......

RELIEF

* *Muzaffarpur, Column 4.*—Besides earthwork, 12,459 c.ft. of quarrying kunkar, and 1,714,507 square feet of turfing were done from the week ending 21st
includes turfing, and average cost of the

III.

operations in 1892.

WORKS.			GRATUITOUS RELIEF.						
bourers.	A, B and C together.					Total outlay on relief works and gratuitous relief. (Total of columns 13 and 15).	Cost of establishment and other charges.	Grand Total.	REMARKS.
Average daily wage per male unit.	Average number of male units daily. (Total of columns 3 and 9).	Total wages paid. (Total of columns 5 and 10).	Average number of adult units relieved daily.	Total amount disbursed.	Average cost per head per diem.				
11	12	13	14	15	16	17	18	19	20
Rs. A. P.		Rs. A. P.		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
......	150	32 0 7	......	......	......	32 0 7			"A" *stands for labourers paid by piece-work,* "B" *for labourers paid by task-work, and* "C" *for labourers paid by the day.* *In the case of relief works women and children are reduced to male units by taking each woman as three-fourths, each big child (above eight years) as one-half, and each small child as one-fourth of a man, and for gratuitous relief, each adult, whether male or female, counts as a unit, and each child as a half.*
......	945	543 5 11	......	......	......	543 5 11			
......	1,273	869 12 3	......	......	......	869 12 3			
......	1,550	1,153 3 3	......	......	......	1,153 3 3			
......	2,533	1,939 0 11	......	......	......	1,939 0 11			
......	2,967	2,363 15 9	......	......	......	2,345 15 9			
......	3,444	2,654 3 10	......	......	......	2,654 3 10			
......	4,324	3,360 15 4	......	......	......	3,360 15 4			
......	3,793	2,567 1 2	......	......	......	2,567 1 2			
......	4,104	3,097 3 4	......	......	......	3,197 3 4			
0 1 1	5,768	5,139 8 8	......	......	......	5,139 8 8			
0 1 0	9,434	7,400 7 10	......	......	......	7,400 7 10			
0 0 11	11,174	9,278 9 2	......	......	......	9,278 9 2			
......	12,796	11,007 3 0	......	......	......	11,007 3 0			
......	8,428	7,013 1 11	......	......	......	7,013 1 11			
......	6,595	4,405 0 1	......	......	......	4,405 0 1			
......	4,856	3,231 9 7	......	......	......	3,231 9 7			
......	1,803	1,250 1 11	......	......	......	1,250 1 11			
......	286	228 8 9	......	......	......	228 8 9			
......	26	17 1 6	......	......	......	17 1 6			
......	......	67,584 2 9	......	......	......	67,584 2 9	11,627 0 3*	79,211 3 0	* Includes Rs. 1,365-1-2, cost of land acquired.
0 1 0	4,318	......	......	......	......	......	......	......	
......	146	142 0 6	......	......	......	142 0 6			
0 1 0	1,636	1,374 12 2	......	......	......	1,374 12 2			
0 1 0	3,144	2,312 5 7	......	......	......	2,312 5 7			
0 1 0	4,062	2,797 1 4	......	......	......	2,797 1 4			
0 1 0	8,857	5,235 1 6	......	......	......	5,235 1 6			
0 1 0	5,905	3,058 12 6	......	......	......	3,058 12 6			
0 1 0	12,717	6,202 8 9	23	4 9 3	0 0 5	6,207 2 0			
0 1 0	17,068	7,704 9 9	90	23 10 9	0 0 7¼	7,728 4 6			
0 0 11	18,344	8,795 0 6	109	25 8 9	0 0 6½	8,820 9 3			
0 1 0	22,576	14,828 1 6	157	38 12 2	0 0 6¾	14,866 13 8			
0 1 0	30,372	20,871 1 3	455	108 1 7	0 0 6¼	20,979 2 10			
0 1 0	30,275	22,017 2 2	1,288	275 6 10	0 0 5½	22,292 9 0			
0 1 0	37,209	27,252 6 2	622	142 7 6	0 0 6½	27,394 13 8			
0 1 0	39,271	27,392 12 4	785	176 11 9	0 0 6	27,569 8 1			
0 0 10½	31,869	20,114 14 6	751	176 3 11	0 0 6½	20,291 2 5			
0 0 8	25,094	13,221 5 1	757	176 12 2	0 0 6¼	13,398 1 3			
0 0 8	14,999	8,597 3 8	783	181 15 7	0 0 6¾	8,779 3 3			
0 0 8	10,930	6,221 6 5	431	99 3 6	0 0 6¼	6,320 9 11			
0 0 8½	7,329	4,053 9 6	384	89 6 10	0 0 6¼	4,143 0 4			
0 0 7½	5,081	1,321 13 0	98	22 7 9	0 0 6¼	1,344 4 9			
......	......	2,03,514 0 2	......	1,541 6 4	......	2,05,055 6 6	66,901 1 5	2,71,956 7 11	* Relief works were actually closed on the 19th, so that the figures given for this week as to works are for three days only.
0 0 10½	16,605	......	481	......	0 0 6 3/10	......	......	......	
......	156	105 10 7	......	......	......	105 10 7			
......	301	189 14 6	143	82 9 0	0 0 8	607 9 9			
......	574	335 2 3							
0 0 6	106¼	50 4 3	250	100 7 0	0 0 5½	221 5 11			
0 0 6	182½	70 10 8							
0 0 6	87	36 5 3	169	76 3 9	0 0 6	129 7 6			
0 0 7	52	16 14 6							
0 0 3	81	23 7 6	151	85 3 9	0 0 5	88 7 3			
0 0 6	29	9 12 0							
0 0 6	29½	7 14 0	198	66 3 9	0 0 4½	104 13 0			
0 0 7	41	13 15 3							
0 0 6	48	16 12 0							
0 1 0	47	20 0 0	196	43 8 3	0 0 6	63 8 3			
0 0 10	25	9 11 3	216	46 2 9	0 0 6	55 13 3			
0 0 10	46	17 7 0	218	49 8 6	0 0 6	66 15 6			
0 0 8	788	207 14 8	217	48 13 9	0 0 6	256 12 5			
0 0 8	972½	386 7 0	239	50 4 9	0 0 5½	436 11 9			
0 0 5	1,040	232 11 9	226	49 3 6	0 0 6	281 15 3			
0 0 7	798	443 0 3	226	49 0 0	0 0 6	492 0 3			
0 0 6	699	542 10 6	211	53 13 3	0 0 7	596 7 9			
0 0 9	1,545	775 9 6	242	54 13 9	0 0 6	830 7 3			
0 0 8	813	408 10 3	243	55 3 3	0 0 6	463 13 6			
0 0 8	339	213 6 9	211	52 8 3	0 0 6½	265 15 0			
0 0 8	34	18 10 3	197	51 6 0	0 0 7	70 0 3			
......	......	......	198	51 1 6	0 0 7	51 1 6			
......	......	......	200	51 11 6	0 0 7	51 11 6			
......	......	......	182	39 6 3	0 0 6	39 6 3			
......	......	......	182	39 6 3	0 0 6	39 6 3			
......	......	4,152 13 11	......	1,166 10 9	......	5,319 8 8	996 5 1†	6,803 14 11	† Includes Rs. 464-6-3 on account of cotton-spinning and the relief of straggling beggars.
0 0 7½	372	......	209	......	0 0 6	......	......	......	

May to the close of the relief works, and columns 3, 5, 12, 13, 17 and 19 include figures on account of these works. The average rate given for earthwork quarrying kunkar was Re. 1-6 per 100 cubic feet.

District.	Month and week.		Relief — A and B labourers. Average number of male units employed daily.	Total amount of earth-work done.	Total wage paid.	Average work done per male unit per diem.	Average daily wage per male unit.	Average cost per 1,000 cubic feet.	C. la[bourers]. Average number of male units employed daily.	Total wage paid.
1	2		3	4	5	6	7	8	9	10
				C. ft.	Rs. A. P.	C. ft.	Rs. A. P.	Rs. A. P.		Rs. A. P.
Bhagalpur.	January	Week ending 23rd ...			No information.			......	230	30 14 6
		" 30th ...	... .	94,875	......	......	......	3 0 0	758	288 14 9
	February	" 6th ...	.....	58,430	......	... ..	......	3 7 0	790	199 12 6
		" 13th ...	... ..	148,070	...	......	......	4 4 0	1,678	629 3 3
		" 20th ...	......	62,385	.....	......	......	3 14 0	1,947	243 5 0
		" 27th ...	... ..	......	... ..	......	......	......	......	......
	March ..	" 5th ..	495	164,108	205 12 0	47½	0 0 11½	1 4 0	......	.. ...
		" 12th ..	881	334,791	424 3 3	54	0 1 1	1 4 0	......	......
		Five days ending 17th	2,015	868,320	1,411 11 9	86	0 2 3	1 10 0	......	......
		Week ending 24th	2,459	1,046,975	1,750 10 3	61	0 1 7½	1 11 0	7	1 10 0
		" 31st ...	3,505	1,143,763	2,049 10 0	46½	0 1 4	1 13 0	94	20 8 10
	April ...	" 7th ...	4,048	1,658,566	1,958 1 9	37	0 1 1	1 14 0	212	44 2 0
		" 14th ...	5,231	1,612,744	2,749 8 7	44	0 1 2½	1 11 0	412	85 0 0
		" 21st .	5,855	1,910,921	3,279 6 10	47	0 1 3½	1 11 0	6[illegible]3	118 14 0
		" 28th ...	6,807	1,952,020	3,318 5 3	40	0 1 1½	1 11 0	504	101 1 6
	May .	" 5th ..	7,377	2,091,570	3,608 13 9	40½	0 1 1½	1 12 0	437	63 3 3
		" 12th ...	8,438	2,522,209	4,521 14 3	43	0 1 2½	1 12 0	155	41 2 9
		" 19th ...	8,543	2,404,983	4,733 12 7	40	0 1 3	1 15 0	138	40 10 3
		" 26th ..	9,335	2,617,554	5,246 9 3	40	0 1 3	2 0 0	522	256 6 3
	June ...	" 2nd	8,858	2,319,283	5,004 13 2	37	0 1 3½	2 3 0	709	350 10 6
		" 9th ..	8,132	1,997,749	4,146 7 8	34	0 1 1½	2 1 0	1,733	433 3 9
		" 16th .	4,646	1,455,775	2,804 3 11	45	0 1 4½	1 15 0	1,183	417 4 6
		" 23rd ..	5,400	1,429,427	2,652 3 6	38	0 1 1½	1 13 0	366	154 9 0
	July ...	For nine days ending 2nd .	4,028	1,782,397	2,631 1 1	49	0 1 2	1 8 0	216	89 11 0
		Week ending 9th .	2,[illegible]25	723,182	1,267 2 10	45	0 1 3	1 12 0	215	71 13 0
		" 16th .	2,241	703,144	1,192 15 5	45	0 1 2½	1 11 0	219	74 8 0
		" 23rd .	1,480	493,755	728 9 7	48	0 1 1½	1 8 0	215	92 9 0
		" 30th ...	1,[illegible]73	443,740	604 10 0	53½	0 1 2	1 6 0	195	82 13 9
	August ..	" 6th ..	1,271	450,695	689 14 4	50	0 1 3	1 8 0	188	74 12 9
		" 13th ...	1,030	357,352	543 0 2	49½	0 1 2½	1 8 0	152	63 6 6
		" 20th ...	651	256,946	358 9 5	56½	0 1 3	1 6 0	134	49 10 6
	Total ..		. . .	32,495,719	57,929 2 7	...	.. ..	... ..	......	4,137 13 1
	Average .		4,287	......	. . .	43	0 1 3	1 12 6	472	......
Purnea.	January ..	Four days ending 30th.	188	12,918	72 2 3	17	0 1 6	5 9 2	45	14 0 3
	February	Week ending 6th	451	68,011	303 15 9	21½	0 1 6½	4 7 6	124	57 4 6
		" 13th	1,460	283,713	848 6 0	29	0 1 4½	2 15 9	284	127 6 6
		" 20th ...	2,189	243,881	1,172 7 9	16	0 1 2½	4 12 10	424	181 11 0
		" 27th ..	2,421	258,175	1,589 4 0	15	0 1 6	6 2 5	470	205 10 3
	March	" 5th ..	3,003	476,870	1,971 15 6	22½	0 1 6	4 2 2	607	265 6 9
		" 12th .	3,296	565,602	2,386 9 6	25	0 1 8	4 3 6	621	270 5 3
		" 19th .	3,273	509,142	1,740 1 9	22½	0 1 2½	3 6 11	336	136 0 9
		" 26th	2,533	631,934	1,867 8 0	36	0 1 8	2 15 3	258	92 12 0
	April ..	Week ending 2nd ...	2,425	820,159	2,153 7 9	49	0 2 0½	2 9 6	334	130 8 3
		" 9th	2,662	4[illegible]0,792	1,824 15 6	25	0 1 7	3 14 1	509	218 8 9
		" 16th ..	917	313,928	794 12 3	52	0 1 11	2 5 0	400	182 1 9
		" 23rd ..	818	2[illegible]8,462	594 1 9	52	0 1 8	1 15 11	305	138 12 9
		" 30th ...	543	160,285	281 7 6	42	0 1 2	1 12 1	166	64 0 6
	May .	" 7th .	599	145,437	241 8 0	35	0 0 11	1 10 6	278	110 2 6
		" 14th .	260	111,613	174 14 0	61½	0 1 6½	1 9 0	209	84 1 0
		" 21st .	192	87,282	135 0 0	65	0 1 7	1 8 8	150	61 15 0
		" 28th	98	43,612	63 4 0	63½	0 1 6	1 7 2	46	19 6 0
	June ...	" 4th .	...	.. ..	. ....	......	......	......	... ..	......
		" 11th ..	.. ...	......	. ...	.. ..	......	......	......	......
		" 18th .	..	......	. ....	.. ...	......	......	......	......
	Total ...		..	5,539,814	18,217 13 3	......	......	... ..	......	2,360 1 9
	Average ..		1,544	....	... ..	24	0 1 6	3 4 7	516	......
Dinajpur.	January ...	Week ending 31st	41	......	......	......	......	......	......	......
	February	" 7th	114	......	......	......	......	......	......	......
		" 13th ..	56	.. ...	......	. ....	......	......	18	......
		" 20th ..	45	......	......	......	.... .	......	18	......
		" 27th .	108	......	......	......	......	......	10	......
	March ...	" 5th	166	......	......	......	......	......	77	......
		" 12th	228	......	......	......	......	......	304	......
		" 19th ...	605	......	......	......	......	......	244	......
		" 26th ..	789	......	......	......	......	......	32	......

WORKS.			GRATUITOUS RELIEF.						
...bourers.	A, B, and C together.								
Average daily wage per male unit.	Average number of male units daily. (Total of columns 3 and 9).	Total wages paid, (Total of columns 5 and 10).	Average number of adult units relieved daily.	Total amount disbursed.	Average cost per head per diem.	Total outlay on relief works and gratuitous relief. (Total of columns 13 and 15).	Cost of establishment and other charges.	Grand total.	REMARKS.
11	12	13	14	15	16	17	18	19	20
Rs. A. P.		Rs. A. P.		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
0 1 1	230	30 14 6	......	....	......	30 14 6			Work open for two days.
0 1 0	758	286 14 9	... ..	......	......	286 14 9			Ditto six days.
0 1 0	799	190 12 6	......	......	......	199 12 6			Ditto four days.
0 1 0	1,678	629 3 3	.. ...	......	......	6[illegible]9 8 3			Ditto six days.
0 1 0	1,947	243 5 0	......	......	......	243 5 0			Ditto two days.
Work temporarily closed.									
... ..	495	205 12 0	.... .	......	......	205 12 0			
......	881	424 3 3	......	......	......	424 [illegible] 3			
......	2,105	1,411 11 9	......	... ..	......	1,411 11 9			Account for five days.
0 0 6½	2,466	1,7[illegible]2 4 3	......	.... .	......	1,752 4 3			
0 0 6	3,5[illegible]9	2,070 2 10	......	0 4 0	.. ...	2,070 6 10			
0 0 5¾	4,26[illegible]	2,000 3 9	. ....	} 188 5 6	......	2,000 3 9			
0 0 5½	5,643	2,834 8 7	.. ...			3,022 14 1			
0 0 5	6,458	3,398 4 10	.... .	. ...	... ..	3,398 4 10			
0 0 5½	7,311	3,419 6 9	132	33 0 0	0 0 7	3,452 6 9			
0 0 5¼	7,814	3,692 1 0	1,204	324 12 7	0 0 7¼	4,016 13 7			
0 0 7¼	8,593	4,563 1 0	1,286	348 4 8	0 0 7½	4,911 5 8			
0 0 8	8,681	4,773 6 10	1,276	345 15 9	0 0 7¼	5,119 6 7			
0 1 1½	9,907	5,502 15 6	1,275	323 11 3	0 0 7	5,826 10 9			
0 1 1½	9,567	5,355 7 8	1,176	512 13 2	0 1 0	5,868 4 10			
0 0 6½	10,185	4,579 11 5	1,331	500 14 3	0 0 10¼	5,080 9 8			
0 0 10	5,829	3,221 8 5	1,316	404 13 6	0 0 8¼	3,626 5 11			
0 1 0	5,766	2,806 12 6	1,363	389 8 4	0 0 8	3,196 4 10			
0 0 9	4,[illegible]38	2,770 12 1	1,243	351 13 0	0 0 6	3,122 9 10			Account for nine days.
0 0 9	2,580	1,338 15 10	1,221	343 5 6	0 0 7¾	1,682 5 1			
0 0 9½	2,469	1,267 7 5	1,025	292 2 9	0 0 7¾	1,559 10 2			
0 1 0	1,605	821 2 7	982	282 10 9	0 0 8	1,103 13 4			
0 0 11½	1,374	687 7 9	831	234 0 0	0 0 7¾	921 7 9			
0 0 11	1,479	764 11 1	719	197 6 9	0 0 7¼	962 1 10			
0 0 11½	1,182	606 6 8	618	275 2 6	0 1 0	881 9 2			
0 0 10	785	408 3 11	167	92 2 9	0 1 3	500 6 8			
....	..	62,096 15 8	.	5,411 3 9	....	67,508 3 5	6,066 12 7	73,575 0 0	
0 0 9½	4,759	....	1,015	...	0 0 8¼	......	......	.....	
0 1 2	233	86 2 6	58	23 14 3	0 0 11¼	110 0 9			Relief works were opened on 27t[h] and gratuitous relief on the 3[illegible] January.
0 1 0	575	361 4 3	77	29 6 3	0 0 10½	390 10 6			
0 1 0	1,684	975 12 6	204	64 8 2	0 0 9	1,040 4 8			
0 1 0	2,613	1,354 2 9	273	82 4 8	0 0 8½	1,436 7 5			
0 1 0	2,891	1,794 14 3	333	113 1 11	0 0 9¼	1,908 0 2			
0 1 0	3,610	2,237 6 3	452	143 15 10	0 0 9	2,381 6 1			
0 1 0	3,827	2,656 14 9	925	246 7 7	0 0 5½	2,903 6 4			
0 0 11	3,611	1,876 2 6	1,065	314 10 7	0 0 8	2,190 13 1			
0 0 9½	2,791	1,960 4 0	1,111	3[illegible]2 13 4	0 0 8	2,283 1 4			
0 0 10½	2,759	2,284 0 0	1,028	305 13 10	0 0 8	2,[illegible]89 13 10			
0 0 11	3,178	2,043 8 3	1,312	305 3 8	0 0 6½	[illegible] 11 11			
0 1 0	1,347	976 14 0	1,059	279 8 5	0 0 7	[illegible] 6 5			
0 1 0	1,123	734 14 6	979	224 14 8	0 0 6	959 13 2			
0 0 10½	709	345 8 0	827	189 7 5	0 0 6½	534 15 5			
0 0 10	877	351 10 6	768	157 3 5	0 0 5½	508 13 5			
0 0 11	469	258 15 0	751	120 15 0	0 0 4½	379 14 0			
0 0 11	342	196 15 0	684	85 10 0	0 0 3¼	282 9 6			
0 0 11½	144	82 10 0	431	48 15 1	0 0 3	131 9 1			28th May was the last day of reli[ef] works.
......	... .	.... .	404	56 7 3	0 0 4	56 7 3			
.....	....	. ...	315	37 13 5	0 0 3	37 13 5			
.. ...	.....	.....	315	45 3 2	0 0 4	45 3 2			17th June was the last day of grat[ui]tous relief.
......	......	20,577 15 0	... ..	3,198 5 11	......	23,776 4 11	2,615 11 7	26,392 0 6	
0 0 11½	1,860	.. ..	659¼	. ....	0 0 6½	......			
......	41	......	......	. ...	......	......			
......	114	......	......	. ....	......	......			
......	74	......	......	.... .	......	. ....			
......	63	......	.. ...	. ....	......	. . .			
......	118	......	......	......	......	......			
......	243	...	......	......	......	......			
......	532	.. ...	.. ...	......	......	......			
......	849	......	......	......	......	......			
......	821	... .	......	......	......	......			

District.	Month and week.	A and B labourers.						Relief	
		Average number of male units employed daily.	Total amount of earth-work done.	Total wage paid.	Average work done per male unit per diem.	Average daily wage per male unit.	Average cost per 1,000 cubic feet.	Average number of male units employed daily.	Total wage paid.
1	2	3	4	5	6	7	8	9	10
			C. FT.	Rs. A. P.	C. FT.	Rs. A. P.	Rs. A. P.		Rs. A. P.
Dinajpur—concluded.	April " 2nd ...	971	......	......	......	......	......	408	......
	April " 9th ...	1,183	......	......	......	......	......	223	......
	April " 16th ...	1,449	......	......	......	......	......	127	......
	April ... Total and average ...	47)	5.145,938	9,386 13 0	109	0 3 2	1 13 0	146	2,000 6 6
	April " 23rd ...	1,831	1,295,717	2,390 0 0	101	0 3 0	1 13 6	66	58 4 0
	April " 30th ...	1,7)4	1,544,1[illegible]8	2,152 9 3	107	0 2 7	1 6 3	69	34 7 6
	May ... " 7th ...	2.202	1,454,925	2,612 13 3	94	0 2 8¼	1 13 0	55	32 5 0
	May " 14th ...	1,617	1,273,758	2,423 1 3	113	0 3 5¼	1 14 6	61	31 0 0
	May " 21st ...	3[illegible]5	1[illegible]8,852	182 14 3	65	0 1 4¼	1 5 1	60	35 10 0
	May " 28th ...	309	258,250	374 6 9	133	0 2 8	1 6 0	113	67 2 0
	June .. " 4th ...	216	191.192	226 12 6	111	0 2 1	1 2 11	63	36 14 6
	June " 11th ..	222	112,762	122 0 6	72	0 1 3	1 1 3	56	52 14 0
	June " 1[illegible]th ...	245	131,529	157 10 6	76	0 1 6	1 3 2	56	32 0 6
	June " 25th ...	297	114,389	155 13 0	65	0 1 3	1 6 2	14	8 3 0
	July ... " 2nd ...	632	384,672	471 14 9	86	0 1 8	1 3 7	62	31 14 6
	Total ...	......	6,900,154	11,278 0 9	......	......	......	......	410 11 0
	Average ...	878	......	......	102	0 2 8	1 10 3	60	......
	Total and average for the whole period	670	12,04[illegible],092	20,664 12 9	105	0 2 11	1 11 5	101	2,411 1 6
	GRAND TOTAL AND AVERAGE OF THE SIX DISTRICTS.	3,932	229,393,819	3,63,540 6 3	60	0 1 6½	1 9 4	299	17,431 7 6

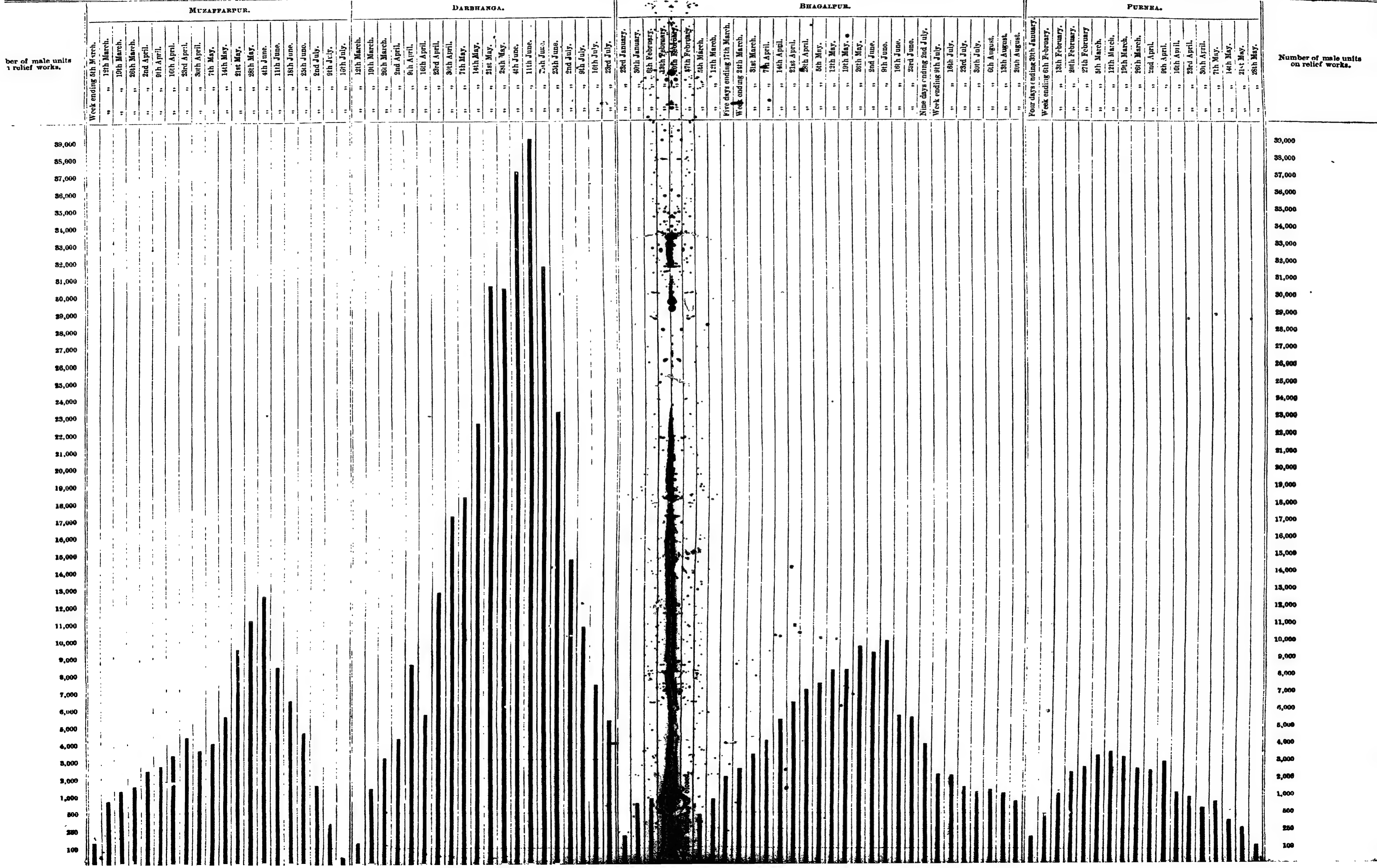
...WORKS.			GRATUITOUS RELIEF.						
...bourers.	A, B, and C together.								
Average daily wage per male unit.	Average number of male units daily. (Total of columns 3 and 9).	Total wage paid. (Total of columns 5 and 10).	Average number of adult units relieved daily.	Total amount disbursed.	Average cost per head per diem.	Total outlay on relief works and gratuitous relief. (Total of columns 13 and 15).	Cost of establishment and other charges.	Grand total.	REMARKS.
11	12	13	14	15	16	17	18	19	20
Rs. A. P.		Rs. A. P.		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
......	1,379	......	......	......	......	......			
......	1,4[illegible]6	......	......	......	......	......			
...	1,576	... ..	......	......	......	......			
0 2 8	625	11,387 2 6	......	......	......	11,387 2 6			
0 2 0	1,897	2,448 4 9	......	......	......	2,448 4 9			
0 1 4	1,813	2,187 0 9	......	......	......	2,187 0 9			
0 1 4	2,257	2,645 2 3	......	......	......	2,645 2 3			
0 1 4	1,678	2,464 1 3	......	......	......	2,464 1 3			
0 1 4	365	218 8 3	......	......	......	218 8 3			
0 1 4·3	424	441 8 9	......	......	......	441 8 9			
0 1 4	309	263 11 0	......	......	......	263 11 0			
0 1 4·6	278	154 14 6	......	......	......	154 14 6			
0 1 3·6	301	189 11 0	......	......	......	189 11 0			
0 1 3·7	311	167 0 0	......	......	......	167 0 0			
0 1 4·3	694	508 13 3	12	3 15 0	0 0 9	512 12 3			
......	...	11,688 11 9	......	3 15 0	......	11,692 10 9			
0 1 5	938	.. ...	12	......	0 0 9	......	. . .	.....	
0 2 0	771	23,075 14 3	......	3 15 0	......	23,079 13 3	3,582 8 5	26,662 5 8	
0 0 11½	4,251	3,80,971 13 9	543	11,351 9 9	0 0 7½	3,92,323 7 6	91,789 7 4	4,84,112 14 10	

C. E. BUCKLAND,

Secretary to the Government of Bengal.

APPENDIX IV.

Diagram showing the rise and fall of numbers on Relief Works in the districts of Muzaffarpur, Darbhanga, Bhagalpur and Purnea.



FINANCIAL RESOLUTION.

FINANCIAL DEPARTMENT—FINANCE.

Calcutta, the 27th December 1892.

RESOLUTION—No. 5191F.

IN the Resolutions of the 17th April and 26th October 1891, the general results of the five years' Provincial contract of 1887 were briefly reviewed. This review was based upon the revised estimates of 1890-91 and the budget estimates of 1891-92. The Accountant-General's memorandum on the accounts of the former year has since been received, and although the accounts of the latter year have not yet been finally closed, the Appropriation Report for the year, furnishing approximate results, is sufficient for all practical purposes. A new contract has now been concluded for another five years, and materials are available for reviewing the Provincial finances during the period of the expired contract. The figures of the revenue and expenditure of the first seven months of the current year have been received from the Accountant-General, and these afford sufficient data for a revised forecast of the probable position of the province in the first year of the period upon which it has now entered.

PART I.—ACCOUNTS OF 1890-91.

2. The actuals of 1890-91 furnished by the Accountant-General in his memorandum on the accounts of the year are compared in the following table with the revised estimate adopted in the Financial Resolution No. 4501, dated the 26th October 1891 :—

RECEIPTS.			OUTGOINGS.	
Revised estimate.	Actuals.		Revised estimate.	Actuals.
Rs.	Rs.		Rs.	Rs.
2,87,26,000	2,86,05,404	Principal heads of revenue	61,77,000	60,94,967
91,000	92,509	Interest ...	83,000	84,461
1,000	129	Post office and telegraph	1,000	(—)481
40,11,000	39,28,936	Civil Departments ...	2,25,05,000	2,30,82,071
11,89,000	11,90,903	Miscellaneous ...	28,91,000	28,90,144
......	......	Famine relief and insurance ...	13,000	12,682
......	......	Construction of railways	13,000	13,040
1,49,24,000	1,46,45,003	Railways... ...	1,08,68,000	1,07,97,407
22,85,000	22,84,427	Irrigation and Navigation	52,48,000	52,47,765
7,36,000	7,36,896	Buildings and Roads ...	35,70,000	35,71,474
......	... .	Contributions ...	8,91,000	8,94,450
5,19,63,000	5,14,84,207	Total ..	5,22,63,000	5,26,87,980
36,77,000	36,76,547	Opening balance ...	......	......
......	......	Closing balance ...	33,77,000	24,72,774
5,56,40,000	5,51,60,754	GRAND TOTAL ...	5,56,40,000	5,51,60,754
		Excess of expenditure over receipts.	3,00,000	12,03,773

3. The revised estimate adopted in the Financial Resolution of the 26th October 1891 assumed that the year 1890-91 had opened with a credit balance of Rs. 36,77,000, and closed with a credit balance of Rs. 33,77,000; that the total amount available for expenditure was Rs. 5,56,40,000, and that Rs. 5,22,63,000 had been spent. The actual result was less favourable than this estimate by Rs. 9,03,773. The amount actually available for expenditure was Rs. 5,51,60,754, and the amount actually expended Rs. 5,26,87,980. The closing credit balance was Rs. 24,72,774.

4. There was a decrease of Rs. 4,78,793 on the Revenue side, of which Rs. 83,707 was under Jails, and this was due to no adjustments being made in the year after the revised estimate had been passed in October last for jail manufactures supplied to other departments, but for which an allowance of a like amount was made in the estimate.

The remainder of the decrease was almost entirely due to the transactions of the Tirhut and Bengal and North-Western Railways. The Government of India have not made any allowance for the loss to the Provincial revenues caused by the transfer of the Tirhut Railway to the Bengal and North-Western Railway Company, for which a credit of Rs. 2,24,334 was taken in the revised estimate. The gross receipts of this railway for 1890-91 and those of the Bengal and North-Western Railway for nine months from 1st July 1890, the date from which the accounts of the two railways have been combined, to 31st March 1891, amounted to Rs. 39,03,251, against Rs. 39,57,547 anticipated in the estimate of October 1891, showing a decrease of Rs. 54,296. The adjustments under Land Revenue on account of the shares of the Company in the net earnings of the Bengal and North-Western Railway for the nine months provided for a payment of Rs. 9,39,000, but the actuals amounted to Rs. 10,49,556, showing a loss of Rs. 1,10,556. The total decrease on account of these transactions thus amounted to Rs. 2,24,334+54,296+1,10,556=3,89,186.

5. The actual expenditure in 1890-91 compared with the revised estimate shows a net increase of Rs. 4,24,980. The fluctuations have been chiefly under (1) Land Revenue (—85,057), (2) Police (+5,72,884) and (3) Working Expenses of State Railways (—71,184).

The decrease under 1) was chiefly under Survey and Settlement charges, which amounted to Rs. 4,16,676 against Rs. 4,90,000, the revised estimate passed by the Government of India. The increase under Police was due to the inclusion of the charges connected with the Chin-Lushai Expedition and the formation of the South Lushai Hills district. In the revised estimate for 1890-91, these charges were eliminated from the Provincial account, as the question of their final adjustment had not then been decided. The decrease under State Railway Working Expenses was in the Tirhut and Bengal and North-Western Railway.

6. The net result of the year, as stated above, was unfavourable to the extent of Rs. 9,03,773, and the year closed with a credit balance of Rs. 24,72,774, against Rs. 33,77,000 anticipated when the revised estimate was framed. The deficit of the year, or the excess of charges over receipts, amounted to Rs. 12,03,773, which was mainly due to a special contribution of ten lakhs paid to the Imperial Revenues in consequence of the financial difficulties of the Government of India, and to a special grant of four lakhs made to the Public Works Department to undertake urgent works, especially to defray the cost of repairs and maintenance of the roads in the Darjeeling district which were much damaged by heavy rains, and the new feeder roads to the railway in Chota Nagpore.

PART II.—APPROXIMATE ACCOUNTS OF 1891-92.

7. The following table compares the approximate actuals for 1891-92 with the latest estimates adopted by the Government of India :—

RECEIPTS.	Revised estimate, 1891-92, adopted by the Government of India	Approximate actuals, 1891-92.
	Rs.	Rs.
Opening balance	24,73,000	24,72,774
Principle Heads of Revenue—		
I.—Land Revenue { Proper ...	99,63,000	1,00,21,546
I.—Land Revenue { Adjustments	+16,14,000	+13,81,360
III.—Salt	1,25,000	1,10,854
IV.—Stamps	1,11,75,000	1,13,25,346
V.—Excise	27,37,000	27,83,490
VI.—Provincial rates	13,80,000	45,24,527
VII.—Customs	58,000	57,105
VIII.—Assessed taxes	21,50,000	21,54,146
IX.—Forests	4,07,000	3,94,777
X.—Registration	6,62,000	6,67,156
Total ...	3,33,01,000	3,34 20,307
XII.—Interest	1,23,000	1,18,163
Receipts by Civil Department—		
XIV.—Law and Justice—		
Courts of Law	8,70,000	8,82,093
Jails	6,50,000	9,27,642
XVII.—Police	4,55,000	4,48,649
XVIII.—Marine	10,00,000	9,65,408
XIX.—Education	6,00,000	5,95,122
XX.—Medical	1,50,000	1,46,548
XXI.—Scientific and other Minor Departments	1,72,000	1,96,040
Total ...	40,97,000	41,61,403
Miscellaneous—		
XXII.—Receipt in aid of superannuation	1 17,000	1,26,574
XXIII.—Stationery and Printing ..	1,11,000	1,57,368
XXV.—Miscellaneous	8,63,000	8,36,496
Total .	11,21,000	11,20,438
Railways—		
XXVI.—State Railways (gross earnings)	1,55,65,000	1,60,39,548
Irrigation—		
XXIX.—Major works (direct receipts) ..	14,42,000	16,02,710
XXX.—Minor works and navigation—		
By Public Works Department	8 35,000	8,17,934
By Civil Department ...	1,08,000	1.17,692
Total ...	23,85,000	25,38,336
Buildings and Roads—		
XXXII.—Civil Work—		
By Public Works Department	1,50,000	1,60,855
By Civil Department ..	2,50,000	2.40,973
Total ...	4,00,000	4.01,828
Total ...	5,69,92 000	5.78,00,113
GRAND TOTAL ...	5,94,65,000	6,02,72,887

EXPENDITURE.	Revised estimate, 1891-92 adopted by the Government of India.	Approximate actuals, 1891-92.
	Rs.	Rs.
Direct demand on the Revenue—		
1. Refunds and drawback	1,69,000	1,54,204
2. Assignments and compensation ..	1,63,000	1,67 129
3. Land Revenue	34,50,000	41.14,224
5. Salt	50,000	51,608
6. Stamps	3,44 000	3,37,772
7. Excise	1,65,000	1,66,416
8. Provincial Rates	4,30,000	4,34,287
9. Customs	5,25,000	5,18,721
10. Assessed taxes	90,000	90,014
11. Forests	2 10,000	2,10,235
12. Registration	3,38,000	3,41,737
Total ...	64,34,000	65 85,347
13. Interest on ordinary debt ...	95,000	1,01,241
15. Post Office	...	4,408
Salaries and expenses of Civil Department—		
18. General Administration	16,01,000	16,16 326
19. Law and Justice. { Courts of Law ...	84.10 000	84,82 793
19. Law and Justice. { Jails	20,35,000	20,22,006
20. Police	58,31,000	59 53,275
21. Marine	9,30,000	9,12,251
22. Education	25,65,000	25,51,574
24. Medical	15,65,000	15,66,661
25. Political	12,000	34,505
26. Scientific and other Minor Departments	3,06,000	3,11,594
Total ...	2,32,55,000	2 34,80,985
Miscellaneous—		
29. Superannuation, &c.	15,88,000	15,99,526
30. Stationery and Printing	13,09,000	13,34,909
32. Miscellaneous	2,07,000	2,94 751
Total ...	31,04,000	32,29,186
Famine Relief and Insurance—		
33. Famine relief	5,000	......
37. Construction of Railways	14,000	7,750
Railways (Revenue account)—		
38. State Railways—		
Working expenses	1,04,35,000	1,04,65,868
Interest on debt	30,96,000	33,98,508
40. Subsidized Companies—		
Land, &c.	3,000	1,358
41. Miscellaneous Railway expenditure	78,000	76,163
Total ...	1,42,12,000	1.42,41,897
Irrigation—		
42. Major works—		
Working expenses	14,23,000	13,54,171
Interest on debt . . .	24,04,000	24 03,107
43. Minor Works and Navigation—		
By Public Works Department . .	16,84,000	15,59,796
By Civil Department	2,000	14 552
Total ...	55 13,000	53,31,626
Buildings and Roads—		
45. Civil Works—		
By Public Works Department .	37,43 000	38 80,194
By Civil Department .. .	2.11,000	1,39,306
Total	39.54,000	40 20,500
Contributions	8,79,000	8.75,847
Total ...	5,74 65,000	5.78,87 877
Closing balance	20,00,000	23,85,010
GRAND TOTAL ...	5,94,65,000	6 02,72,887
Provincial surplus (+) or deficit (−) .	(−)4,73,000	(−)87,764

8. Taking the Civil and Public Works heads together, the Provincial receipts of the year amounted to Rs. 5,78,00,113 against the revised estimate of Rs. 5,69,92,000, and the Provincial expenditure aggregated Rs. 5,78,87,871 against the estimate of Rs. 5,74,65,000. The revised estimate allowed for a special contribution of 3⅓ lakhs from Imperial to Provincial to make up the Provincial balance of 20 lakhs, which under the orders of the Government of India the Government of Bengal is ordinarily bound to maintain. No such grant was, however, necessary, as an unexpected increase occurred in almost all principal revenue heads in the last two months of the year. The main cause of the improvement in the financial position of the province was the increase in the Provincial share of receipts under Railways, as the following statement will show:—

	Estimate passed by the Government of India, 1891-92.	Approximate actuals, 1891-92.
RECEIPTS.	Rs.	Rs.
Eastern Bengal State Railway	70,90,000	68,41,226
Other sections of the Eastern Bengal System ...	43,60,000	46,22,609
Nalhati	90,000	92,353
Tirhut and Bengal and North-Western Railway	48,50,000	48,88,540
	1,63,90,000	1,64,44,728
Deduct—Imperial share of the receipts from Eastern Bengal State Railway (Proper) being excess over 30 lakhs of the net earnings of the Railway	8,25,000	4,05,180
Total ...	1,55,65,000	1,60,39,548
CHARGES.		
Eastern Bengal State Railway ...	32,65,000	34,36,046
Other sections of the Eastern Bengal System ...	28,85,000	28,26,747
Nalhati	60,000	48,177
Tirhut and Bengal and North-Western Railway	42,25,000	41,54,898
Total ...	1,04,35,000	1,04,65,868
Net receipts (Provincial) ...	51,30,000	55,73,680

The charges of the Eastern Bengal State Railway (Proper) amounted to Rs. 34,36,046 against Rs. 32,65,000 passed by the Government of India in the revised estimate. The increase was due to the adjustment of the claim of the East Indian Railway Company for arrear freight on coal amounting to Rs. 2,21,102. This increase raised the expenditure on the broad gauge section to Rs. 34,36,046; and as the receipts on that section fell to Rs. 68,41,226, there remained a surplus of Rs. 34,05,180, of which only Rs. 4,05,180, instead of the estimated surplus of Rs. 8,25,000, passed to Imperial revenues, as the Imperial share was limited to any excess over 30 lakhs of the net earnings of Eastern Bengal State Railway (Proper). Thus, while the gross receipts and charges under Railways exceeded the revised estimates only by Rs. 54,728 and Rs. 30,868 respectively, and the net earnings by Rs. 23,860, the reduction of the Imperial share in these earnings benefited the Provincial revenues to the extent of nearly Rs. 4¼ lakhs.

The revenue derived from the canals classed as Irrigation Major Works amounted to Rs. 16,02,710 against Rs. 14,42,000 provided for in the revised estimate. The excess was due chiefly to larger collections of water-rates.

The heads of revenue and receipts in the Civil Department which chiefly contributed to the increase were Land Revenue (Rs. 58,000), Stamps (Rs. 1,50,000), Excise (Rs. 46,000), Provincial rates (Rs. 1,45,000) and Jails (Rs. 78,000).

9. The total expenditure exceeded the revised estimate by Rs. 4,22,871, and the chief fluctuations are explained below:—

Land Revenue.—The Accountant-General's account showed that the total expenditure under this head amounted to Rs. 41,14,224 against the revised estimate of Rs. 39,50,000. The increase was mainly under Surveys and Settlements which were actively pushed on during the year, and was partly also due to the creation of the Palamau and South Lushai districts.

Law and Justice, Courts of Law.—The actual charges under the heads of (*a*) "Law Officers," (*b*) "Civil and Sessions Courts," and (*c*) "Refunds" exceeded the revised estimates by Rs. 18,000, Rs. 29,000, and Rs. 13,000, respectively. The increase under (*a*) was due to the adjustment of large payments in Calcutta for conducting certain important law suits. The increase under (*b*) was caused by addition to the number of munsifs.

Police.—The revised estimate under this head was Rs. 58,31,000, but the total expenditure amounted to Rs. 59,53,275. The excess was under "Village Police" (Rs. 16,000), "Special Police" (Rs. 64,000), and "Refunds," (Rs. 50,000), the increase under the first head being due to the extension of Act V of 1887 to the district of Lohardaga, and that under the second to heavier expenditure in the South Lushai Hills.

Political.—There was larger expenditure under "Durbar Presents," and the total charges amounted to Rs. 34,505 against the revised estimate of Rs. 12,000. The increase was on account of khilluts purchased for presentation to the recipients of titles sanctioned after the revised estimate had been passed.

Stationery and Printing.—The original budget estimate under this head, amounting to Rs. 10,18,000, was raised by the Government of India to Rs. 13,09,000 on information furnished by the Superintendent of Stationery to meet a large increase of expenditure under "Stationery supplied from Central Stores." The actual charges amounted to Rs. 13,34,909, the increase being due to increased charges on account of rent of godowns and office expenses and miscellaneous, consequent on increased purchases and larger supplies of stationery.

Miscellaneous.—There was an increase of expenditure under "Donations for charitable purposes" (Rs. 25,000), due entirely to the larger payment on account of the contribution to the Calcutta Female Nurses' Institution made at the close of the year, and under "Miscellaneous and unforeseen charges" (Rs. 54,000), chiefly on account of the irrecoverable balance of embankment advances made in the district of Muzaffarpur from 1877 to 1882, amounting to Rs. 42,000, written off under the order of Government to debit of this head. The total expenditure amounted to Rs. 2,94,751 against Rs. 2,07,000, the revised estimate.

Irrigation Major Works.—An expenditure of Rs. 13,54,171 was incurred on account of the working expenses of the canals against Rs. 14,23,000 provided for in the revised estimate. The saving was mainly under the following heads:—

	Revised estimate.	Actuals.
	Rs.	Rs.
Midnapore Canal—		
Establishment	75,000	64,301
Sone Canals—		
Extensions	8,000	3,812
Repairs	2,71,000	2,59,304
Establishment	3,91,000	3,55,573
Refunds of Revenue	13,000	8,980
Total ...	7,58,000	6,92,470

Minor Works and Navigation.—The works in charge of the Public Works Department cost Rs. 15,59,796 against Rs. 16,84,000 provided for in the revised estimate passed by the Government of India. The decrease was mainly for smaller expenditure on the Hidgellee Tidal Canal and under Agricultural Works.

Civil Works in charge of the Public Works Department.—The increase under this head was Rs. 1,37,194, due principally to the increase of stock in the 1st Calcutta Division caused by the purchase of bricks from the lessee of the Government factory at Akra.

Civil Works in charge of Civil Officers.—The charges under this head aggregated Rs. 1,46,306 against Rs. 2,11,000 passed by the Government of India in the revised estimate. One of the chief causes of decrease was that the disturbances in the Lushai district prevented the construction of some projected works.

10. *Closing balance.*—The closing balance, as shown above, amounts to Rs. 23,85,016 against Rs. 20,00,000 estimated by the Government of India, and the increase has been obtained without taking any contributions from the Imperial revenues, while the estimate included a credit of Rs. 3,33,000 to make up the prescribed minimum balance of 20 lakhs.

PART III.—WORKING OF THE PROVINCIAL CONTRACT OF 1887.

11. In the Financial Resolution of the 24th December 1887, the results of the Provincial Contract of 1882, which was in force for the five years 1882-83 to 1886 87, were examined and reviewed. In this Resolution was also given some account of the terms of the contract which has just expired, governing the financial administration of this Province from 1887-88 to 1891-92. This period has now closed, and it will be convenient therefore to examine the operation of that contract.

The contract of 1887 was based for the most part on the arrangements proposed by the Finance Committee. No material advance in the system of decentralisation was made, but by a redistribution of the shares of the Imperial and Provincial Governments in the three principal heads of Land Revenue, Stamps, and Excise, and by certain reductions in expenditure which were considered feasible, a general standard of normal revenue and expenditure was obtained, which was adopted as the "Ruling account." The surplus of this account, amounting to Rs. 6,90,000, was appropriated by the Government of India through the Land Revenue head, leaving the province with a revenue and expenditure exactly equal. The Government of Bengal was admitted to a quarter share in the Land revenue collections, except those from Government estates, whilst under Stamps and Excise its share was changed from one-half in the preceding contract to three-fourths and one-fourth respectively. The proportion of charges under Stamps and Excise followed the proportion of receipts. The cost of surveys and settlements and of the maintenance of agricultural works and embankments was made entirely Provincial. Refunds and Drawbacks followed the proportions assigned for the revenues concerned. The Patna-Gaya State Railway was made Imperial, and the Eastern Bengal State Railway System, Provincial, with this reservation, that any excess over 30 lakhs in the net revenue from the Eastern Bengal State Railway (Proper) was to be credited to Imperial revenues. The interest on funds provided for outlay on State Railways and Irrigation Major Works was borne by the Provincial revenues, and was calculated on the entire capital outlay, including loss by exchange, from the commencement of operations, but excluding the amount advanced from Provincial revenues during the term of the contract.

12. The only important change made since the contract was finally settled is the transfer of the management of the Tirhut State Railway to the Bengal and North-Western Railway Company from 1st July 1890. But the Provincial accounts have been swollen by the inclusion of the receipts and working expenses of that Railway, including the payment to the Company of their share in the net receipts from the entire undertaking.

13. The following statements show at a glance the progress of the Provincial receipts and expenditure during the five years as compared with the assignments made in the contract:—

REVENUE.

Receipts.	Contract assignment.	Actuals, 1887-88.	Actuals, 1888-89.	Actuals, 1889-90.	Actuals, 1890-91.	Approximate actuals, 1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Opening balance ...	......	19,98,924	33,08,991	26,51,072	36 76,547	24,72,774
Principal heads of Revenue—						
I.—Land Revenue. Proper	98,53,000	97,88,195	95,87,775	1,00,16,495	99,92,539	1,00,21,546
I.—Land Revenue. Adjustment	(—)6,81,000	(—)2,40,185	(—)5,01,838	(+)1,61,032	(—)22,97,338	(+)13,81,360
III.—Salt	1,00,000	78,207	88,195	1,23,718	1,28,226	1,10,864
IV.—Stamps	1,04,87,000	1,03,02,028	1,03,7[illegible],239	1,06,78,5[illegible]3	1,06,85,194	1,13,25,340
V.—Excise	24,82,000	27,16,436	27,22,939	26,[illegible]8,82[illegible]	26,16,210	27,83,490
VI.—Provincial Rates	39,20,000	42,36,538	41,56,323	43,06,024	43,19,933	45,24,527
VII.—Customs	57,000	59,584	40,891	55,0[illegible]4	57,973	57,105
VIII.—Assessed Taxes	17,81,000	18,69,971	19,55,098	20,83,503	21,19,441	21,54,146
IX.—Forests	3,50,000	3,28,897	3,38,454	3,84,359	3,63,6[illegible]6	3,94,777
X.—Registration	5,38,000	5,08,912	5,10,772	6,00,033	6,19,589	6,07,156
Total ...	2,84,82,000	2,97,08,583	2,93,20,418	3,10,27,610	2,86,05,404	3,34,20,307
XII.—Interest	73,000	67,093	97,383	1,04,267	92,509	1,18,163
Post Office, Telegraph and Mint—						
XIV.—Telegraphs	......	1,163	926	868	129	......
Receipts by Civil Department—						
XVI.—Law and Justice—						
Fees, fines, and forfeitures of Judicial Courts	7,60,000	7,74,2[illegible]5	7,89,538	8,04,582	8,96,337	8,82,093
Jails	8,46,000	7,10,279	7,75,021	8,59,502	7,66,293	9,27,642
XVII.—Police	7,05,000	3,13,349	3,38,197	4,26,742	4,51,678	4,48,640
XVIII.—Marine	8,08,000	9,10,096	9,11,734	8,54,207	9,18,736	9,65,408
XIX.—Education	5,25,000	6,94,653	6,11,884	5,09,861	5,75,668	5,95,128
XX.—Medical	1,46,000	1,38,554	1,36,165	1,46,352	1,[illegible]2,812	1,46,548
XXI.—Scientific and other Minor Departments	1,41,000	1,56,308	1,65,154	1,55,780	1,77,394	1,96,040
Total ...	39,40,000	36,07,494	37,27,693	38,17,026	39,28,936	41,01,4[illegible]
Miscellaneous—						
XXII.—Receipts in aid of superannuation...	41,000	45,504	48,849	45,601	1,26,507	1,26,[illegible]74
XXIII.—Stationery and Printing	1,23,000	1,88,347	1,75,074	1,50,506	2,94,147	1,57,368
XXV.—Miscellaneous	7,45,000	6,94,887	8,34,785	8,02,574	7,70,249	8,36,496
Total ...	9,09,000	9,28,738	10,58,708	9,98,681	11,90,9[illegible]	11,20,488
Railways—						
XXXVI.—State Railways (gross earnings) ...	1,00,19,000	1,12,73,465	1,17,33,868	1,25,04,406	1,46,45,003	1,60,39,548
Irrigation—						
XXIX.—Major works (direct receipts) ..	13,30,000	11,03,220	13,04,369	15,21,274	13,46,728	16,02,710
XXX.—Minor works and navigation—						
By Public Works Department ...	9,44,000	8,62,662	8,67,844	7,88,642	8,44,062	8,17,934
By Civil Department		1,02,008	1,02,154	1,02,130	93,0[illegible]7	1,17,692
Total ...	22,74,000	[illegible]67,890	23,64,367	24,12,046	22,84,427	25,38,336
Buildings and Roads—						
XXXII.—Civil works—						
By Public Works Department	7,50,000	1,75,42[illegible]	2,00,076	2,52,843	4,72,445	1,60,855
By Civil Department		2,27,379	2,74,564	3,16,758	2,64,451	2,40,973
Total ...	7,50,000	4,02,801	4,74,640	5,69,601	7,36,896	4,01,828
Total ...	4,64,47,000	4,81,47,256	4,87,78,003	5,14,34,505	5,14,84,207	5,78,00,113
GRAND TOTAL ...	......	5,01,46,180	5,20,86,994	5,40,85,577	5,51,60,754	6,02,72,887

EXPENDITURE.

EXPENDITURE.	Contract assignment.	Actuals, 1887-88.	Actuals, 1888-89.	Actuals, 1889-90.	Actuals, 1890-91.	Approximate actuals, 1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direct demands on the Revenues—						
1. Refunds and Drawbacks	1,55,000	1,56,096	1,40,156	1,50,185	1,48,335	1,54,204
2. Assignments and Compensations ...	1,68,000	1,88,565	1,39,300	1,55,660	1,63,447	1,66,129
Charges in respect of collection—						
3. Land Revenue	34,08,000	34,05,966	35,13,059	35,47,957	36,30,963	41,14,224
5. Salt	11,000	12,369	21,224	46,521	68,258	51,608
6. Stamps	3,75,000	3,64,216	3,70,334	3,84,679	3,63,361	3,37,772
7. Excise	96,000	1,06,620	1,08,652	1,41,480	1,62,972	1,66,416
8. Provincial Rates	......	3,47,213	3,17,410	3,37,184	4,05,650	4,34,287
9. Customs	4,97,000	5,30,638	5,24,020	5,39,442	5,42,1[illegible]3	5,18,721
10. Assessed Taxes	85,000	75,705	74,865	80,649	87,930	90,014
11. Forests	2,25,000	1,94,859	1,88,101	1,98,985	2,06,666	2,10,235
12. Registration	2,95,000	2,89,251	2,99,720	3,14,316	3,14,872	3,41,737
Total ...	53,15,000	56,71,487	56,96,800	58,96,458	60,94,967	65,85,347
13. Interest on ordinary debt	......	......	45,802	67,637	84,461	1,01,241
Post Office, Telegraph and Mint—						
15. Post Office	......	......	......	......	......	4,498
16. Telegraphs	1,000	915	884	868	(−)481	......
Salaries and expenses of Civil Department—						
18. General Administration	15,62,000	15,42,870	15,71,036	16,20,623	15,84,964	16,16,326
19. Law and Justice—						
Judicial Courts	80,11,000	79,40,386	81,01,737	81,54,840	82,40,807	84,82,793
Jails	17,28,000	15,31,090	17,95,795	18,99,078	20,40,307	20,22,006
20. Police	47,48,000	47,86,787	48,34,090	52,93,625	58,65,884	59,53,273
21. Marine	7,81,000	9,16,601	10,71,199	12,11,312	9,40,470	9,42,251
22. Education	32,46,000	24,22,221	24,58,200	24,94,936	25,24,854	25,51,574
24. Medical	14,50,000	14,43,691	14,87,730	15,20,158	15,65,936	15,66,661
25. Political	......	......	24,102	21,2?3	21,801	34,506
26. Scientific and other Minor Departments	3,30,000	3,03,598	3,10,050	3,?4,?68	2,97,048	3,11,694
Total ...	2,18,65,000	2,08,87,253	2,16,54,368	2,25,28,883	2,31,82,071	2,34,80,985
Miscellaneous—						
29. Superannuation, &c.	12,54,000	12,79,572	13,70,007	14,36,145	15,13,417	15,99,526
30. Stationery and Printing	10,59,000	10,46,423	10,21,138	9,89,272	11,51,087	13,34,909
32. Miscellaneous	3,48,000	3,43,134	2,40,432	2,44,?74	2,25,640	2,94,751
Total ...	26,61,000	26,6?,?2?	26,32,077	26,70,591	28,90,144	32,29,186
Famine Relief and Insurance—						
33. Famine Relief	...	......	54,338	1,34,260	12,682	......
37. Construction of Railways	......	(−)1,849	(−)10,863	235	13,040	7,750
Railways (Revenue Account)—						
38. State Railways—						
Working expenses	59,61,000	59,34,865	59,40,007	60,84,635	71,30,816	1,04,65,868
Interest on debt	25,02,000	30,81,695	32,61,352	34,32,670	35,81,548	36,98,508
40. Subsidized Companies—						
Land, &c.	......	40	(−)336	1,072	5,129	1,358
41. Miscellaneous Railway expenditure ..	......	68,200	1,42,602	82,510	79,914	76,163
Total ..	87,63,000	90,84,900	93,52,715	96,00,887	1,07,97,407	1,42,41,897
Irrigation—						
42. Major works—						
Working expenses	11,25,000	15,03,585	14,18,090	13,55,565	13,51,272	13,54,171
Interest on debt	22,94,000	23,13,446	23,30,840	23,64,042	23,81,597	24,03,107
43. Minor works and navigation—						
Minor works by Public Works Department ..	11,48,000	15,18,533	14,75,746	14,19,180	15,02,988	15,59,796
Minor works by Civil Department ..	2,000	1,916	1,911	2,017	11,508	14,552
Total ...	45,69,000	53,37,480	52,35,506	51,40,804	52,47,765	53,31,626
Buildings and Roads—						
45. Civil works—						
By Public Works Department	31,14,000	27,61,075	39,04,393	31,24,008	35,06,058	38,80,194
By Civil Department		1,65,736	1,19,658	61,640	65,416	1,46,306
Total ...	31,14,000	29,26,811	40,23,951	31,85,648	35,71,474	40,26,500
Contributions ...	1,59,000	2,61,063	7,50,184	11,82,950	8,94,450	5,78,841
Total ...	4,64,47,000	4,68,37,189	4,94,35,922	5,04,09,030	5,26,87,930	5,78,87,871
Closing balance ..	......	33,08,991	26,51,072	36,76,547	24,72,774	23,85,016
GRAND TOTAL ..	......	5,01,46,180	5,20,86,994	5,40,85,577	5,51,60,754	6,02,72,887
Provincial surplus (+) or deficit (−)	......	(+)13,10,067	(−)6,57,919	(+)10,25,475	(−)12,03,773	(−)87,758

14. It appears on the face of this statement that the Provincial revenues have increased from the contract estimate of Rs. 4,64,47,000 to Rs. 5,78,00,113, while the expenditure on all accounts has risen from an assignment of a like amount to Rs. 5,78,87,871. But it would be misleading to say that the whole of this growth of more than 100 lakhs in revenue and expenditure has been the outcome of Provincial administration. As already stated, the accounts of the last two years, 1890-91 and 1891-92, have been swollen on both sides by the inclusion of the transactions of the Bengal and North-Western Railway from 1st July 1890, without affecting in any way the finance of the province. The accounts of these two years have also been swollen with excess duty levied under the Succession Act VII of 1889 on probates, letters of administration, &c., which has been paid back in entirety to Imperial through the adjusting head of Land Revenue. Again, out of the total capital outlay on the Orissa Coast Canal, amounting to Rs. 5,04,839, additional assignments of Rs. 3,10,000 and Rs. 1,81,000 were made to Provincial Revenues in 1887-88 and 1889-90 respectively, and advances aggregating Rs. 4,37,216 have also been made from Imperial Revenues during the last three years of the contract, for remodelling the Hidgellee Tidal Canal, the Provincial Government undertaking to pay interest on this last amount till it is paid back.

Since the settlement of the contract the Eastern Bengal Railway Police has been provincialized with effect from 1887-88 with an assignment of Rs. 41,000 a year; the ordinary political charges have been transferred from Imperial to Provincial revenues with effect from 1888-89 with a grant of Rs. 21,000, and the Police of Calcutta and the Suburbs has been made entirely Provincial with effect from the third year of the contract with an assignment of Rs. 2,00,000.

An additional assignment of Rs. 93,000 a year has also been sanctioned to meet the cost of interest on exchange on the capital outlay on State Railways, which was not taken into account when the contract was made.

The opening of the South Lushai Hills district caused a considerable increase of expenditure in the last two years, especially under Police, amounting to Rs. 12,26,860, against which the Provincial Revenues have received in the last year a grant equivalent to half the amount.

A Provincial Loan Account has also been opened from 1888-89, of which only the interest received and paid are entered in the General Account.

15. Eliminating the transactions which are purely formal, and which had no direct effect on Provincial finance during the period covered by the contract, exhibiting separately numerous other adjustments shown in detail in paragraph 17 below, and taking only the net results under Railways, the following table shows the actual growth of revenue and expenditure during the five years in *thousands* of rupees.

	Contract assignment.	Actuals, 1887-88.	Actuals, 1888-89.	Actuals, 1889-90.	Actuals, 1890-91.	Actuals, 1891-92.
Receipts.						
Principal heads of Revenue	2,91,71	2,99,49	2,98,22	3,08,67	3,09,03	3,20,39
Deduct excess duty under Act VII of 1889	......	......	......	......	1,71	63
	2,91,71	2,99,49	2,98,22	3,08,67	3,07,32	3,19,76
Interest	73	67	97	1,04	93	1,18
Post Office and Telegraph	......	1	1	1	......	......
Civil Departments	39,40	36,97	37,28	38,17	39,29	41,62
Miscellaneous	9,09	9,29	10,59	9,99	11,91	11,20
	3,40,93	*3,46,43*	*3,47,07*	*3,57,88*	*3,59,45*	*3,73,76*
Net earnings of railways	40,58	53,38	57,85	64,20	75,14	55,74
Adjustments	......	......	......	......	—10,49	+5,94
	40,58	53,38	57,85	64,20	64,65	61,68
Irrigation	22,74	20,68	23,64	24,12	22,84	25,38
Civil works	7,50	4,03	4,75	5,70	7,37	4,02
	70,82	*78,09*	*86,24*	*94,02*	*94,86*	*91,08*
Total ...	*4,11,75*	*4,24,52*	*4,33,31*	*4,51,90*	*4,54,31*	*4,64,84*
Adjustment	(—) 6,90	(—) 6,90	(—) 6,90	(—) 6,90	(—) 6,90	(—) 6,90
					(—)10,000	
	(+) 1	(+) 1,40	(+) 1,88	(+) 4,29	(+) 4,60	(+) 13,05
	(—)6,89	*(—)5,50*	*(—)5,02*	*(—)2,61*	*(—)12,30*	*(+)6,15*
Grand Total ...	*4,04,86*	*4,19,02*	*4,28,29*	*4,49,29*	*4,42,01*	*4,70,99*
Expenditure.						
Direct demands under Revenue heads ...	53,15	56,71	56,97	58,96	60,95	65,85
Interest	......	......	46	68	84	1,01
Post Office and Telegraph	1	1	1	1	......	5
	53,16	*56,72*	*57,44*	*59,65*	*61,79*	*66,91*
Civil Departments	2,18,65	2,08,87	2,16,54	2,25,29	2,30,82	2,34,81
Deduct cost of *Cassandra*	......	......	......	1,91	......	......
	2,18,65	2,08,87	2,16,54	2,23,38	2,30,82	2,34,81
Miscellaneous	26,61	26,69	26,32	26,70	28,90	32,29
Famine relief	......	......	54	1,34	13	......
Construction of railways	......	(—)2	(—)11	......	13	8
Interest on railways	28,02	30,82	32,61	34,33	35,82	36,99
Subsidized Coy.'s land, &c.	......	......	......	1	5	1
Miscellaneous railway expenditure	......	68	1,43	83	80	76
	2,73,28	*2,67,04*	*2,77,33*	*2,86,59*	*2,96,65*	*3,04,94*
Irrigation	45,69	53,37	52,36	51,41	52,48	53,32
Deduct for Orissa Coast Canal and Hijili Tidal.	...	3,10	...	2,30	1,53	2,35
	45,69	50,27	52,36	49,11	50,95	50,97
Civil works	31,14	29,27	40,24	31,86	35,71	40,26
Contribution	1,59	2,61	7,50	11,83	8,94	8,79
	78,42	*82,15*	*1,00,10*	*92,80*	*95,60*	*1,00,02*
Grand Total ...	*4,04,86*	*4,05,91*	*4,34,87*	*4,39,04*	*4,54,04*	*4,71,87*
Surplus (+) or deficit (—)	......	(+)13,11	(—)6,58	(+)10,25	(—)12,03	(—)88

It will be seen that the revenues have risen from Rs. 4,24,52,000 in 1887-88 to Rs. 4,33,31,000 in 1888-89, Rs. 4,51,90,000 in 1889-90, Rs. 4,54,31,000 in 1890-91, and Rs. 4,64,84,000 in 1891-92; that the expenditure has increased from Rs. 4,05,91,000 in 1887-88 to Rs. 4,34,87,000 in 1888-89, Rs. 4,39,04,000 in 1889-90, Rs. 4,54,04,000 in 1890-91, and Rs. 4,71,87,000 in 1891-92; that against this increase of expenditure additional grants aggregating Rs. 25,22,000 in five years have been obtained from the Imperial revenues, while, in addition to the annual payment of Rs. 6,90,000 out of the Provincial surplus, a special contribution of 10 lakhs has been made to the Imperial revenues, in 1890-91. The principal fluctuations under the major heads are explained in the following paragraphs.

16. *Land Revenue*—The receipts from Land Revenue Proper have been as follows:—

	Contract.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Gross Land Revenue	3,82,50,000	3,80,01,091	3,73,73,461	3,88,82,119	3,88,19,398	3,86,79,567
Deduct—Percentage on collections from Government estates set apart for management and improvements	3,87,000	3,83,896	3,25,880	3,94,620	3,83,574	4,68,873
	3,78,63,000	3,76,17,195	3,70,47,581	3,84,87,499	3,84,35,824	3,82,10,694
Provincial share	94,66,000	94,04,299	92,61,895	96,21,875	96,08,956	95,52,673
Percentage on collections as above ..	3,87,000	3,83,896	3,25,880	3,94,620	3,83,574	4,68,873
Total ...	98,53,000	97,88,195	95,87,775	1,00,16,495	99,92,530	1,00,21,544

Under the orders of the Government of India, Finance and Commerce Department, No. 4689, dated the 14th December 1886, special efforts were made to collect the full demand for 1886-87 before the contract came into operation, and this led to a considerable diminution of arrear demands for collection in the following year. The decrease in 1888 89 was chiefly due to the failure of the Burdwan Raj to pay its March instalment before the close of the year, and also to smaller collections in Government Estates in Midnapore and Orissa, which suffered from floods and droughts during that year. The short collections in 1887-88 and 1888-89 were made up in the two following years, and the receipts in 1891-92 were smaller than in the preceding year, as the arrear balances had again been comparatively reduced in the latter. The average realizations during the five years have been at the rate of Rs. 3,83,51,000, which shows an improvement of more than a lakh over the contract estimate, and this nearly corresponds to the increase in the current demand. When it is remembered that only a small part of Bengal is temporarily settled, and that there have been years of unfavourable harvest in parts of the country, this improvement may be considered satisfactory. The percentage on collections from Government estates for their management and improvement has been raised from 10 to 12 per cent. under the orders of the Government of India, Home Department, No. 196, dated the 29th May 1891, with effect from the beginning of 1891-92, in order to provide for sanitary improvements in villages, and this accounts for the large increase shown under this minor head in 1891-92. The total Provincial receipts in the five years amounted to Rs. 4,94,06,541, and the gain to the Provincial revenues under this head over the contract assignment of Rs. 5 × 98,53,000 or Rs. 4,92,65,000 *plus* 78,000, the additional percentage, or Rs. 4,93,43,000 has been Rs. 63,541 only.

শরিফ আফিস, সন ১৮৮৯ সাল তারিখ ১ই জানুয়ারি।

সকলকে সমাচার দেওয়া যাইতেছে যে সুবে বাঙ্গালার ফোর্ট উইলিয়ম দুর্গের অধীন শহর কলিকাতার ও অন্যান্য স্থানের ফৌজদারী বিচার নিষ্পত্তি জন্য আগামী সন ১৮৮৯ সালের ১১ই ফেব্রুয়ারি সোমবার বেলা ১১ ঘটিকার সময় এবং যে পর্য্যন্ত সেশিয়ানের কার্য্য শেষ না হয় প্রতিদিন উক্ত সময়ে কলিকাতার হাই কোর্টের আপন আদালত ঘরে সন ১৮৮৯ সালের প্রথম ক্রিমিনেল সেশিয়ান বসিবেক এবং এতদ্দারা প্রচার করা যাইতেছে যে, যে সকল ব্যক্তি কোন কয়েদির বিরুদ্ধে ফৌজারী মিছিল করিবেক তাহারা উক্ত স্থানে উক্ত সময়ে হাজির থাকিয়া মোকদ্দমা করে ইতি।

জে: বি: ডি: ইজরা, শরিফ।

17. The details of the adjustments between the Imperial and Provincial accounts effected through the Land Revenue head are shown below:—

	Contract.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Trial boring for seams of coal in Sonthal Parganas ...	......	......	......	(—)4,475	......	......
2. Fixed contribution to Imperial ...	(—)6,90,000	(-)6,90,000	(—)6,90,000	(—)6,90,000	(—)6,90,000	(—)6,90,000
3. Special benevolence to Imperial ...	......	......	......	......	(—)10,00,000	......
4. Hidgellee Tidal Canal	......	......	......	+49,414	+1,52,884	+2,34,918
5. Interest on exchange, State Railways	......	......	+1,86,000	+93,000	+93,000	+93,000
6. Interprovincial adjustments ...	......	+85,430	(—)80,430	+46,621	+1,29,491	+71,066
7. Duty on Bengal-made rum	......	......	(—)11,025	(—)10,261	(—)11,210	(—)5,276
8. Half the cost of the Special Branch of the Police Office	......	......	+ 1,755	+1,291	+5,458	+5,592
9. Half the cost of the South Lushai Hill charges	......	......	......	......	......	+6,13,430
10. Custom House Appraisers	......	+6,549	+6,780	+7,280	+7,620	+7,620
11. Conservation of ancient monuments	+1,000	+1,000	+1,000	+1,000	+1,000	+1,000
12. Petroleum wharf establishment at Budge-Budge	......	......	+4,000	+4,000	+4,000	+4,000
13. Eastern Bengal Railway Police ...	......	+41,000	+41,000	+41,000	+41,000	+41,000
14. Political charges Provincialized ...	......	......	+21,000	+21,000	+21,000	+21,000
15. Calcutta Police	......	......	......	+2,00,000	+2,00,000	+2,00,000
16. Forest survey charges	......	......	(—)2,900	(—)2,900	(—)2,900	(—)2,900
17. New method of testing distillation of imported spirits	......	......	......	+2,500	+2,500	+2,500
18. Duty levied under Succession Act VII of 1889 on probates, letters-of-administration, and certificates under Act XXVII of 1886	......	......	......	......	(—)1,71,123	(—)63,444
19. Adjustment on account of the new classification of rewards paid out of criminal fines in excise and stamp cases	......	......	......	(—)28,861	(—)32,980	(—)40,100
20. Up-keep of the *Rhotas*	......	......	......	......	+8,500	+8,500
21. Interest on Hidgellee Tidal Canal ...	......	......	......	......	(—)6,022	(—)12,790
22. Net earnings of the Bengal and North-Western Railway	......	......	......	......	(-)10,49,556	+5,94,043
23. Adjustment of the loss in rents from the Burrakar Iron Works ...	......	......	......	......	......	+11,582
24. Assignment to Provincial to defray a portion of the cost of traverse survey of Wards' estates in Bengal ...	......	......	......	......	......	+34,280
25. Orissa Coast Canal	......	+3,10,000	......	+1,81,000	......	......
26. Copying fees realised in cash and credited to Imperial revenue without authority by reducing Provincial share in 1885-86 ...	......	+5,836	......	......	......	......
27. Half the excess over contract sum for survey and settlement charges ...	......	......	......	......	......	+2,27,292
28. Adjustment of over charge to Provincial Revenues for Duar-survey ...	......	......	......	......	......	+25,047
29. Interest on Provincial loans—loss to Provincial account	......	......	+20,982	......	......	......
30. Construction of a vessel to replace the pilot brig *Cassandra*	......	......	......	+1,91,423	......	......
31. Mr. Kilby's salt-weighing machine ...	......	......	......	+33,000	......	......
32. Cost of constructing buildings required at Budge-Budge for accommodation of officers of the Customs Department	......	...	......	+25,000	......	......
Total ...	(—)6,89,000	(—)2,40,185	(—)5,01,838	+1,61,032	(—)22,97,338	+13,81,360

For items 8, 9, 15, 27 and 31, grants equivalent to nearly half the additional charges thrown on the Provincial Revenues were sanctioned, and if full assignment had been made, the province would have been better off by nearly twelve lakhs than the results show it to be. On the other hand the Provincial Revenues have been relieved to the extent of Rs. 1,01,941 in consequence of the change in the procedure of charging rewards paid out of criminal fines in Stamp and Excise cases, under the departmental heads of accounts instead of under the wholly Provincial head of Law and Justice, while an increase of revenue, amounting to Rs. 2,34,567, has been obtained under Stamps, in consequence of the duty levied under the Succession Act VII of 1889 on probates, letters of administration and certificates under Act XXVII of 1886, but the entire benefit to the Provincial Revenues which should have accrued from these two sources has been discounted by a debit to Provincial under the adjusting head of Land Revenue. The effect of the net adjustment for supplies and services obtained from, and rendered to, this Government, including those for exciseable articles produced in one Province and consumed in another (items 1, 6, and 7), afforded to Bengal a net credit for Rs. 2,09,931, while for the excess receipts included in the Provincial account on account of the Bengal and North-Western Railway, a sum of Rs. 4,55,513 has been paid back through the head of Land Revenue. A special benevolence of Rs. 10,00,000 was made to the Imperial Revenues in 1890-91.

18. The expenditure charged under Land Revenue has risen from Rs. 34,05,966 in 1887-88 to Rs. 41,14,224 in 1891-92, or by Rs. 7,08,258. The details are these:—

	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.
(a) District Administration	28,37,184	28,32,555	28,36,137	28,48,848	29,14,878
(b) Management of Government estates ..	3,35,277	3,43,981	3,06,811	2,85,358	3,72,708
(c) Survey and Settlement	1,44,373	2,69,393	3,38,481	4,16,676	7,44,585
(d) Land Records and Agriculture ...	89,182	67,130	66,528	80,081	82,053
Total ...	34,05,966	35,13,059	35,47,957	36,30,963	41,14,224

The increase in 1891-92 under (*a*) is due partly to the creation of the new districts of Palámau and South Lushai Hills, and partly to the general growth of administrative charges.

The excess under (*b*) includes about Rs. 41,000 in 1891-92 for sanitary improvements, for which an increase of 2 per cent. in the collections of Government estates has been assigned.

The increase under (*c*) was due to more extensive operations of the Land Settlement and Professional Survey Department. The contract assignment for those charges was Rs. 2,90,000, or Rs. 14,50,000 for the five years. But the total expenditure in these five years amounted to Rs. 19,13,508, or Rs. 4,63,508 in excess of the assignment. Against this excess an additional grant of Rs. 2,27,292, equivalent to half the increase, has been made to the Provincial Revenues through the head of Land Revenue as stated above. A further credit for Rs. 25,047 has been allowed to the Provincial Revenues on account of the Duars survey in the three years from 1888-89 to 1890-91.

19. *Salt.*—The rate of rent of warehouses was reduced from Rs. 5 to Rs. 3 per 100 maunds, with effect from the 1st April 1887, and although in the first instance this led to the decrease of receipts in 1887-88 and 1888-89, the result in the long run has fully justified the change of policy then introduced. A considerable increase in bonding operations in the following two years was directly due to this cause. The increase in these operations in 1890-91 is attributed also to the rise in the price of salt brought about by the influence of the English Salt Syndicate. The decrease in 1891-92 was due to larger clearances, as, in consequence of the increasing importation of salt by steamers *viâ* the Suez Canal, and more rapid and continuous clearance from shipboard, the necessity of keeping large stocks in the golahs has been obviated. This is attributable to the introduction of Kilby's scales which, by simplifying and cheapening the weighment of salt, have rendered it profitable to merchants to import salt by steamers; and thus, though trade has been quickened and importation increased, there is no necessity for storing salt in the warehouses so long as was formerly the case. The result is that the Imperial duty from imports has increased, but the Provincial asset, rent of warehouses, has declined.

From the year 1888-89 the municipal taxes on the Sulkea Salt Golahs were debited to this head instead of to "32—Miscellaneous," which accounts for the increase of expenditure in that year. The increase in 1889-90 and subsequent years was due to the gradual introduction of Mr. Kilby's patent scales for the weighment of salt in Calcutta and other ports in Bengal. The payment of Rs. 10,456 in 1890-91 to the East Indian Railway Company as contribution towards the construction of a siding in the Sulkea Salt Golahs swelled the charges for that year.

20. Under the head, *Stamps*, the development of the revenue has been steady and continuous with a marked increase in every third year as is shown in the following table:—

	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.
Court-fee stamps	1,02,64,782	1,00,88,114	1,03,48,831	1,01,88,732	1,09,51,000
General stamps	34,02,525	36,50,855	37,78,911	39,53,076	40,62,000
Miscellaneous	1,48,730	1,00,016	1,10,289	1,05,118	87,000
Total ...	1,38,16,037	1,38,38,985	1,42,38,031	1,42,46,926	1,51,00,000
Imperial share ...	34,54,009	34,59,746	35,59,508	35,61,732	37,75,000
Provincial share ...	1,03,62,028	1,03,79,239	1,06,78,523	1,06 85,194	1,13,25,000

The gross receipts in 1887-88 amounted to Rs. 1,38,16,000 against the contract estimate of Rs. 1,34,50,000. The increase in 1888-89 was only Rs. 23,000, but in the third year of the contract the receipts were Rs. 1,42,38,000, showing an increase of Rs. 3,99,000 over the receipts of the preceding year. The increase in the following year was only Rs. 9,000, while in the last year of the contract the receipts aggregated Rs. 1,51,00,000, being an increase of Rs. 8,53,000 on that of 1890-91. The increase under general stamps in 1890-91 was almost entirely due to the formation of companies, the transfer of shares, execution of leases, &c., consequent upon the gold speculation in Chota Nagpur, while the increase in 1891-92 was almost entirely in court-fee stamps, and is attributable to an increase in the number of civil suits. It is reasonable to ascribe these results partly to the increased facilities for obtaining justice, partly to a growing tendency to substitute written agreements for verbal contracts, and partly to improved administration and special vigilance in the prevention and detection of frauds. The gain of the Local Government on the contract under this head was 2¾ lakhs in the first year, nearly 3 lakhs in the second, nearly 6 lakhs in the third and the fourth, and 12½ lakhs in the fifth, so that the total Provincial increment come to nearly 30 lakhs in five years. But from this must be deducted Rs. 2,34,567 representing three-fourths of the excess duty under Act VII of 1889 on probates, letters-of-administration, which, as stated above, have been repaid to the Government of India under the adjusting head of Land Revenue. Under the orders of the Government of India the rate of copying fees has been reduced from four to three annas per folio from 1st April 1890, but this reduction has as yet had hardly any appreciable effect on the total revenue.

On the expenditure side the rate of discount on the sale of court-fee stamps of all values above one rupee has been reduced from 3 pies to 1½ pie per rupee from 1st April 1888. The total charges of the Stamp Department rose from Rs. 4,85,621 in 1887-88 to Rs. 4,93,778 in 1888-89, and Rs. 5,12,906 in 1889-90, and then fell to Rs. 4,85,282 in 1890-91 and Rs. 4,50,362 in 1891-92. The charges for stamp paper supplied from the Central Stores fluctuated according to requirements, while the discount paid on stamps varied according to the sale of stamps. The large decrease in 1891-92 is chiefly due to the lower rates secured for the manufacture of stamp papers under the new contracts with Messrs. DeLa Rue and Company. The direct cost of raising the stamp revenue in Bengal has now been reduced to about 3 per cent.

21. *Excise.*—The following table shows the total income derived from country spirit and that derived from other sources during the periods covered by the last three contracts:—

		Revenue from country spirits.	Revenue from other sources.	Total.
		Rs.	Rs.	Rs.
1877-78	...	28,90,000	39,78,000	68,68,000
1878-79	...	29,71,000	40,57,000	70,28,000
1879-80	...	31,89,000	40,18,000	72,07,000
1880-81	...	42,21,000	43,32,000	85,53,000
1881-82	...	46,20,000	47,54,000	93,74,000
1882-83	...	48,26,000	49,63,000	97,89,000
1883-84	...	52,23,000	52,02,000	1,04,25,000
1884-85	...	48,55,000	51,97,000	1,00,52,000
1885-86	...	45,10,000	50,74,000	95,84,000
1886-87	...	47,91 000	53,35,000	1,01,26,000
1887-88	...	52,05,000	56,61,000	1,08,66,000
1888-89	...	50,90,000	58,02,000	1,08,92,000
1889-90	...	47,07,000	57,68,000	1,04,75,000
1890-91	...	45,28,000	59,37,000	1,04,65,000
1891-92	...	48,15,000	63,19,000	1,11,34,000

Under the contract of 1877 the extraordinary development of this branch of revenue was among the most striking feature of the financial history of the period. The receipts rose from Rs. 68,68,000 in 1877-78 to Rs. 93,74,000 in 1881-82 or by 25 lakhs. This remarkable increase was due partly to the introduction and development of the outstill system, and partly to the bumper harvests, the activity of trade, and the general prosperity of the country which marked the three years 1879-80, 1880-81 and 1881-82. But commercial and

agricultural prosperity soon received a check. The rainfall in 1883, 1884 and 1885 was unfavourable in quantity and distribution, and the failure of the crops was so serious as to necessitate the opening of relief works by Government. The revenue from Excise fell from Rs. 1,04,25,000 in 1883-84 to Rs. 1,00,52,000 in 1884-85, and to Rs. 95,84,000 in 1885-86. The return of good harvests and the favourable settlement of outstills led to the revival of the revenue, and it again rose to Rs. 1,08,92,000 in 1888-89; but soon after a reaction took place against a policy which was admitted to have looked too much to revenue, and to have paid insufficient attention to the duty of attempting to reduce consumption. The next three years, which coincide with the period during which the department has been under the administration of a separate Excise Commissioner have been a period of radical change, of difficult experiments, for the most part still incomplete, and of the introduction of new measures, all of which, for the time being, tended to check the expansion of revenue. On 1st April 1889 outstills were abolished in Calcutta, Howrah and the 24-Parganas, and the system of central distilleries introduced. A year later a similar change was made throughout the Presidency, Burdwan and Orissa Divisions. At the same time the number of outstills was reduced in the districts of the Patna, Bhagalpur and Chota Nagpur Divisions, and the upset fees for licenses of all kinds were materially raised. The combined effect of these measures has been a substantial reduction of revenue in 1889 90 and 1890-91. The resistance of the abkars to the excise policy of increasing taxation, the falling off in advance collections owing to the introduction of the distillery system, and agricultural scarcity brought down the revenue from country spirits from about 51 lakhs in 1888-89 to 45¼ lakhs in 1890-91. But it is satisfactory to find that the decline has been only temporary, and that in 1891-92 the revenue rose to Rs. 48,15,000 from country spirits, and the total receipts to Rs. 1,11,34,000, the highest figure ever reached, and this result has been obtained notwithstanding the reduction of the number of shops licensed for the sale of country spirits from 3,025 in 1890-91 to 2,919 in 1891-92, and the decrease of consumption from 877,048 gallons to 814,432 gallons. Compared with the contract assignment of Rs. 24,82,000, the Provincial Government, which has been allowed one-fourth share in these receipts, has made a profit of Rs. 2,34,436 in 1887-88, Rs. 2,40,909 in 1888-89, Rs. 1,36,829 in 1889-90, Rs. 1,34,210 in 1890-91, and Rs. 3,01,490 in 1891-92, so that the total profit amounted to Rs. 10,47,874 during the whole term of the contract.

22. The contract estimate for the Provincial share of expenditure of the Excise Department was taken at Rs. 96,000, but the actuals amounted to Rs. 1,06,629 in 1887-88, rose to Rs. 1,08,602 in 1888-89, Rs. 1,41,480 in 1889-90, Rs. 1,62,972 in 1890-91, and Rs. 1,66,416 in 1891-92. The increase in 1887-88 compared with the contract grant was due to the amalgamation of the offices of Income-Tax Assessors and Excise Inspectors in 20 districts of Bengal, and the inclusion of their entire salaries under this head instead of a moiety under Excise and a moiety under Assessed Taxes. The large increase from 1889-90 under Excise and subsequent years has been, as stated above, due to the creation of the appointment of a Commissioner of Excise, the inclusion of the charges for rewards in Excise cases under this head instead of under *Law and Justice*, the appointment of a larger number of Special Deputy Collectors, and the construction of several distillery buildings. In 1891-92 two Deputy Collectors were appointed as Inspectors of Excise to assist the Excise Commissioner in district inspections, and this led to a further increase of expenditure in that year counterbalanced in some measure by smaller expenditure on distillery buildings. The employment of larger establishments has been the natural outcome of the introduction of the sadar distillery system, which cannot be effectively worked without a large and well-paid staff. The outstill system established everywhere a self-acting detective agency, which tended to keep down illicit distillation. Under the central distillery *régime* no one's self-interest is enlisted on the side of Government, and greater vigilance and activity are demanded from the inspecting and detective staff of the Excise Department. Part of the increase is also attributable to greater liberality in granting rewards for the detection of Excise offences, and to the heavier expenditure on travelling allowances which the present method of administration involves. The appointment of an Excise Commissioner has rendered it possible to pay much closer attention to the supervision of the subordinate Excise officials, and the gradual improvement brought about in the standard of Excise

administration has its effect on the revenue. The appointment of Excise Commissioner, which was at first sanctioned for three years, has now been made permanent, and the Government of India have just sanctioned an elaborate scheme for reorganizing the subordinate establishments somewhat on the lines suggested by the Excise Commission of 1884. The pay and prospects of the subordinate staff have been improved, and a superior class of men have been induced to enter the department. The incidence of the gross Excise revenue is less than Rs. 16 per hundred of the duty paying population.

23. The head *Provincial Rates* represents principally the proceeds of the Public Works Cess, but it includes also the recoveries from district funds of the proportionate cost of collecting Road Cess and the Rates for the general management of Wards' and Attached Estates. The receipts have been as follows:—

	Contract.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs
(a) Public works cess		38,19,860	37,97,870	39,11,693	38,93,461	40,79,753
(b) Proportionate cost of collecting road cess.	39,20,000	3,13,524	2,68,084	3,12,096	3,55,052	3,64,355
(c) General management of wards' and attached estates.		1,03,164	90,369	82,235	71,420	80,419
Total ...	39,20,000	42,36,538	41,56,323	43,06,024	43,19,933	45,24,527

The variations under (*a*) were partly due to the same causes which led to the differences in the Land Revenue collections and partly to progress in valuation and revaluation of districts. The gross rental assessed on the introduction of the road cess was Rs. 13,11,68,432, and on the same basis the statistics furnished by the Board of Revenue show that it amounted to Rs. 14,60,45,236 in 1890–91 and Rs. 14,78,83,221 in 1891–92. Large recoveries of the arrears of rates on wards' estates were effected from the Burdwan Raj in 1887-88, and this accounts for the larger receipts under (*c*) in the first year of the contract. The comparatively smaller receipts under (*c*) in 1890 91 and 1891-92 were due to the release from the Government management of a large number of estates during the course of the former year.

Head (*b*) is a new head of account which appeared in the Provincial Account in consequence of the introduction of the Local Self-Government Act. Prior to the extension of the Act, the charges for the collection of both the Road and Public Works Cesses were shown in the District Road accounts, the cost of collecting the Public Works Cess being paid to the District Road Committees through the adjusting head of Contribution, an assignment of Rs. 47,000 being made in the Provincial Contract under that head. The arrangement has now been reversed. The collection of the cess in the districts where the Local Self-Government Act has been introduced is shown as a Provincial charge, and is recovered from the District Funds before the net collections of the Road Cess are made over to the District Boards. The receipts and charges have been as follows:—

	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.
Total expenditure ...	3,47,213	3,17,410	3,37,184	4,05,650	4,34,287
Recoveries from District Funds ...	3,13,524	2,68,084	3,12,096	3,55,052	3,64,355
Cost of collection of Public Works Cess.	33,689	49,326	25,088	50,598	69,932

The increased charges in 1890-91 and 1891-92 were due to revaluations undertaken in several districts, and partly to arrear contributions recovered from District Funds on account of pensions of establishment employed for the collection of cesses. The net proceeds of the Public Works cess have been Rs. 37,86,171 in 1887-88, Rs. 37,48,544 in 1888-89, Rs. 38,86,605 in 1889-90, Rs. 38,42,863 in 1890-91, and Rs. 40,09,821 in 1891-92.

24. It will be interesting to show together the net proceeds of the Public Works cess and the charges properly debitable to them. The cess was originally imposed to enable the Government of Bengal to meet all charges for unremunerative public works made over to Provincial management, and to apply the balance, if any, to the construction and maintenance of public works of

Provincial utility. Accordingly, in 1877, the following works were made over to this Government, with the responsibility for the payment of interest charges on the capital expended on their construction: Northern Bengal Railway, Tirhut Railway, Nalhati Railway, Orissa Canals, Midnapore High Level Canal, Hidgelee Tidal Canal, and Sone Canal. The Calcutta and South-Eastern Railway was also made over; but as the earnings of this line had been barely sufficient to cover the working expenses, no interest was charged on the capital. The amount of capital expenditure on which the Provincial Government was liable for interest up to the end of 1877-78 was—

					Rs.
Railways	...	...		...	2,10,17,000
Canals	...	...		...	4,56,43,000
			Total	...	6,66,60,000

Theum due for interest on this capital at 4½ per cent., which was the rate of interest fixed at the time, was Rs. 30,00,000, while the net surplus of receipts over working expenses of Railways was Rs. 1,63,000, against a net deficit of Rs. 2,08,000 from Canals. During the quinquennial period covered by the contract of 1877, the net proceeds of the Public Works cess aggregated about 161¼ lakhs, the interest charges 157 lakhs, and the result of the Provincial administration of Productive Public Works added about 46 lakhs to Provincial resources. With this additional revenue of about half-a-lakh of rupees and improvements under other heads, the Government of Bengal could spend about 20¾ lakhs for the construction or completion of railways such as those from Sonapore on the Calcutta and South-Eastern Railway to Magrahat, from Parbatipur on the Northern Bengal Railway to Dinajpur, from Kaunia to Dharla, and from Bankipore on the East Indian Railway, to Gaya; and about 39 lakhs on Irrigation, such as those connecting the Gunduck river with the principal watercourses of the Saran district, on the Calcutta Canals, on the Jagooly Scheme, and the Orissa Coast Canal.

Similarly, during the term of the next quinquennial contract, the net proceeds of the public works cess aggregated about 187¼ lakhs, and the net receipts from railways and canals 94 lakhs, while the charge for interest amounted to about 196¾ lakhs. Out of the surplus of about 84½ lakhs from this source, about 29 lakhs was spent for the completion of the Dinajpur Branch of the Northern Bengal State Railway, the Diamond Harbour Branch of the Calcutta and South-Eastern Railway, and the Kaunia-Dharla Railway. More than one lakh was spent on the acquisition of lands and other charges for subsidized railways, and about 31½ lakhs for the prosecution of the Orissa Coast Canal and the improvement of the Calcutta Canals, while in addition to this large expenditure amounting to more than 20 lakhs was incurred for the maintenance of several canals for which no capital account has been kept.

During the five years now under review, a considerable change was made in the financial relations between the Government of Bengal and the Government of India, so far as the railways were concerned, the Northern Bengal State Railway and the Calcutta and South-Eastern Railway with their branches and feeders being included in the Eastern Bengal Railway System, which is rather an Imperial than a Provincial undertaking, and the management of the Tirhut Railway being made over to the Bengal and North-Western Railway Company. Leaving aside the transactions of these railways, which moreover are now able to bear their own interest charges, and can no longer be treated as unremunerative works, and taking only the transactions of the canals, it will be seen that against the total net proceeds of the Public Works cess, amounting to about 192¾ lakhs, the charge for interest on irrigation canals amounted to Rs. 118 lakhs, while the earnings of these canals just covered their working expenses with a deficit of about Rs. 14,000 in five years. Out of the surplus of 74¾ lakhs, Rs. 36,53,000 has been spent on the maintenance and repairs of the Calcutta and other canals classed as "Minor works," Rs. 31,63,000 on Government embankments, Rs. 71,000 for the improvements of the Calcutta and Eastern, Midnapore, and Sone Canals and Damodar project, Rs. 87,000 on surveys, such as the Western Bengal Railway Survey, Darbhanga-Sitamarhi Survey, and Sakri-Jainagar Survey, besides Rs. 6,60,000 advanced on Takavi Embankments and Rs. 9,42,000 expended on the Orissa Coast Canal, and for remodelling the

Hidgelee Tidal Canal, and large amounts disbursed for the improvement of Provincial Road communications.

25. The increase in expenditure under *Customs* over the contract assignment was chiefly due to the adjustment under this head of the rent, rates, and taxes of the Customs buildings which were hitherto adjusted under Miscellaneous, and to the entertainment of additional establishment of appraisers for changes in the Tariff Act, for additional wharf establishment at Budge-Budge in consequence of the introduction of the Petroleum Act just before the close of 1887-88, for a new method of testing distillation of spirits, and for temporary preventive establishment according to the requirements of trade. The only fluctuation in receipts was in 1888-89, and was due to smaller recoveries on account of demurrage.

26. The head *Assessed Taxes* represents the receipts from the income-tax. The contract estimate of the Provincial share, which was limited to half the revenue, was taken at Rs. 17,84,000, whereas the actuals in each year were Rs. 18,69,971, Rs. 19,55,698, Rs. 20,83,503, Rs. 21,19,441, and Rs. 21,54,146. The development of revenue has been steady and continuous. The aggregate gain to the Provincial revenues has been about 12½ lakhs of rupees during the currency of the contract. The average charge for the assessment and collection of the tax as debitable to the Provincial account, which is half of the total expenditure, amounted to Rs. 81,833 a year against the contract assignment of Rs. 85,000; but it rose from Rs. 75,705 in 1887-88 to Rs. 87,930 in 1890-91, and to Rs. 90,014 in 1891-92, and the rise has been in proportion to the growth of revenue, but chiefly for increased charges under the head of travelling allowance. A part of the increase is due to the separation of the offices of Excise Inspector or Sub-Inspector from that of Assessor of Income-tax, which was decided on in 1889, and fully carried out in 1890-91. Service in the Income-tax Department, which had formerly been treated as temporary, was at the same time declared to be permanent and pensionable. Districts were divided into five classes according to the average revenue from income, and five grades of Assessors were appointed on somewhat lower rates of pay than had previously been allowed. The effect of this reorganization has been to provide every district with an officer whose whole time is given to Income-tax work, and will lead to improve the quality of the work done by the Assessors, and make the assessment registers a trustworthy record of the taxable incomes in each district. The average incidence of the tax on the whole population of the province, excluding assessments on the salaries of Government officials, and the interest on Government securities, was in 1891-92 Re. 1 to every 19·2 persons, and the proportion of persons assessed for the whole of Bengal was 1 to 688.

27. The Forest Department in Bengal is of comparatively little importance from a revenue point of view. The following figures compare the net revenue in each year with the contract estimates:—

	Contract.	1887-88.	1888-89.	1889-90.	1890-91.	1891 92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts	7,00,000	6,57,794	6,76,907	7,68,717	7,27,392	7,89,558
Expenditure	4,50,000	3,89,717	3,76,203	3,97,969	4,13,332	[illegible]
Net revenue ...	2,50,000	2,68,077	3,00,704	3,70,748	3,14,060	3,69,083
Provincial share in net revenue ...	1,25,000	1,34,038	1,50,352	1,85,374	1,57,030	1,84,541

There was an abnormal fall in net revenue in 1890-91 in the Sunderbun Division, attributable in a large measure to local agricultural distress, and the presence of excess stock of *sundri* wood in the market. The gross revenue in 1891-92 was the largest ever obtained since the department was formed; and the net revenue amounted to Rs. 3,69,083, notwithstanding a heavy outlay of Rs. 31,500 on account of a new steamer *Swan* purchased for the department, and increased pay of establishment sanctioned by the Government of India. The surplus in 1888-89 would have been larger but for the depression of trade in Chittagong attributable to the frontier raids which prevented access to the more remote parts, and also for the grant of considerable concessions to the inhabitants of Orissa during the scarcity of that year.

The net revenue in each year has been more than was anticipated in the contract, and the net gain to the Provincial Government during the five years has been Rs. 1,86,335.

28. Under the head of *Registration* the figures of gross receipts must not be looked at alone, as this is a Department where, more than in most other cases, increase in expenditure on establishment produces increase of revenues.

The following statement compares the net revenue from Registration in each year with the contract estimates:—

	Contract.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts	10,76,000	10,17,825	10,93,544	12,00,066	12,39,079	13,34,313
Charges	5,90,000	5,78,462	5,99,459	6,28,631	6,29,743	6,83,474
Net receipts	4,86,000	4,39,363	4,94,085	5,71,435	6,09,336	6,50,839
Provincial share in receipts	2,43,000	2,19,081	2,47,042	2,85,717	3,04,668	3,25,419

It will be seen that, though the net revenue in the first year of the contract showed a decrease compared with the contract estimate, the revenue increased gradually every year, and that the Provincial revenues made a net profit of Rs. 1,67,527 under this head in the quinquennial period. These satisfactory results are greatly due to the steady expansion of Registration offices supervised by special, not official, agency, and to some extent to the speculation in gold and silver mining.

29. *Interest.*—Under the order contained in the Resolution of the Government of India, Finance Department, No. 13, dated the 13th January 1889, the control and management of loans and advances to municipalities and other public bodies (excluding Presidency corporations), to landholders and other notabilities, &c., have been made over to the Local Government. The total amount of loans and advances made under these orders and repayments received are shown in the following table:—

	1888-89.		1889-90.		1890-91.		1891-92.		Closing balance on 31st March 1891.
	Outgoings.	Receipts.	Outgoings.	Receipts.	Outgoings.	Receipts.	Outgoings.	Receipts.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
ADVANCES TO CULTIVATORS—									
Loans under the Land Improvement Act .	2,44,714	56,233	80,526	44,692	28,309	53,774	94,570	94,707	
Advances under the Agriculturists Loans Act	2,07,851	26,849	2,50,685	1,01,903	1,88,196	1,47,466	49,209	1,35,599	
Famine advances ...	5,318	4,731	79,309	79,776	10,782	492	......	10,409	
ADVANCES UNDER SPECIAL LAWS—EMBANKMENTS AND DRAINAGE ADVANCES—									
Zamindari embankment advances ..	1,50,067	29,756	32,303	38,122	35,892	72,866	54,872	90,938	
Drainage advances—									
Ampta drainage ...	52	......	......	......	......	......	......	......	
Howrah do. ...	2,94,8[illegible]8	24	1,654	3,350	14,766	22			
Nadia do. ...	290	......	......	......	......	......			
Rajapur do. ...	5,45,590	......	2,58,497	868	76,764	1	1,35,772	21,152	
Dankooni do. ...	73,555	33,060	3,201	13,638	2,154	12,784			
Protabkhally do. ...	12	......	......	......	......	......			
LOANS TO LAND-HOLDERS	19,000	255	1,01,000	6,608	2,023	52,866	4,35,000	1,06,083	
LOANS TO MUNICIPALITIES AND OTHER LOCAL BODIES—									
Mufassal municipalities	28,960	1,771	30,000	1,851	1,80,000	71,936	37,500	5,492	
District Boards and other local bodies ...	505	205	......	300	2,10,000	1,05,000	1,56,000	18,643	
Port Fund, Chittagong	......	......	......	...	64,455	..	63,771	......	
	15,70,782	1,52,884	8,37,175	2,91,114	8,12,341	5,17,207	10,26,694	4,83,024	28,02,762

It will be seen that during the last four years sums aggregating Rs. 42,47,000 has been advanced on all accounts, and Rs. 14,44,000 has been repaid. The interest received and paid by the Government of Bengal are:—

	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts	......	24,820	34,231	33,676	58,933
Charges	......	45,802	67,637	84,461	1,01,241
Deficit	......	20,982	33,406	50,785	42,308

The charges represent 4 per cent. on the mean balance outstanding on the close of every year, which is payable to the Government of India under the orders quoted above.

The gradual increase on the charge side is due to the larger mean balance outstanding at the close of each succeeding year. The above table shows that the loss to the Provincial Revenue from the new arrangement has amounted to Rs. 20,982 in 1888-89, Rs. 33,406 in 1889-90, Rs. 50,785 in 1890-91, and Rs. 42,308 in 1891-92. The loss for the first year has only been recouped by an additional grant from the Imperial Revenues under the head of Land Revenue. The loss is, however, only temporary, as the whole amount will be more than recovered when the drainage and embankment works, for which the major portion of the advances have been made, are completed, and interest will be recovered with instalments of capital from the zamindars and others who will be benefited by the works. The interest payable on the advances has been included in the capital cost of the works, while interest payable to the Government of India is charged on the amount advanced from the Imperial Treasury; and thus when the recoveries are made, the Government of India will receive only the amounts actually advanced, and the Provincial Government will get the balance, which will include the suspended interest on the capital expended.

Besides the receipts shown above, this head also comprises interest on the securities of the Education Department and interest on arrears of Public Works cess. The aggregate of these receipts, exclusive of interest on loans, amounted to—

	Rs.
1887-88	67,093
1888-89	72,563
1889-90	70,036
1890-91	58,833
1891-92	59,230

30. *Post Office.*—The charges under this head in 1891-92 represented the charges incurred in the South Lushai Hills for the carriage of mails.

31. The General Administration Charges have risen from Rs. 15,42,579 to Rs. 16,16,326 as shown below:—

1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
Rs. 15,42,879	Rs. 15,71,096	Rs. 16,20,623	Rs. 15,84,964	Rs. 16,16,326

The increase in 1888 89 and 1889-90 was due to the deputation of officers on special duty connected with the revision of the statistical accounts of Bengal, and to enquire into the excise systems of the Presidencies of Madras and Bombay. In 1889-90 again the charges under the sub-head "Board of Revenue" included the salary of a Member of the Board of Revenue of the North-Western Provinces paid in Calcutta and recovered by inter-provincial adjustment from the North-Western Provinces. The increase in 1891-92 was partly due to the appointment of a special officer in the Judicial Department of the Secretariat, and partly to the payment in Calcutta of salaries and leave allowances of officers of the local Secretariats of Burma and Assam.

32. *Law and Justice (Judicial Courts).*—The following table compares the receipts and charges under this head with the assignments fixed in the contract:—

	Contract.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Courts of Law—						
Receipts	7,69,000	7,74,255	7,89,538	8,04,582	8,96,337	8,82,093
Charges	80,11,000	79,40,386	81,01,737	81,54,810	82,40,807	84,82,793
Net charges	72,42,000	71,66,131	73,12,199	73,50,258	73,44,470	76,00,700

No adequate provision was made in the contract for the improvement of Judicial establishments, which was left to be met from the improveable revenues made over to Provincial management. The increase of nearly 4¾ lakhs in 1891-92 in the contract assignment represents the financial effect of the increase which has been found necessary in the number of Subordinate Judges and Munsifs and Judicial establishments generally. There has also been a partial improvement in the ministerial establishment of the Civil Courts sanctioned

in consequence of the recommendations made in the reports of Messrs. Toynbee and Stevens who were appointed to enquire into the subject.

33. *Jails.*—The receipts and charges of the Jails Department are shown below:—

	Contract.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts—Ordinary ...	5,000	4,362	7,753	2,319	2,836	9,214
Manufactures ...	8,41,000	7,05,917	7,67,268	8,57,183	7,63,457	9,18,428
Total ...	8,46,000	7,10,279	7,75,021	8,59,502	7,66,293	9,27,642
Expenditure—Ordinary ...	6,39,000	10,02,033	11,46,915	13,14,794	12,09,569	13,57,196
Manufactures ..	10,89,000	5,29,057	6,48,880	5,84,284	8,30,738	6,64,810
Total ...	17,28,000	15,31,090	17,95,795	18,99,078	20,40,307	20,22,006
Net expenditure ...	8,82,000	8,20,811	10,20,774	10,39,576	12,74,014	10,94,364

The comparative smaller expenditure in 1887-88 was due to the release and remissions granted on the celebration of the Jubilee. The total jail population fell from 14,629 on 1st January 1887 to 13,210 on 31st December 1887, and to 11,990 on 31st March 1888. The Bhagalpur District Jail was abolished in that year. In 1888, 14 District Jails were reduced to the status of intermediate jails, and this reduction was sanctioned on the expectation that provision would have to be made for the accommodation of 11,000 prisoners. The population has, however, since then considerably increased, as the following table will show:—

	1888.	1889.	1890.	1891.	1892.
Number on 1st January	13,210	13,985	15,048	15,211	16,590
Daily average number	13,731	13,076	14,777	15,916	......

and this increase accounts for the growth of charges shown in the table.

34. The falling off of receipts under the head *Police* from Rs. 7,05,000 fixed in the contract to Rs. 3,13,349 in 1887-88 was due to the transfer of pound receipts from Provincial to Local in the districts to which the Local Self-Government Act has been extended. The increase in 1888-89 as compared with the actuals of 1887-88 was due to the inclusion of the recoveries on account of the Village Police in Hazaribagh and Lohardaga, consequent on the introduction of Act V of 1887 in those districts. The increase from 1889-90 was chiefly due to the credit for the first time under the Provincial head of the recoveries on account of the Presidency and Suburban Police, as the Metropolitan Police has been wholly Provincial from that year. On the expenditure side the contract grant was fixed at Rs. 47,48,000, and the actual charges rose from Rs. 47,86,787 in 1887-88 to Rs. 48,34,099 in 1888-89, Rs. 52,93,625 in 1889-90, Rs. 58,65,884 in 1890-91 and Rs. 59,53,275 in 1891-92. The details are these:—

Expenditure.	Contract.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Presidency Police ...		3,16,986	3,20,645	7,05,290	7,14,062	7,29,108
Superintendence		1,16,627	1,13,069	1,27,186	1,34,549	1,23,387
District Executive force ...		38,45,736	39,46,996	39,37,901	39,27,068	39,57,181
Village police		1,40,414	1,66,174	1,90,000	1,88,304	2,00,641
Special police		1,98,857	1,88,556	2,34,067	7,71,709	7,89,472
Cattle pounds ...		6,828	4,925	5,026	6,417	6,782
Steam-boiler inspection establishment.		13,074	17,611	18,974	20,099	21,483
Refunds		79,842	5,550	6,219	36,350	56,677
State Railway Police ...		68,423	70,573	68,962	67,326	68,544
Total ...	47,48,000	47,86,787	48,34,099	52,93,625	58,65,884	59,53,275
Receipts ...	7,05,000	3,13,349	3,38,197	4,26,742	4,51,678	4,48,640
Net expenditure ...	40,43,000	44,73,438	44,95,902	48,66,883	54,14,206	55,04,635

The increase in 1888-89 was due to the entertainment of a large number of temporary Assistant Superintendents of Police, to the additional force

entertained in Darjeeling and Jalpaiguri, and to larger expenditure on account of contingencies, chiefly for petty construction and repairs, and rents, rates and taxes. The marked increase from 1889-90 has been, as already explained above, due to the entire charges of the Presidency and Suburban Police being paid from Provincial Revenues instead of in the proportion of one-fourth and three fourths as before. Against this increase the Provincial revenues obtained an additional assignment of 2 lakhs from the Imperial revenues through the Land Revenue head. The charges in connection with the subjugation of the South Lushai district and the formation of the South Lushai Hills district have been adjusted in the Provincial accounts under this head from the year 1890-91, and this accounts for the large increase in the last two years. An assignment equal to half the cost of these charges incurred in the two years has been made to the Provincial Revenues and adjusted in the accounts of 1891-92. A part of the increase under District Executive Force in 1891-92 is due to the improvement effected in the position of the force by raising the clothing allowance of all constables from Rs. 4 to Rs. 5 and of the special reserve force from Rs. 6 to Rs. 8; stopping all deductions from pay for superannuation charges; and raising the pay of the lowest class of constables in Bengal Proper from Rs. 6 to Rs. 7. Free-kits are also now supplied to fresh recruits on their first joining the department.

35. The receipts and charges of the Marine Department are shown below:—

	Contract.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts	8,08,000	9,10,096	9,11,734	8,54,207	9,18,736	9,65,408
Charges	7,81,000	9,16,601	10,71,199	12,11,342	9,40,470	9,42,251
Difference ...	+27,000	—6,505	—1,59,465	—3,57,135	—21,734	+23,157

The chief receipts are pilotage fees, which are of a fluctuating nature, and depend solely on trade and the tonnage of vessels visiting the port. There was a special receipt from the sale of the steamer *Undaunted* credited in 1888-89. A part of the increase since 1890-91 is due to the inclusion of surveyors' fees in the accounts from that year. On the expenditure side the charges in 1888-89 include the cost of building a pilot brig to replace the *Cassandra* at the India Government Dockyard at Bombay, for which an assignment of Rs. 1,91,423 has been received from the Government of India. The accounts of 1889-90 includes the cost of nearly four lakhs incurred in the purchase of the steamer *Guide* to replace the *Undaunted.* The charges for the maintenance of the State yacht *Rhotas* have been transferred to the Bengal Government from April 1890 with an assignment of Rs. 8,500 from the Imperial Revenues.

The net loss to the Provincial Revenues during the five years amounted to Rs. 5,21,682, against a gain of Rs. 27,000 × 5 = Rs. 1,35,000, provided for in the contract, but against this loss of Rs. 5,21,682 + 1,35,000 = 6,56,682 must be set the—

	Rs.	Rs.
Additional assignment sanctioned by the Government of India for the new vessel to replace P. V. *Cassandra*	1,91,423	
Additional assignment sanctioned by the Government of India for up-keep of the *Rhotas*	17,000	
		2,08,423
so that the net loss to the Provincial Revenues compared with the contract assignment has amounted to	......	4,48,259

36. The contract assignment for expenditure on *Education* was Rs. 32,46,000. The actual charges in 1887-88, however, amounted to Rs. 24,22,221. This decrease is nominal and is due to the transfer of certain Government schools to local bodies on the formation of District Boards under the Local Self-Government Act. The grants to the District Boards have been adjusted under the head of Contributions. The combined expenditure from Provincial and District Funds in 1891-92 amounted to Rs. 25,51,574 + 11,05,375 = 36,56,949.

37. The ordinary *Political* charges were provincialised with an annual grant of Rs. 21,000 from the year 1888-89. The loss to the Provincial revenues amounted to Rs. 18,041 during the four years of the contract period.

38. The large increase of receipts under the head *Superannuation* in 1890-91 and 1891-92 arose from recoveries made in those years of the arrear contributions for the pensions of employés transferred to the establishments of District Boards.

39. The large increase under *Printing* receipts in 1890-91 was on account of the supplies of census forms made to other Governments and Administrations, for which there was an increased charge under "30—Stationery and Printing."

40. The contract provided for no capital expenditure on State Railways from the Provincial Funds, but the outlay required for the construction of the Kaunia-Dhurla State Railway, which has been constructed entirely from Provincial funds, continued to be advanced from those Funds. In 1888-89 the steamer *Empress* attached to the Railway was sold, and the proceeds were credited to the Provincial Revenues. The actuals of 1890-91 include the cost of constructing 20 jute wagons for the Railway.

41. The following table shows the net financial results of the working of all Provincial Railways as compared with the contract estimates:—

	Contract.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
Gross receipts.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Eastern Bengal State Railway	84,70,000	95,84,310	1,07,05,894	1,14,57,267	1,22,01,116	1,14,63,835
Nalhati ditto	79,000	94,054	1,04,589	1,04,440	1,00,084	92,353
Tirhut ditto	14,70,000	18,05,057	17,08,537	21,11,818	39,03,251	48,88,540
Total ..	1,00,19,000	1,14,83,421	1,25,19,020	1,36,73,525	1,62,04,451	1,64,44,728
Deduct Imperial share of the Eastern Bengal State Railway.	Nil	2,09,936	7,85,152	11,69,119	15,59,448	4,05,180
Provincial Total ...	1,00,19,000	1,12,73,485	1,17,33,868	1,25,04,406	1,46,45,003	1,60,39,548
Working expenses.						
Eastern Bengal State Railway	...	48,11,385	49,01,050	51,08,172	54,22,052	62,62,793
Nalhati ditto	...	61,920	85,414	75,935	78,317	48,177
Tirhut ditto	...	10,61,560	9,62,543	9,05,528	16,30,447	41,54,898
Total ...	59,61,000	59,34,865	59,49,007	60,84,635	71,30,816	1,04,65,868
Net earnings	40,58,000	53,38,620	57,84,861	64,19,771	75,14,187	55,73,680
Interest	28,02,000	30,81,696	32,61,382	34,32,670	35,81,548	36,98,508
Net profit ...	12,56,000	22,56,924	25,23,479	29,87,101	39,32,639	18,75,172

The working of the Tirhut State Railway has been transferred to the management of the Bengal and North-Western Railway Company from the 1st July 1890. Under the orders of the Government of India in the Public Works Department, the gross earnings of the combined system of the Bengal and North-Western Railway and the Tirhut State Railway, and the actual working expenses plus the share of net receipts payable to the Company, were treated as revenue and expenditure respectively in the accounts. In accordance with this arrangement, the earnings of the Bengal and North-Western Railway Company for nine months, from 1st July 1890 to 31st March 1891, were included in the Provincial account for 1890-91, but as the account with the Company had not been closed, the payment to the Company could not be made during that year, and the amount of net earnings was passed over from the Provincial to the Imperial account through the adjusting head of Land Revenue. The amount so credited to Imperial in 1890-91 for the nine months was Rs. 10,49,556. The actual payment to the Company was, however, not made till May 1891. In 1891-92, therefore, the Company obtained the net earnings for three half-years, or for eighteen months, from 1st July 1890 to 31st December 1891, and all these payments were again under the orders of the Government of India shown under Railways in the Provincial account for 1891-92. The payments from Provincial Revenues thus included double payments for six months, and for this over-payment a write-back of Rs. 5,94,043 has been made in favour of the Provincial Revenues through the adjusting head of Land Revenue. The increase of Rs. 8,40,741 in the working expenses of the Eastern Bengal State Railway shown in the above statement was due mainly to renewals of permanent way and partly also to compensation paid for goods lost in flats and arrear charges for freight on coal. The increase under the Tirhut Railway arose from the inclusion of twelve months' expenses of the Bengal and North-Western Railway instead of nine months shown in the preceding year.

42. The contract made no separate provision for charges under *Miscellaneous Railway expenditure*, which mainly represent the share of the Public Works Secretariat debitable to Railways, but these were provided for in the assignment for establishment under Civil Works. The charges on account of surveys for new railway projects incurred on the recommendation of the Local Government were also adjusted under this head. The following table shows the details of the expenditure :—

	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.
Public Works Secretariat share	68,290	68,246	69,453	79,914	76,163
Western Bengal Railway Survey	......	62,999	12,191	......	......
Darbhanga-Sitamarhi Survey	......	9,067	......	......	......
Sakri-Jaynagar Survey	......	2,380	866	......	......
Total ...	68,290	1,42,692	82,510	79,914	76,163

The total expenditure exclusive of Secretariat Establishment during the five years amounted to Rs. 87,503.

43. The following table shows the net financial result of the working of the Irrigation Major Works :—

	Contract.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts	13,30,000	11,03,229	13,94,369	15,21,274	13,46,728	16,02,710
Working expenses	11,25,000	15,03,585	14,18,090	13,55,565	13,51,272	13,54,171
Net profit ...	(+)2,05,000	(—)4,00,356	(—)23,721	(+)1,65,709	(—)4,544	(+)2,48,539

The table shows that the contract provided for a net annual profit of Rs. 2,05,000 under Major Works, but the actual result amounted to a loss of Rs. 4,00,356 in 1887-88, Rs. 23,721 in 1888-89, and Rs. 4,544 in 1890-91, while there was a gain of Rs. 1,65,709 in 1889-90 and Rs. 2,48,539 in 1891-92. The total loss during the contract period amounted to Rs. 14,373, which was met from savings under other heads, while according to the contract it was estimated that Rs. 2,05,000 × 5 = Rs. 10,25,000 would be available from these canals to meet expenditure in other heads.

44 The expenditure on *Minor Works and Navigation* in charge of the Public Works Department exceeded the contract estimate in each year, as the following table will show:—

	Contract.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
Capital.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Calcutta and Eastern Canals	......	15,343	47,862	—169	5,613	—10,329
Midnapore Canal	......	......	......	... ..	4,412	14,469
Hijili Tidal Canal	......	......	......	49,414	1,52,884	2,34,918
Orissa Coast Canal	......	3,22,102	97,811	63,774	17,212	3,940
Saran Canal	......	...	......	340	......	... .
Damodar Project	......	—1,200	—1,200	—1,200	—1,200	—1,200
Total Capital ...	Nil	3,36,245	1,44,473	1,12,159	1,78,921	2,41,798
Revenue.						
Orissa Coast Canal	......	80,885	74,822	68,026	73,810	75,362
Calcutta and Eastern Canals	......	2,12,312	2,81,967	2,67,046	3,09,684	3,28,527
Saran Canal	...	28,120	34,897	38,313	37,403	12,538
Total Revenue ...	2,36,000	3,21,817	3,91,686	3,73,385	4,20,897	4,16,427
Expenditure on Works for which no capital accounts have been kept.						
Nadia Rivers	......	92,022	1,34,694	87,814	1,03,699	1,07,085
Eden Canal	......	41,769	17,498	24,780	34,795	25,702
Teur (Madhuban) Canal	......	9,821	4,194	9,337	11,827	10,506
Total ...	1,34,000	1,43,612	1,56,386	1,21,931	1,50,321	1,43,293
Minor Works ...	3,70,000	8,01,174	6,92,545	6,07,475	7,50,139	8,01,518
Agricultural Works.						
Government embankments	6,50,000	5,95,519	6,53,405	6,60,038	6,26,201	6,28,281
Takavi embankments	1,28,000	1,21,840	1,29,796	1,51,667	1,26,648	1,29,997
Total Agricultural Works ...	7,78,000	7,17,359	7,83,201	8,11,705	7,52,849	7,58,278
GRAND TOTAL ..	11,48,000	15,18,533	14,75,746	14,19,180	15,02,988	15,59,796

In the contract no assignment was made for capital expenditure on Minor Works, but grants aggregating Rs. 4,91,000 were subsequently made for capital expenditure on the Orissa Coast Canal. The charges for remodelling the Hidgellee Tidal Canal have also been met by additional grants from the Imperial Revenues, but the Provincial Government has undertaken to pay interest at 4 per cent. on the capital advanced. The total expenditure under Minor Works in excess of Imperial assignment and grants has amounted to Rs. 8,08,027.

45. The large decrease of receipts under *Civil Works* in charge of civil officers, as compared with the contract estimate, was due to the transfer of ferry receipts from Provincial to Local under the Local Self-Government Act. The receipts of the Public Works Department in 1889-90 included the Provincial share of the sale proceeds of the Barakur Iron Works, while those for 1890-91 included the sale proceeds of the buildings and land in the north-west corner of the Custom House premises, Calcutta, sold to the East Indian Railway Company on the understanding that a sum equivalent to the proceeds would be expended on the construction of a new building for the Calcutta Collectorate and for the improvement of the Custom House.

46. The Contract assignment for *Civil works in charge of the Public Works Department* was Rs. 29,90,000, viz.—

	Rs.
Original works	7,10,000
Repairs	12,22,000
Establishment excluding what is debitable to Railways	10,08,000
Tools and plant	50,000
Total ...	29,90,000

In 1888-89 the Calcutta and Jessore road was transferred to the District Boards of Jessore and the 24-Parganas, the Ganges and Darjeeling Road from Karagola and Titalya to the District Board of Purnea, and the Grand Trunk Road from Pulta ghat to Chote-kund (34 miles) to the District Board of Hooghly.

In 1889-90 the Grand Trunk Road from Chote-kund to Barakar (97¼ miles), the Raniganj-Midnapore road from Raniganj to Damudar river (3 miles), the Sithona road from the Damodar river to the Grand Trunk Road (3½ miles), were transferred to the District Board of Burdwan. The Raniganj and Midnapore road from Damodar to Kurkasole and the Bishenpore Loop-line road (4 miles) were transferred to the District Board of Bankura. The Grand Trank Road from Bhullua Chatti to the Sone river was transferred to the District Board of Gaya, and the Chittagong Trunk Road, passing through the districts of Chittagong, Noakhali and Tippera, was made over to the respective District Boards concerned.

The aggregate cost of the maintenance and repairs of these roads, transferred to the District Boards, amount to Rs. 2,72,472. Excluding these, the total expenditure on Civil works during the five years has been as follows:—

	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Original works—						
Civil buildings	7,67,000	11,98,000	12,05,000	11,12,000	10,71,000	53,53,000
Communications	1,14,000	5,84,000	4,15,000	4,74,000	5,54,000	21,41,000
Miscellaneous	2,09,000	84,000	42,000	1,70,000	59,000	5,64,000
Total	10,90,000	18,66,000	16,62,000	17,56,000	16,84,000	80,58,000
Repairs—						
Civil buildings	5,08,000	5,01,000	3,96,000	3,54,000	4,95,000	22,54,000
Communications	5,97,000	8,30,000	5,96,000	6,27,000	6,27,000	32,77,000
Miscellaneous	57,000	58,000	56,000	75,000	67,000	3,13,000
Total	11,02,000	13,89,000	10,48,000	10,56,000	11,89,000	58,44,000
Establishment	7,30,000	6,91,000	7,72,000	7,22,000	7,64,000	36,79,000
Tools and plant	17,000	48,000	57,000	47,000	33,000	2,02,000
Suspense	—2,38,000	—90,000	—4,15,000	—75,000	2,10,000	—6,08,000
Total	5,09,000	6,49,000	4,14,000	6,94,000	10,07,000	32,73,000
GRAND TOTAL	27,61,000	39,04,000	31,24,000	35,06,000	38,80,000	1,71,75,000

In the first year of the contract it was necessary to proceed with extreme caution in regard to the expenditure on Public Works. The grant could not be placed at a higher amount than the contract assignment less the cost of establishment debitable to the Irrigation grant, which was included in the assignment under Civil Works. The increased balance at credit of the Provincial Government at the end of the year, and the rapid growth of revenue under Railways, enabled the Lieutenant-Governor to spend on Civil Works during the last three years of the contract sums exceeding the assignment by 4, 8, and 11½ lakhs respectively.

The Provincial grant under this head is almost entirely spent on metalled or unmetalled roads and on Civil buildings. The outlay on Civil Works during the five years amounted to Rs. 1,71,75,000. In Calcutta a new building for the accommodation of the Police Court and the Fire-brigade has been completed, a new wing has been added to the Indian Museum in Sudder Street, a new building has been provided for the Port and Shipping Office, and considerable extension has been made to the Calcutta Small Cause Court. A new building for the Calcutta Collectorate and Income-Tax Office has been commenced, on which Rs. 82,336 has already been expended. The head-quarters of Chittagong have been provided with a set of Revenue and Judicial offices, at a cost exceeding 5 lakhs. Court-houses have been constructed at Dumka, Jalpaiguri, Mymensingh and Noakhali, and several sub-divisional Court-houses and Munsifis have been built. A new collectorate building has been erected for Khulna, and a khas tahsil office at Cox's Bazar sub-division. Considerable expenditure has also been incurred in the construction and improvement of distillery buildings at Russa, Darbhanga, Bankipore, Monghyr, Rajmahal, Godda, Muzaffarpur, Chapra, and Arrah; while Chapra, Buxar, Narainganj, Kutwa, and Khulna have been provided with new circuit-houses.

47. In the contract the amount of contributions to Incorporated Local Funds was fixed at Rs. 1,59,000, thus:—

	Rs.
Payment to Road Committees for collection of Public Works cess	47,000
Payment to Road Committees for road works out of collections from Government estates	58,000
Contribution to District Road account in Chittagong Hill Tracts, Sonthal Parganas, and Singhbhum	54,000
Total ...	1,59,000

The actual grants, however, amounted to Rs. 2,61,063 in 1887-88, Rs. 7,50,184 in 1888-89, Rs. 11,82,950 in 1889-90, Rs. 8,94,450 in 1890-91, and Rs. 8,78,841 in 1891-92. The increase is due to the inclusion of the grants made to the District Boards in adjustment of the excess of charges over receipts transferred to them on the extension of the Local Self Government Act III (B.C.) of 1885.

The provisions of this Act were in force in 16 districts from 1st October 1886 and were extended from the 1st April following to all other districts in the Province except Darjeeling, the Chota Nagpur districts, the Sonthal Parganas and the Chittagong Hill Tracts. District Boards have been constituted in 38 districts, and Local Boards established in nearly all districts where there are sub divisions. The District Boards have been vested with the administrative control and financial responsibility of all cattle-pounds, of Government middle English, middle vernacular and public primary schools, or where there are none of the last-named, their duties are confined to aiding primary schools under private management. Some charitable dispensaries, all bridges, roads and other property hitherto under the care of District or Branch Road Committees, and most of the public ferries and their proceeds, have been placed under their control and administration; and lastly, the provisions of the Act which relate to sanitation have been expressly extended to them. The maintenance and repairs of certain provincial roads have also been transferred to them. Local Boards have been in most districts entrusted with the administration of the grants

for village roads, pounds, ferries and primary education. The net grants payable to the District Boards are shown in the following table:—

	Receipts.	Charges.
	Rs.	Rs.
Pounds (police) ...	4,20,153	22,297 3,758
Ferries (civil works) ...	2,96,076	3,808
Education	24,968	10,39,177
Medical	300	2,424
Stationery	......	16,750
Miscellaneous	......	3,676
Improvement of roads in Government estates out of percentage on collections ...	......	56,298
Administration	......	11,292
Maintenance of provincial roads	......	2,72,472
Total ...	7,41,497	
Net grant ...	6,90,455	
GRAND TOTAL ...	14,31,952	14,31,952

The comparatively smaller grants in 1887-88 were due to the fact that the adjustments for the year were not completed within the year, and the accounts of the next year include necessarily for the most part the net grants for two years.

The principal items of receipt and expenditure besides provincial roads transferred to the Boards are Pounds, Ferries and Education, and the following table shows the progress made in the last two years under these heads:—

	Fixed assignment made from provincial revenue.		1890 91.		1891-92.	
	Receipts.	Expenditure.	Receipts.	Expenditure.	Receipts.	Expenditure.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Education	24,968	10,39,177	33,496	10,01,855	37,803	11,05,375
Pounds	4,20,153	22,297	4,43,775	29,618	4,72,187	33,874
Ferries	2,96,076	3,808	3,38,558	53,165	3,75,664	38,458
Government grant ...	3,24,085	......	3,24,085	......	3,24,085	......
Total ...	10,65,282	10,65,282	11,39,914	10,84,638	12,09,739	11,77,707
Surplus (+) or Deficit (—)	Nil	Nil	+55,276	......	+32,032	......

The receipts under these heads have increased by Rs. 1,44,457, while the expenditure has risen by Rs. 1,12,425.

48. The general financial results of the contract of 1887 may be summarised thus: the Provincial resources which were estimated at Rs. 4,64,47,000 averaged Rs. 5,15,29,000, being an increase of Rs. 50,82,000; the expenditure, which was estimated at Rs. 4,64,47,000, averaged Rs. 5,14,52,000, showing an increase of Rs. 50,05,000. The chief branches of revenue which contributed to the increase of receipts were Stamps, Provincial Rates, Assessed Taxes and Railways. The contract period began with a balance of Rs. 19,99,000 and closed with a balance of Rs. 23,85,000.

PART IV.—THE NEW CONTRACT.

49. Such were the results of the five years' contract of 1887, the term of which has just expired with the year 1891-92. A new contract has now been made for another period of five years, commencing from 1st April 1892, under which no material change in the system of decentralization has been made, but the contract has been expressly declared to be a consolidated one for all Provincial revenue and

expenditure, and not a collection of separate assignments for each head. The following changes have been made in the Provincial receipts and charges. The cost of surveys and settlements under Land Revenue, which under the last contract was entirely Provincial, has been made Imperial, with the reservation that, if the recoveries on account of the survey and settlement operations in Bihár fall short of the expenditure which is recoverable from the zamindars and raiyats, the difference will be charged to the Provincial Revenues. The whole of the general establishment of the Accountant-General has been made Imperial, but the charges of the Examiner of Local Accounts and his establishment will continue to be Provincial as before. The cost of plain paper used with court-fee stamps will be charged under "6—Stamps" instead of, as in the past, under "30—Stationery." All police charges, including Railway Police, have been made Provincial. The salaries and allowances of officers on the cadre of the Civil Veterinary Department will be Imperial, but all other charges of that department have been made Provincial. Inter-provincial adjustments have been abolished. The Nalhati and the Tirhut State Railways have been made Imperial, while the net receipts of the Eastern Bengal Railway system will be divided equally between the Imperial and the Provincial Revenues. It has also been decided that the Government of Bengal will not exercise any administrative or financial powers in regard to railways. The capital expenditure on the Hidgelee Tidal Canal required to complete the work will be advanced from Imperial Funds, the Provincial Government paying interest as before. After making allowance for all these alterations, the Government of India have adopted the following figures as the estimates of the total Provincial revenue and expenditure for the new contract:—

	Rs.
Revenue from all sources	4,24,93,000
Total Provincial expenditure	4,10,54,000
Surplus	14,39,000

This surplus (Rs. 14,39,000) has been appropriated to the Imperial Revenues through the Land Revenue head, and the Province has thus been left with a revenue and expenditure exactly equal.

BUDGET ESTIMATE FOR 1892-93.

50. The Lieutenant-Governor has already in separate Resolutions reviewed the estimates of receipts and expenditure for the current year. Later information, however, has led to a modification of these in some respects. The following table shows the estimates of the Local Government submitted to the Government of India, the figures accepted by the Government of India, and the estimates which the Lieutenant-Governor has finally resolved to adopt:—

RECEIPTS.	Estimate of the Government of Bengal reported to the Government of India.	Estimate sanctioned by the Government of India.	Estimate now adopted.
	Rs.	Rs.	Rs.
Opening balance ...	19,70,000	20,00,000	23,85,000
Principal Heads of Revenue—			
I.—Land Revenue .. Proper	99,52,000	99,52,000	99,78,000
I.—Land Revenue .. Adjustments.	(—)14,89,000	(—)13,71,000	(—)13,01,000
III.—Salt ...	1,30,000	1,30,000	90,000
IV.—Stamp ...	1,11,38,000	1,11,75,000	1,16,25,000
V.—Excise ..	27,37,000	27,37,000	28,50,000
VI.—Provincial rates ...	44,17,000	44,17,000	44,17,000
VII.—Customs ...	57,000	57,000	50,000
VIII.—Assessed taxes ...	21,50,000	21,50,000	21,75,000
IX.—Forests ...	4,16,000	4,16,000	4,00,000
X.—Registration ..	6,80,000	6,80,000	6,85,000
Total ...	3,01,88,000	3,03,43,000	3,09,69,000
XII.—Interest ...	1,62,000	1,62,000	1,62,000
Receipts by Civil Department—			
XVI.—Law and Justice—			
Courts of Law ...	8,70,000	8,70,000	8,70,000
Jails ...	9,00,000	9,00,000	9,00,000
XVII.—Police ...	4,60,000	4,69,000	2,66,000
XVIII.—Marine ..	9,68,000	9,68,000	8,60,000
XIX.—Education ..	6,10,000	6,10 000	5,75,000
XX.—Medical ...	1,50,000	1,50,000	1,50,000
XXI.—Scientific and other Minor Departments ..	1,47,000	1,47,000	1,47,000
Total ...	41,05,000	41,05,000	37,68,000
Miscellaneous—			
XXII.—Receipts in aid of Superannuation .	71,000	71,000	65,000
XXIII.—Stationery and Printing .	1,36,000	1,36,000	1,36 000
XXV.—Miscellaneous ...	7,64,000	7,64,000	7,64,000
Total ...	9,71,000	9,71,000	9,65,000
Railways—			
XXVI.—State Railways (gross earnings) ..	32,00,000	32,00,000	31,00,000
Irrigation—			
XXIX.—Major works (direct receipts)	13,93,000	14,63,000	16,00,000
XXX.—Minor works and Navigation—			
By Public Works Department ...	8,43,000	8,43,000	8,00,000
By Civil Department	1,03,000	1,03,000	1,17,000
Total ..	23,39,000	24,14,000	25,17,000
Buildings and Roads—			
XXXII.—Civil Works—			
By Public Works Department ..	2,30,000	2,30,000	2,30,000
By Civil Department ...	2,26,000	2,26,000	2,26,000
Total ...	4,56,000	4,56,000	4,56,000
Total ...	4,14,21,000	4,16,51,000	4,19,37,000
GRAND TOTAL ...	4,33,91,000	4,36,51,000	4,43,22,000

EXPENDITURE.	Estimate of the Government of Bengal reported to the Government of India.	Estimate sanctioned by the Government of India.	Estimate now adopted.
	Rs.	Rs.	Rs.
Direct demand on the Revenues—			
1. Refunds and drawbacks ...	1,50,000	1,50,000	1,50,000
2. Assignments and compensations	1,60,000	1,60,000	1,60,000
3. Land Revenue ...	33,63,000	33,63,000	33,08,000
5. Salt ...	52,000	52,000	1,27,000
6. Stamps ...	4,26,000	4,26,000	4,26,000
7. Excise ...	1,70,000	1,70,000	1,70,000
8. Provincial Rates ...	4,52,000	4,52,000	4,52,000
9. Customs ...	5,58,000	5,58,000	5,58,000
10. Assessed taxes ...	93,000	95,000	93,000
11. Forests ...	2,40,000	2,40,000	2,27,000
12. Registration ...	3,49,000	3,49,000	3,53,000
Total ...	60,15,000	60,15,000	61,04,000
13. Interest on ordinary debt ...	1,36,000	1,21,000	1,21,000
Salaries and expenses of Civil Department—			
18. General Administration ...	15,48,000	15,48,000	15,67,000
19. Law and Justice { Courts of Law ...	84,38,000	84,33,000	84,33,000
Jails ...	21,00,000	21,00,000	20,86,000
20. Police ...	57,90,000	57,90,000	56,59,000
21. Marine ...	8,85,000	8,85,000	9,10,000
22. Education ...	25,66,000	25,66,000	23,66,000
24. Medical ...	15,50,000	15,50,000	15,50,000
25. Political ...	29,000	29,000	29,000
26. Scientific and other Minor Departments ...	3,25,000	3,25,000	3,38,000
Total ..	2,32,26,000	2,32,26,000	2,31,38,000
Miscellaneous—			
29. Superannuation, &c. ...	16,20,000	16,20,000	16,80,000
30. Stationery and Printing ...	9,90,000	9,90,000	9,90,000
32. Miscellaneous ...	2,30,000	2,30,000	2,30,000
Total ...	28,40,000	28,40,000	29,00,000
Famine Relief and Insurance—			
33. Famine relief ...	1,00,000	1,00,000	1,50,000
Railways (Revenue account)—			
40. Subsidized Companies—Land, &c.	......	8,000	24,000
Irrigation—			
42. Major works—			
Working expenses ...	13,73,000	13,73,000	14,23,000
Interest on debt ...	24,27,000	24,28,000	24,28,000
43. Minor works and Navigation—			
By Public Works Department	13,12,000	16,45,000	16,17,000
By Civil Department ...	2,000	2,000	6,000
Total ...	51,14,000	54,48,000	54,74,000
Buildings and Roads—			
45. Civil Works—			
By Public Works Department	31,84,000	29,71,000	28,29,000
By Civil Department ...	2,20,000	1,79,000	2,48,000
Total ...	34,04,000	31,50,000	30,77,000
Contributions ...	8,43,000	7,43,000	11,88,000
Total ...	4,16,78,000	4,16,51,000	4,21,68,000
Closing balance ...	17,13,000	20,00,000	21,54,000
GRAND TOTAL ...	4,33,91,000	4,36,51,000	4,43,22,000
Provincial surplus (+) or deficit (—)	(—)2,57,000	...	(—)2,31,000

RECEIPTS.

51. *Land Revenue.*—The Government of India have accepted the estimate of total collections under this head as passed by the Local Government for 1892-93, amounting to Rs. 3,83,95,000 against Rs. 3,83,51,000, the average receipts of the last five years. The collections in the first five months of the current year amounted to Rs. 74,38,000 against Rs. 70,28,000 in the corresponding period of last year. But the September kist having fallen during the holidays, the collections to the end of that month were Rs. 1,20,57,000 against Rs. 1,30,12,000 obtained during the same period last year. The October returns, however, show that the collection in that month exceeded those of the same month last year by Rs. 8,42,000. In view of these figures the Lieutenant-Governor does not anticipate that there will be any serious falling off at the end of the year, but with reference to the actuals of the last three years amounting to Rs. 3,88,82,000,

Rs. 3,88,19,000, and Rs. 3,86,80,000, would raise the estimate to Rs. 3,85,00,000 and place the Provincial share at Rs. 99,78,000 thus:—

	Rs.
Gross revenue	3,85,00,000
Less percentage on collections from Government estates ...	4,71,000
	3,80,29,000
Provincial share	95,07,000
Percentage on collections	4,71,000
	99,78,000

52. *Adjustments.*—Under the orders of the Government of India in the Public Works Department, the construction of a new Telegraph office at Sirajganj and the maintenance of certain Imperial buildings and works have been transferred to the District Boards with grants amounting to Rs. 32,352. The grants to the District Boards have been passed through the adjusting head of Contributions from Provincial to Local, and, subject to the final orders of the Government of India in the Finance and Commerce Department, a credit for this amount has been taken under Land Revenue. The Government of India have consented to bear from the Imperial Revenues only half the amount of honorarium granted to Mr. Kilby for his patent salt-weighing scale. A credit for Rs. 37,500 has accordingly been taken on this account. The total payment to Imperial Revenues under Land Revenue adjustments will then amount to Rs. 13,01,000, thus:—

	Rs.	Rs.
Fixed contribution to Imperial ...	...	14,39,000
Deduct—		
For transfer of Imperial buildings to Local Funds	32,352	
Honorarium to Mr. Kilby ...	37,500	
Hidgellee Tidal Canal	68,500	
	1,38,352	
	Or in round numbers	1,38,000
	Net payment ...	13,01,000

53. *Salt.*—The receipts from warehouses during the first six months amounted to Rs. 28,152 against Rs. 44,747 during the six months of last year. The total receipts in last year amounted to Rs. 1,11,000. It will not be safe, therefore, to place the estimate for the current year at a higher figure than Rs. 90,000.

54. *Stamps.*—The estimate of total revenue under this head, as passed by the Government of India, amounts to Rs. 1,49,00,000. The statements of the Comptroller-General and District Returns show that the receipts in the first eight months of the current year amounted to Rs. 99,37,000 against Rs. 96,34,000 obtained in the corresponding period of last year, showing an increase of more than three lakhs in eight months. The actual receipts in 1891-92 amounted to Rs. 1,51,00,000, and the Lieutenant-Governor thinks that the estimate for 1892-93 may be raised to Rs. 1,55,00,000. The Provincial share will be Rs. 1,16,25,000.

55. *Excise.*—The estimate of total revenue under this head amounts to Rs. 1,09,50,000. The monthly returns show that the receipts in the first eight months of the current year were Rs. 1,85,000 in excess of the receipts of the corresponding period of last year. The total collections in 1891-92 amounted to Rs. 1,11,34,000, and the results of the recent settlement of excise shops for the current year show an increase of about 4 lakhs in license fees as compared with those of the last year. In view of these figures, and of the fact that the crops in Behar show great promise, the estimate for 1892-93 will be raised to Rs. 1,14,00,000. The Provincial share will stand at Rs. 28,50,000.

56. *Provincial Rates.*—The estimate of total receipts under this head amounts to Rs. 44,17,000 against Rs. 45,25,000, the approximate actuals of 1891-92. The collections in the first eight months of the current year fell short of those of the corresponding period of last year by Rs. 19,000. In view of these figures,

the Lieutenant-Governor does not consider it safe to raise the original estimate, which stands at Rs. 44,17,000 against Rs. 45,25,000, the actuals of last year.

57. The Provincial receipts under Customs during the first seven months of the current year amounted to Rs. 26,424 against Rs. 34,117 in the corresponding period of last year. The total receipts in 1891-92 were Rs. 57,100. The estimate for the current year will be reduced from Rs. 57,000 to Rs. 50,000.

58. *Assessed taxes.*—The receipts under this head during the first eight months of the current year amounted to Rs. 29,91,000 against Rs. 29,28,000 obtained in the corresponding period of last year, showing an increase of Rs. 63,000. The total receipts in 1891-92 amounted to Rs. 43,08,000, and looking to the steady growth of this revenue, the Lieutenant-Governor would raise the estimate to Rs. 43,50,000. The Provincial share will stand at Rs. 21,75,000.

59. *Forests.*—The Conservator of Forests anticipates a decrease of Rs. 32,000, chiefly owing to the abandonment of the departmental system of collections and supply of timber and other forest produce which has been approved by Government, and has also made a reduction of Rs. 27,000 on the expenditure side. The provincial share of receipts has accordingly been reduced from Rs. 4,16,000 to Rs. 4,00,000.

60. The Registration receipts during the first seven months were Rs. 8,31,000 against Rs. 8,02,000 of the same period of last year showing an increase of Rs. 29,000. The actuals of 1891-92 were Rs. 13,34,000. In view of the steady expansion of revenue under this head, the estimate will be raised from Rs. 13,60,000 to Rs. 13,70,000. The provincial share will stand Rs. 6,85,000. A corresponding increase has also been made on the expenditure side.

61. *Police.*—The estimate under this head amounts to Rs. 4,60,000, which includes Rs. 25,000 for recoveries on account of clothing from District Executive Force. Under the orders of the Government of India, No. 458, dated the 31st July 1891, the clothing allowance of the constables has been raised from Rs. 4 to Rs. 5 per head, and in the case of special reserve from Rs. 6 to Rs. 8, and this will be sufficient to cover the cost of uniforms, so that no recoveries will virtually be made from the pay of the force, and free kits are also supplied to fresh recruits on their joining the Department without any deductions from their pay. The provision of Rs. 25,000 will therefore be struck out. But as the actuals of the first seven months of the current year irrespective of these recoveries show an increase of Rs. 18,000 as compared with those of the corresponding period of last year, the original estimate of Rs. 4,60,000 does not appear to be high. As, however, under the orders of Government, No. 3775F., dated the 12th October 1892, two separate local accounts have been opened for the receipts and charges hitherto included under the Provincial Minor head of Village Police, the estimate which includes Rs. 1,94,000 on the receipt side, and Rs. 2,20,000 on the expenditure on this account, will be reduced by these amounts. The estimate of receipts will accordingly be reduced to Rs. 4,60,000—Rs. 1,94,000=2,66,000.

62. *Marine.*—The receipts during the first seven months of the current year amounted to Rs. 4,18,081 against Rs. 5,58,110 obtained in the corresponding period of last year, showing a decrease of Rs. 1,40,000. The fluctuations are chiefly under pilotage receipts. The aggregate receipts in 1891-92 amounted to Rs. 9,65,408, and the Lieutenant-Governor does not think that the estimate for the current year can be placed at a higher figure than Rs. 8,60,000 against Rs. 9,68,000 originally estimated.

63. *Education.*—The actual receipts amounted to Rs. 5,75,686 in 1890-91, and Rs. 5,95,122 in 1891-92. The latter amount, however, includes a special refund of Rs. 19,000 made by the District Board of Jessore on account of charges formerly erroneously debited to Provincial account. The receipts in the first seven months of the current year show a decrease of Rs. 30,000 as compared with those of the corresponding period of last year. Looking to all these circumstances, the Lieutenant-Governor would place the estimate at Rs. 5,75,000, equivalent to the actuals of 1890-91, against Rs. 6,10,000 originally estimated.

64. *Superannuations.*—The estimate of receipts under this head for 1892-93 amounts to Rs. 71,000 against Rs. 1,26,574, the approximate actuals of 1891-92. The actuals of last year included arrear contributions received on account of the employés of District Boards, whose services had been declared to be qualifying for pension. No such arrears are expected this year, and the collections in

the first seven months amounted to Rs. 42,226, against Rs. 84,562 in the corresponding period of last year. Under the orders of the Government of India, Home Department, No. 253, dated the 12th August 1892, no contributions for pensions are now payable by the Sub-Inspectors of Schools transferred to the District Boards. Looking to all the circumstances, the estimate will be reduced to Rs. 65,000.

65. *Railways.*—Under the terms of the new Provincial Contract with the Government of India, the net receipts of the entire Eastern Bengal State Railway System are to be equally divided between the Imperial and Provincial Governments. The other Railways have been made Imperial. The following statement compares the estimate of the Government of India for 1892-93 with the actuals of 1891-92:—

	Actuals, 1891-92.	Estimate passed by the Government of India, 1892-93.
	Rs.	Rs.
Receipts	1,14,63,835	1,18,00,000
Expenditure	62,62,793	54,00,000
Net earnings ...	52,01,042	64,00,000

The approximate gross earnings of the Eastern Bengal State Railway System from 1st April to 26th November 1892 amounted to Rs. 79,36,000 against Rs. 80,27,000 obtained from 1st April to 28th November 1891, but the traffic is now improving, and a large quantity of jute is still waiting for despatch. Looking to all the circumstances, the Lieutenant-Governor does not think that it will be safe to place the estimate of net receipts at a higher figure than Rs. 62,00,000. Half of this, Rs. 31,00,000, is Provincial, and this amount has been entered in the estimate, against Rs. 32,00,000 originally passed by the Government of India.

66. *Irrigation Major Works.*—The latest returns from the Examiner of Accounts show that the receipts during the first six months of the current year were Rs. 2,73,000 in excess of those during the corresponding period of the past year. The actual collections in 1891-92 amounted to Rs. 16,02,710, and the estimate for the current year, which stands at Rs. 14,68,000, will be raised to Rs. 16,00,000.

67. *Irrigation Minor Works.*—The returns of the Examiner show that the receipts in the first six months of the current year from Minor Works in charge of the Public Works Department, amounted to Rs. 3,17,603 against Rs. 3,59,951 realised in the corresponding period of last year. The total receipts in 1891-92 amounted to Rs. 8,17,934: the actuals of the first six months show a decrease of Rs. 42,384. The estimate will be reduced from Rs. 8,43,000 to Rs. 8,00,000. On the other hand the estimate of receipts by Civil Officers will be raised from Rs. 1,03,000 to Rs. 1,17,000 on account of the recoveries to be made of the capitalized maintenance charges of the Dankuni drainage.

EXPENDITURE.

68. *Assignments and compensations.*—The actuals in 1891-92 amounted to Rs. 1,66,129 and included arrear payments. But looking to the actuals of the first six months of the current year, amounting to Rs. 1,00,319, the Lieutenant-Governor would raise the estimate for 1892-93 from Rs. 1,60,000 to Rs. 1,80,000.

69. *Land Revenue.*—The estimate under this head, amounting to Rs. 33,63,000, will be raised by Rs. 2,000 to meet the cost of an accommodation boat for the Collector of Cuttack, and by Rs. 3,000 on account of additional establishment applied for for the South Lushai Hills District. The revised estimate submitted by the Commissioner for this district is under consideration, but, pending final orders, the provision will be allowed to stand. The amalgamation of all criminal and revenue process-serving establishments recently sanctioned may increase the number of naib-nazirs or bukshis in certain districts, but the centralisation of the amalgamated establishment under one controlling authority will lead to a reduction in the number of peons employed, and more than compensate for the additional cost of the nazir's assistant. No increased grant will be necessary on this account. The estimate will stand at Rs. 33,68,000.

70. *Salt.*—The estimate under this head, amounting to Rs. 52,000, will be raised by Rs. 75,000, the payment of which amount has been sanctioned by the Secretary of State to Mr. Kilby as honorarium for his patent scales for the weighment of salt. The grant will now stand at Rs. 1,27,000.

71. *Forests.*—As stated in paragraph 59 above, the Conservator of Forests has reduced the grant of the Forest Department by Rs. 27,000. The Provincial grant will stand at Rs. 2,27,000.

72. *General Administration.*—The grant under this head for the current year will be raised by a transfer of Rs. 4,124 to meet the cost of the additional establishment of the Marine Branch of the Public Works Secretariat, and by Rs. 15,000 for the temporary appointment of an additional Commissioner for the Patna Division. The estimate will now stand at Rs. 15,67,000.

73. *Jails.*—The estimate under this head will be reduced by Rs. 13,607, which has been made over to the Public Works Department for the construction of works for the supply of drinking water to the Arrah Jail. The grant will stand at Rs. 20,86,000.

74. *Police.*—The estimate under this head, amounting to Rs. 57,90,000, includes Rs. 3,73,000 for the South Lushai Hill Force. The revised estimate of the South Lushai District just received from the Commissioner of the Chittagong Division, provides for a total expenditure of Rs. 7,24,146 against Rs. 4,97,000 provided in the budget, thus:—

	Estimate passed by the Government of India.	Revised estimate now resubmitted by the Commissioner.
	Rs.	Rs.
Land Revenue, including postal runners	18,000	21,048
Police—		
Force and establishment	1,57,000	1,45,864
Permanent transport and rations ...	2,16,000	2,29,699
Temporary ditto ...		1,86,009
Proportionate cost of supplies to Military Department, Rs. 76,590, debitable to Police	......	54,376
Medical	19,500	20,282
Political	7,500	7,500
Civil works	79,000	59,368
Total ...	4,97,000	7,24,146

The estimate provides Rs. 4,70,084 for transport and rations and Rs. 1,45,864 for salaries and allowances of the Police and Commissariat Departments. The estimate of transport and rations is no doubt susceptible of considerable reduction, and, pending final orders, a lump provision of 3 lakhs will be made in the budget on this account. The total grant for Police of the South Lushai Hills will then stand at Rs. 4,45,864 against Rs. 3,73,000 passed by the Government of India, making an increase of Rs. 72,864. The total grant of the Police Department will also be raised by Rs. 10,593 to meet the cost of constructing a new steam-launch at the Government Dockyard for the District Superintendent of Police, Backergunge, and by Rs. 5,280 on account of the scheme recently sanctioned, by which the Court Sub-Inspectors will be employed as prosecuting officers, with effect from January 1893. The annual cost of this scheme is estimated at Rs. 21,120. Against these increases the estimate will be reduced by Rs. 2,20,000 on account of the charges hitherto included under village Police. The total grant will stand at Rs. 56,58,737, or Rs. 56,59,000 in round numbers.

75. *Marine.*—The estimate under this head, amounting to Rs. 8,85,000, does not include any provision for the purchase of new vessels. A new vessel to replace the *Coleroon* is now under construction at the Bombay Dockyard at a rough estimated cost of two lakhs, but the Public Works Department has recently reported that a sum of Rs. 25,000 only will be required on this account in the current financial year. The estimates will therefore be raised by Rs. 25,000, and will be placed at Rs. 9,10,000.

76. *Scientific and other Minor Departments.*—The estimate under this head amounting to Rs. 3,25,000, includes a provision of Rs. 15,000 for the maintenance of a "Veterinary School and Hospital" for the construction of which a donation of Rs. 30,000 was received from Babu Shewbux Bagla. As the construction of the hospital has not yet commenced, a grant of Rs. 5,000 will probably be sufficient on this account. Against this saving a grant of Rs. 6,000 has been made to the Indian Museum for the repairs of the Black Pagoda (Kanarak) in the district of Puri, and a grant of Rs. 10,000 has been sanctioned as contribution towards the representation of Indian tea at the Chicago Exhibition. A grant of Rs. 5,000 has also been promised for the repairs of roads in the Royal Botanic Gardens, and a further grant of Rs. 2,000 has been sanctioned to the Asiatic Society for the addition of a third section to the journal dealing with anthropology and ethnography. The total grant will now stand at Rs. 3,38,000.

77. *Superannuations.*—The Provincial expenditure under this head has been as follows:—

			Increase.
		Rs.	Rs.
	1887-88	... 12,80,000	
	1888-89	... 13,70,000	90,000
	1889-90	... 14,36,000	66,000
	1890-91	... 15,13,000	77,000
	1891-92	... 16,00,000	87,000
Estimate	... 1892-93	... 16,20,000	20,000

The increase in the last four years amounted to Rs. 3,20,000, or an average of Rs. 80,000. The actuals of the first seven months of the current year show an increase of about Rs. 63,000 as compared with the corresponding period of last year. In view of these figures, it will not be safe to place the estimate for the current year at a lower figure than Rs. 16,80,000.

78. *Famine Relief.*—The charges shown in the Accountant-General's monthly account for the first five months of the current year amounted to Rs. 1,623 only, but the adjustments with the District Boards will not probably be made before the close of the year. A provision of Rs. 1,50,000 will be made under this head.

79. *Subsidized Company's Land.*—The estimate under this head has been raised from Rs. 8,000 to Rs. 24,000 to meet the cost of land for the Bengal Duars Railway.

80. *Irrigation Major Works.*—The estimate of the Government of India, amounting to Rs. 13,73,000, will be raised by Rs. 50,000 to enable the Public Works Department to meet urgent demands on account of heavy damages done by the floods in Orissa.

81. *Minor Works and Navigation by Public Works Department.*—The estimate under this head as passed by the Government of India amounts to Rs. 16,45,000 A sum of Rs. 637 has been placed at the disposal of the District Board of Malda for the maintenance and repairs of embankments in that district entrusted to the Board's agency for a period of four years. Further grants of Rs. 120 and Rs. 72 have been made to the District Road Account of the Sonthal Parganas and the District Board of Monhgyr to meet the pay of the gauge readers at Sahebgunge and Monghyr respectively. It also appears from the rate of progress of work in the canals that it is unlikely that the full grant will be utilized during the current year, and that it will be enough if the grant is placed at Rs. 15,65,000. But this will be raised by Rs. 52,000 to effect an adjustment of the value of stock stores of the Orissa and Sone canals, which will probably be transferred from Capital to Provincial Minor Works Account.

82. *Minor Works in charge of the Civil Department.*—The actual expenditure in the first five months of the current year has amounted to Rs. 3,035. The estimate for the year will be raised from Rs. 2,000 to Rs. 6,000.

83. *Civil Works by Public Works Department.*—The grant for Provincial Civil Works for the current year was originally fixed by the Local Government at Rs. 31,84,000, but the Government of India, while passing orders on the budgets

for 1892-93, reduced it to Rs. 29,71,000. This has further been reduced to Rs. 27,41,000 by the following additions and deductions:—

		Rs.	Rs.
	As originally fixed		29,71,000
Add—			
	Grant for the supply of drinking-water to the Arrah jail	13,607	
	Cost of land for Veterinary School and Hospital ...	10,000	
	Grant for the additions and alterations to the Russa and Maniktolla distillery ...	27,944	
	Grant for the Hospital at Rajshahi	1,817	
	Grant for the Sirajganj Sub-divisional House and Court	33,186	
			86,554
			30,57,554
Deduct—			
	Amount transferred to General Administration for establishment of the Marine Branch ...	4,124	
	Withdrawal for the new cemetery at Calcutta ..	60,000	
	Amount transferred to District Boards, &c., for the construction and maintenance of Provincial Buildings	3,57,990	
	Amount transferred to Chittagong Hill Tracts ...	6,071	
			4,28,185
			26,29,369
		or in round numbers	26,29,000

A further grant of two lakhs is required to enable the Public Works Department to undertake several urgent works which can no longer be postponed. The total grant will now stand at Rs. 28,29,000.

84. *Civil Works by Civil Department.*—The estimate under this head was originally passed by the Local Government for Rs. 2,20,000, but the Government of India reduced it to Rs. 1,79,000, thus:—

	Local Government.	Government of India.
	Rs.	Rs.
Lushai charges	79,000	79,000
Ferries	13,663	14,000
Contributions	62,000	62,000
Refunds	24,337	24,000
Improvements at Hastings (Calcutta) ..	41,000	.....
Total ...	2,20,000	1,79,000

The revised estimate for the South Lushai Districts, now submitted by the Commissioner of Chittagong, provides Rs. 59,368 for works in that district. The estimate will accordingly be reduced by Rs. 20,000, but as there are several applications from municipalities for grants-in-aid, and the improvements at Hastings may be taken up this year, the grant will be placed at Rs. 2,10,000. This will be further raised by Rs. 37,906, in case it is finally decided to debit to this head the compensation paid during the current year for the acquisition of certain lands adjoining the Cantonment grounds on Lebong spur.

85. *Contributions.*—The grants made to the several District Boards to establish equilibrium between the receipts and charges transferred to their management amount to Rs. 4,44,735, and the grants for the maintenance of Provincial roads transferred to their charge for the current year amount to Rs. 2,39,720. The grants to the District Road Funds and District Road Accounts as passed in the Incorporated Local Funds budget for 1892-93 amount to

Rs. 7,500 and Rs. 59,000 respectively. The total comes up to Rs 7,50,955. The following further grants have since been sanctioned :—

	Rs.
Amount transferred to District Boards, &c., for the construction and maintenance of Provincial Civil Works	3,57,990
Amount transferred to District Boards, &c., for Imperial Civil Works	32,352
Amount transferred to Chittagong Hill Tracts ...	6,071
District Board, Malda, for the maintenance and repairs of embankments	637
District Board, Monghyr, for the pay of gauge reader ...	72
District Road Account, Sonthal Parganas, for gauge reader	120
District Road Fund, Hazáribágh, on account of Government share of the cost of revaluation	2,125
District Road Fund, Singhbhum, on account of Government share of the cost of revaluation	754
District Road Fund, Lohardaga, on account of Government share of the cost of revaluation	4,586
Total ...	4,04,707

These make a total of Rs. 11,55,662, and as some provision is necessary to meet payment of arrear grants, for which applications are constantly received, a lump provision of Rs. 11,80,000 will now be made.

86. *Closing balance.*—According to the estimates passed by the Government of India, it was expected that the year would close with a balance of Rs. 20,00,000. According to the estimates now adopted, the closing balance will be Rs. 21,54,000.

ORDER.—Ordered that a copy of this Resolution be submitted to the Government of India, Department of Finance and Commerce, for information.

Ordered also that a copy of the above Resolution be forwarded to the Board of Revenue; to all Commissioners of Divisions; to the Accountant-General; to the Inspectors-General of Civil Hospitals, Police, Jails, and Registration; to the Directors of Public Instruction and Land Records and Agriculture; to the Conservator of Forests; to the Port Officer, Calcutta; to the Superintendents of Royal Botanic Garden, Calcutta, and Government Printing, Bengal, and to all Departments of this Government, for information.

By order of the Lieutenant-Governor of Bengal,

H. H. RISLEY,

Secretary to the Govt. of Bengal.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 31st December, 1892.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL				
BURDWAN DIVN.	1	Burdwan Dec. 31, '92 Kalna . Katwa ... Raniganj ..	Nil Nil Nil Nil	Weather—fine and fairly cool. *Aman* harvesting nearly finished. Prospect of *rabi* fair. Prices of common rice:— Srs. Burdwan ... ... 10 to 12 } Kalna ... ... 11 to 14 } per rupee. Katwa ... .. 13½ } Raniganj ... ... 13 }
	2	Bankura „ 31, '92 Vishnupur ...	Nil Nil	Weather—seasonable. Harvesting of *aman* still continues in places in the Vishnupur subdivision. Other crops doing well. Fodder and water sufficient. Prices of common rice:— Srs. Sadar ... ... 11¾ } per rupee. Vishnupur ... ... 11½ }
	3	Birbhum „ 31, '92 Rampur Hât ...	Nil Nil	Weather—seasonable. There is nothing more to report about the crops as the rice harvest has been gathered. Prices of rice remain at 12 to 14 seers per rupee. The usual decrease in price at this season has not taken place because of the exceptional demand for rice for exportation from the district. Fodder and water plentiful.
	4	Midnapore „ 31, '92	Nil	Weather—fine and cold. *Aman* harvest almost over. *Rabi* and sugarcane doing well. Prices of common rice:— Srs. Sadar ... ... 11 } Contai ... ... 10 to 14 } per rupee. Tamluk ... ... 13 to 14 } Garhbeta ... ... 12½ to 16 }
	5	Hooghly „ 31, '92 Serampore ... Jahanabad ...	Nil Nil Nil	Ordinary cold weather, but slightly warmer at end of the week. No change in condition of crops. *Rabi* and sugarcane doing well. Prices becoming a little easier as harvest progresses. Prices of common rice:— Srs. C. Sadar ... ... 9 to 10 0 } Serampore ... ... 10 8 } per rupee. Jahanabad ... ... 11 13 }
	6	Howrah „ 31, '92 Ulubaria ...	Nil Nil	Weather—seasonable. About half the winter rice harvested. Sugarcane and spring crops doing well. Condition of cattle good. Fodder and water-supply sufficient, except in Howrah Municipality. Prices of rice 10 to 11¼ seers per rupee.
PRESIDENCY DIVN.	7	24-Parganas „ 31, '92	Nil	Weather—seasonable. Harvesting of *aman* practically completed; outturn fair. *Rabi* crops progressing well. No complaints of lack of fodder or water. No cattle disease prevalent. Prices of common rice — Srs C. Srs. Sadar ... . 10 8 to 11 } Barasat ... ... 11 14 } Basirhat .. .. .. 11 11 } per rupee. Diamond Harbour .. .. 13 0 } Barrackpore .. .. 11 0 } Dum-Dum ... .. . 11 0 }
	8	Nadia „ 31, '92 Kushtia ... Meherpur ... Chuadanga ... Ranaghat ...	Nil Nil Nil Nil Nil	Weather—cold and seasonable. Harvesting of *aman* nearly finished. Prospects of winter crops promising. Price of rice stationary. No cattle-disease.
	9	Khulna „ 31, '92 Bagerhat ... Satkhira ...	Nil Nil Nil	Weather—seasonable. Harvesting of *aman* continues; outturn good except in Paikgachha. Prospects of *rabi* fair. Price of common rice 12 to 14 seers per rupee. Supply of water and fodder sufficient.
	10	Jessore „ 31, '92 Jhenida ... Magura .. Narail ... Bangaon ...	Nil Nil Nil Nil Nil	Weather—seasonable. Harvesting of *aman* still going on. Prospects of winter crops fair. No cattle-disease. Fodder and drinking water sufficient. Ordinary coarse rice selling at 12 to 14 seers per rupee.
	11	Murshidabad „ 31, '92	Nil	Weather—clear, cold and pleasant. The harvesting of *aman* is still going on. Sowing of *rabi* has almost been completed. No cattle-disease and fodder sufficient. Coarse rice selling at 13 seers per rupee.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and State and prospects of the crops.
BENGAL—*concld.*			
CHITTAGONG DIVN.			
12	Chittagong ...	..	Report not received.
13	Noakhali „ 31, '92	Nil	Weather—seasonable. Reaping of *aman* and sowing of *rabi* crops still continue. Fodder and water sufficient. Cattle-disease in Sundip and Sidhi. Common rice 13 to 14 seers per rupee.
14	Tippera „ 31, '92	Nil	Weather—seasonable. Reaping of *aman* crop has nearly been finished. Mustard and chillies thriving. Price of rice stationary.
15	Chittagong Hill Tracts. „ 30, '92	Nil	Weather—seasonable. Harvesting of *aman* still going on. Mustard in flower. Vegetables and sugarcane good. No cattle-disease. Common rice being sold at 10 seers per rupee.
DACCA DIVN.			
16	Dacca „ 31, '92	Nil	Weather—seasonably cold and fine. *Aman* nearly reaped. Mustard, pulses and tobacco thriving. Fodder available. No cattle-disease. Common rice selling at from 12 to 15 seers per rupee.
17	Faridpur „ 31, '92	Nil	Weather—seasonable. Harvesting of *aman* not completed. Condition of *rabi* crops generally fair. Common rice sells at 13 seers per rupee at Sadar and Goalundo, and at 14 seers per rupee at Madaripur. Condition of cattle good and fodder available.
	Goalundo ...	Nil	
	Madaripur ...	Nil	
18	Backergunge „ 31, '92	Nil	Weather—fine and seasonable. Harvesting of paddy in progress. Prospects good. Common rice is being sold at from 10 to 15 seers per rupee. Fodder and water sufficient.
19	Mymensingh „ 31, '92	Nil	Weather—seasonable. Prospects of crops good. Rice selling at from 11½ to 14½ seers per rupee. Fodder and water sufficient. There is no cattle-disease.
RAJSHAHI DIVN.			
20	Dinajpur „ 31, '92	Nil	Weather—cool. Standing crops doing well. Harvesting of winter rice going on. Outturn of sugarcane expected to be 16 annas. Prices of rice:— Srs. Sadar ... ... 15, Thakurgaon ... . 13 to 16 } per rupee. Condition of cattle good. Supply of fodder and drinking water sufficient.
	Thakurgaon ...	Nil	
21	Rajshahi „ 31, '92	Nil	Weather—cold and seasonable. Harvesting of *aman* going on vigorously. Prospects of mustard and other standing crops good. A few cases of small-pox among cattle reported from thana Singra. Fodder and water sufficient. Price of rice almost stationary.
	Nator ...	Nil	
	Naugaon ...	Nil	
22	Rangpur „ 31, '92	Nil	Weather—seasonable. Harvesting of *aman* still going on. Mustard ripe in some places. Other *rabi* crops promising. Price of common rice 10 to 13 seers per rupee.
	Kurigaon .	Nil	
	Gaibanda ...	Nil	
	Nilphamari ...	Nil	
	Ulipur ...	Nil	
23	Bogra „ 31, '92	Nil	Weather—seasonable. Harvesting of *aman* in full swing. Prospects of *rabi* good. Price of rice almost stationary. Condition of cattle good. Fodder and water sufficient.
24	Pabna „ 31, '92	Nil	Weather—cool. *Aman* harvested. In the Sirajganj subdivision the outturn is estimated at 16 annas. Price of common rice at Sirajganj Rs. 3 to Rs. 4-2 per maund and at Pabna 18 seers per rupee. Condition of cattle good. Water-supply and fodder sufficient.
25	Darjeeling „ 31, '92	Nil	Weather—mornings clear, afternoons cloudy, nights chilly. *In the hills*:—Wheat, barley, *phaphur* and *tori* progressing favourably. *In the terai*:—Paddy and potatoes continue to be harvested. Other standing crops doing well. Prices of coarse rice:— Srs. Hills ... ... 10, Terai ... ... 12 } per rupee. Indian corn in the hills scarce and dear.
	Siliguri ...	0·03	
26	Jalpaiguri „ 31, '92	Nil	Weather—seasonable. Reaping of *haimanti* paddy still going on. Common rice sells at 18 seers per rupee. Potatoes and tobacco doing well. No cattle-disease. Fodder and water-supply sufficient.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.			
BHAGALPUR DIVN.			
27	Monghyr Dec. 31, '92 Begusarai ... Jamui ...	Nil Nil Nil	Weather—cold and dry. Harvesting of winter rice and *kurthi* nearly completed. Prospects of *rabi*, oil-seeds, poppy and chillies good. No cattle-disease. Prices of common rice:— Srs. Sadar ... ... 13 to 16 } per rupee. Begusarai .. .. 16 Jamui 14
28	Bhagalpur „ 31, '92 Banka .. Madhipura ... Supaul	Nil Nil Nil Nil	Weather—seasonable. Rice harvest in progress. Prospects of *rabi* crops good, but a shower of rain will be wanted soon to secure a full outturn.
29	Purnea „ 31, '92 Kishanganj ... Araria .	Nil Nil Nil	Weather—very cold. Fogs in mornings *Aghani* still being cut. *Rabi* prospects continue good. Fodder and water sufficient. No cattle-disease. Prices of coarse rice:— Srs. Sadar ... ... 13 to 18 } per rupee. Araria ... ... 18 Kishanganj 14
30	Malda „ 31, '92	Nil	Seasonably cold weather. Reaping of winter rice has far advanced. *Kalai* being gathered Wheat and other *rabi* crops growing well. Coarse rice sells at from 13 to 17 seers per rupee. Fodder and water enough.
31	Sonthal Parganas „ 31, '92 Deoghur ... Godda Jamtara ... Pakur ... Rajmahal ...	Nil Nil Nil Nil Nil Nil	Weather—cool and dry, but growing warmer. Rice harvest well advanced; outturn expected to be 12 to 16 annas Mustard, *sarguja* and *kurthi* being gathered; outturn about 14 annas. Fodder and water-supply sufficient.
PATNA DIVISION.			
32	Patna „ 31, '92	Nil	Weather—cool; occasionally somewhat cloudy. Harvesting and threshing of paddy still going on. Mustard-seed, linseed, gram and peas are flowering. Wheat, barley, poppy and other crops doing well. Barley in ear in some places Prices of common rice— Srs. Sadar ... . 17 } per rupee. Barh .. .. 13 Bihar .. .. 17 Dinapore ... ... 13 to 14
33	Gaya .. 31, '92 Aurangabad .. Jahanabad . Nawada	Nil Nil Nil Nil	Weather—clear and very cold. Harvesting of paddy crop approaching completion and threshing is in progress *Rabi* crops are in flower. Prospects of poppy good. Pressing of sugarcane is still going on. Common rice sells at 14 seers per rupee at Gaya. Supply of fodder and water for cattle sufficient.
34	Shahabad .. 31, '92	Nil	Weather—cloudy and hot. The harvesting of rice is over. Results have been fair, except in a limited tract in the south. Sugarcane is being pressed. *Rabi* looks well in the irrigated area. Elsewhere rain is urgently wanted.
35	Darbhanga , 31, '92	Nil	Weather—cool; occasionally slightly cloudy. Harvesting of winter rice nearly completed. *Rabi* still doing well, but wants rain. Mustard, *rahar*, and peas in flower. Condition of poppy good. Supply of fodder and water for cattle sufficient. Prices almost stationary.
36	Muzaffarpur „ 31, '92 Hajipur .. Sitamarhi ..	Nil Nil Nil	Weather—seasonable and cold. Harvesting and threshing of winter rice still going on. *Rabi* and poppy crops doing well. A little rain wanted. Common rice selling at 14 seers per rupee at Muzaffarpur. Fodder and water for cattle sufficient.
37	Saran .. 31, '92 Siwan .. Gopalganj ...	Nil Nil Nil	Weather—seasonable. *Rabi* crops doing well, but rain would do good. Sugarcane pressing goes on. Condition of poppy good. Fodder and water sufficient. Prices of common rice:— Srs. C Chapra ... . 15 8 } per rupee. Siwan ... ... 13 2 Gopalganj 15 1
38	Champaran „ 31, '92	Nil	Weather—seasonable. Harvesting of rice nearly over, threshing in progress. Prospects of *rabi* crops favourable. Poppy plants now two to four inches above ground generally, look healthy and promising. Fodder and water for cattle sufficient.
ORISSA.			
ORISSA DIVN.			
39	Cuttack „ 31, '92	Nil	Weather—seasonable Harvesting of *sarad* rice in progress. Prospects of winter crops good. Prices of rice:— Srs. C. Srs. Sadar .. .. 10 8 to 20 } per rupee. Jajpur ... ... 14 7 to 21 Kendrapara ... ... 14 7 to 21 Banki 17
40	Puri „ 29, '92 Khurda ... Banpur ..	Nil Nil Nil	Weather—seasonable. Reaping of *sarad* rice still continues. Sowing of *dalua* rice going on. *Rabi* crops doing well. Rice sells at from 15 to 18 seers per rupee.
41	Balasore „ 31, '92	Nil	Weather—normal. Harvesting of winter rice continues. Price of common rice at Balasore 16½ seers and at Bhadrak 18 seers per rupee.

No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
CHOTA NAGPUR.				
South-West Frontier Agency.				
CHOTA NAGPUR DIVN. 42	Hazaribagh	Dec. 31, '92	Nil	Weather—clear and cold. Paddy harvesting not yet completed. Prospects of *rabi* generally good, but rain required. Common rice 12 to 16 seers per rupee. Poppy promising.
	Giridi	...	Nil	
43	Lohardaga	" 31, '92	Nil	Weather—seasonable. Harvesting of winter rice nearly finished. Prospect of *rabi* continues good. Common rice selling at 14 seers per rupee. Fodder and water plentiful.
44	Palamau	" 30, '92	Nil	Weather—seasonable. Harvesting of paddy completely over; threshing nearly finished. *Rabi* suffering for want of rain: even a small shower will do immense good. Damage done to *rahar* by frost is estimated at about two annas. Common rice selling at 16 seers per rupee. Water-supply and fodder plentiful. Cattle-disease reported from Daltonganj, Lesliganj, and Manator.
45	Singhbhum	" 31, '92	Nil	Weather—clear, seasonable. *Rabi* crops doing well. Harvesting of rice crop continues. Common rice selling at the Chaibassa market at 16 seers per rupee.
46	Manbhum	" 31, '92	Nil	Weather—warmer than last week. Harvesting of rice nearly over; outturn 8 to 12 annas. Prospects of *rabi* crops excellent. Rice selling at from 12 to 16 seers per rupee. Fodder and water-supply sufficient.
	Gobindpur	...	Nil	

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 3rd January, 1893

C. E. BUCKLAND,
Secy. to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS. Air pressure. Mean barometric height, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. Prevailing direction.	Mean wind velocity.	Temperature. Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri ...	Puri ..	30·143	30·092	—	N	137	79·6	31st Dec.	58·1	26th Dec.	78·3	60·0	69·1
		Gopalpore ..	30·147	30·100	+·062	NNW	226	84·2	30th ,,	55·0	30th ,,	78·9	56·4	67·7
		False Point .	30·148	30·112	+·064	NNW	137	80·4	31st ,,	52·0	28th ,,	77·4	54·1	65·8
	Cuttack	Cuttack ...	30·091	30·118	+·075	Calm	22	83·3	31st ,,	54·9	26, 28 & 29. ,,	80·6	56·1	68·4
	Balasore	Balasore .	30·107	30·111	+·058	NWly	43	82·4	31st ,,	40·4	26 & 27 ,,	78·9	51·9	65·4
South-West Bengal.	Midnapore	Midnapore ..	30·015	30·119	+·058	N	120	83·3	31st ,,	50·2	26 & 27 ,,	80·2	52·6	66·4
	24-Parganas	Calcutta ...	30·138	30·106	+·055	Calm	31	78·7	31st ,,	49·2	26 & 27 ,,	75·9	51·6	63·8
		Saugor Island	30·133	30·104	+·059	Nly	178	75·7	31st ,,	51·7	28, 29 ,,	74·1	55·7	64·9
	Howrah ...													
	Hooghly													
	Nadia ...	Krishnagar ...	30·109	30·108	+·065	WNW	46	80·2	31st ,,	45·3	27th ,,	77·1	48·1	62·6
	Khulna ..													
	Jessore ...	Jessore ...	30·117	30·059	+·059	Calm	30	77·7	31st ,,	49·4	27 & 28 ,,	75·6	51·2	63·4
	Burdwan ...	Burdwan ..	30·066	30·110	+·058	Calm	13	80·0	30th ,,	?	?	77·6	?	?
		Raniganj ..	29·823	30·142	+·055	NWly	15	80·5	31st ,,	48·2	27th ,,	77·0	51·6	64·8
	Bankura	Bankura ..	29·821	30·093	+·037	Calm	26	81·1	30th ,,	49·1	27th ,,	77·9	52·0	65·0
	Birbhum													
	Murshidabad	Berhampore ..	30·092	30·111	+·051	NWly	28	78·6	31st ,,	51·2	27th ,,	76·4	52·7	64·6
	Pabna	Sirajganj ..	30·091	30·089	+·046	Variable	12	76·6	30th ,,	46·8	26th ,,	75·8	48·5	62·2
North Bengal.	Bogra	Bogra ..	30·068	30·086	+·075	Calm	22	77·3	25 & 26 ,,	46·2	26th ,,	76·7	48·0	62·8
	Rajshahi	Rampur Boalia.	30·072	30·095	+·060	Calm	67	?	?	46·7	26 & 27 ,,	?	48·4	?
	Malda	Malda ..	30·080	30·117	—	NW	80	77·9	31st ,,	?	?	76·0	?	?
	Dinajpur	Dinajpur ...	30·019	30·090	+·067	Wly	32	76·1	25, 28, 29, & 31. ,,	45·0	26th ,,	75·7	47·6	61·7
	Rangpur	Rangpur ...	30·027	30·113	+·043	Calm	25*	75·6	28 & 29 ,,	45·6	26th ,,	74·8	47·5	61·2
	Jalpaiguri	Jalpaiguri	29·846*	30·102*	+·034*	Calm	26	73·9	29th ,,	49·1	26th ,,	73·1	50·5	61·8
	Kuch Bihar													
	Darjeeling	Darjeeling ...	23·048	—	+·030	ENE & Calm	65	45·0	25 & 26 ,,	33·6	27th ,,	43·0	34·9	39·0
	Sikkim . .	Gnatong ...	19·197	—	—	SEly	96	39·0	30th ,,	7·1	25th ,,	34·4	10·0	22·5
East Bengal.	Chittagong	Chittagong ...	30·054	30·093	+·063	Calm	44	76·7	31st ,,	53·1	26, 27 28, & 31. ,,	75·6	53·4	64·5
	Chittagong Hill Tracts	Demagiri ...					Observations not received.							
	Backergunge	Barisál ...	30·128	30·087	+·067	Calm	37	77·3	30 & 31 Dec.	50·1	27 & 28 ,,	75·1	51·3	63·2
	Noakhali	Noakhali ..	30·094	30·086	+·063	N	68	77·1	30th ,,	50·8	28 & 29 ,,	76·4	51·3	63·9
	Faridpur	Faridpur ...	30·111	30·107	+·073	Calm	32	74·0	28 & 30 ,,	40·0	27th ,,	73·6	50·9	62·3
	Dacca	Dacca ...	30·120	30·091	+·054	Calm	54	78·1	29 & 30 ,,	51·8	27th ,,	77·2	53·6	65·4
	Tippera	Comilla ..	30·103	30·087	+·054	Calm	20	78·2	28 & 31 ,,	51·1	30th ,,	77·4	51·7	64·6
	Mymensingh . ..	Mymensingh	30·075	30·094	+·048	Nly	30	75·9	31st ,,	49·4	31st ,,	74·2	50·3	62·3
North Bihar.	Purnea	Purnea .	30·024*	30·113*	+·019*	Calm	29	75·2	25, 30 & 31. ,,	43·3	27th ,,	74·3	45·2	59·8
	Bhagalpur	Bhágalpur ..	29·987	30·110	+·043	Calm	—	79·3	31st ,,	44·5	27th ,,	76·4	48·1	62·3
	Darbhanga ...	Darbhanga ..	29·988	30·119	+·050	Variable	43	76·8	31st ,,	[illegible]	26 & 27 ,,	74·5	48·9	61·[illegible]
	Muzaffarpur	Muzaffarpur .	29·980	30·126	—	WSW & Calm	45	74·7	25, 30 & 31	44·3	25, 26 & 27. ,,	71·9	46·0	59·0
	Champaran	Motihari ...	29·903	30·102	+·049	WSW	74	76·2	31st ,,	41·0	27th ,,	74·0	42·8	58·9
	Saran	Chapra ..	29·964	30·112	+·076	SWly & Calm	46	78·8	30th ,,	44·7	27th ,,	75·3	48·7	62·0
South Bihar.	Shahabad	Dehri ...	29·801	30·130	+·057	SW	[illegible]	80·9	31st ,,	47·4	26th ,,	76·8	51·5	64·2
		Buxar ...	29·917	30·127	+·052	Wly	37	79·4	30 & 31 ,,	44·4	26th ,,	75·5	49·9	62·7
		Arrah ..	29·964	30·11[illegible]	+·074	NWly	28	79·1	31st ,,	43·7	26th ,,	76·0	48·1	62·1
	Gaya .. .	Gaya ...	29·76[illegible]	30·124	+·051	S	115*	79·9	30th ,,	43·7	26th ,,	76·6	50·2	63·4
	Patna	Bankipore ..	29·977	30·123	+·039	Variable	61	77·8	30th ,,	45·4	26th ,,	74·2	49·1	61·7
	Monghyr ...													
	Sonthal Parganas . .	Naya Dumka	29·641	30·126	+·051	C & W	38	78·6	30th ,,	44·5	26th ,,	75·8	48·4	62·1
Chota Nagpur.	Hazaribagh ...	Hazaribagh ...	28·074	30·115	+·044	SWly	115	76·2	31st ,,	46·2	26th ,,	73·6	50·1	61·9
	Lohardaga	Ranchi ..	27·350	30·115	+·0[illegible]	Calm	93	75·5	29th ,,	45·4	25th ,,	73·5	50·1	61·8
	Palamau													
	Singhbhum ...	Chaibassa ..	29·348	30·106	+·056	WSW	14	82·7	31st ,,	47·7	27th ,,	78·8	51·0	64·9
	Manbhum													

* Mean of 6 days.

Explanation.—*Summary.*—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period
The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 10
rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station
district, i.e., from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one of

for the week ending Saturday, the 31st of December 1892.

Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	DISTRICT OBSERVATIONS. Of week. Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Rainfall. Since 1st of month. Mean for district.	Normal mean.	Variation.	Since 16th October 1892. Mean for district.	Normal mean.	Variation.	DISTRICT.
—	63'6	79	0	Nil	Nil	0'01	0'00	0'05	Nil	0'68	—0'68	7'20	6'10	+1 10	Puri.
—1'0	61'1	77	0	Nil											
—0'6	60'5	87	0	Nil											
—1'2	60'8	73	0	Nil	Nil	0'02	0 00	0'02	Nil	0'46	—0'46	6'01	3'85	+2'16	Cuttack.
+0'5	58'2	83	0	Nil	Nil	0'08	0'00	0'11	Nil	0'29	—0 29	6'57	2'66	+3 91	Balasore.
+0'2	60'0	70	0'3	Nil	Nil	0'12	0'00	0'08	Nil	0'30	—0'30	7'93	2'01	+5'32	Midnapore.
—0 6	56'5	89	0	Nil	Nil	0'11	0'00	0'12	Nil	0'29	—0'29	7'12	2'42	+4'70	24-Parganas.
—0'8	61'2	91	0'1	Nil											
					Nil	0'15	0'00	0'09	Nil	0'33	—0'33	3'56	1'79	+1'77	Howrah.
					Nil	0'06	0'00	0'10	Nil	0'20	—0'20	7'14	1'57	+5'57	Hooghly.
—1'4	56'6	82	0	Nil	Nil	0'11	0'00	0'12	Nil	0'17	—0'17	4 24	1'58	+2'66	Nadia.
					Nil	0 15	0'00	0'21	Nil	0'25	—0'25	6'92	2 34	+4'58	Khulna.
—1'0	56'7	89	0	Nil	Nil	0'09	0'00	0'15	Nil	0 19	—0'19	9 10	1 93	+7'26	Jessore.
?	56'1	73	0	Nil	Nil	0'07	0'00	0'08	Nil	0 16	—0'16	4 49	1'45	+3'04	Burdwan.
+0'2	56 7	70	0	Nil											
+0'8	56'7	74	0	Nil	Nil	0'01	0'00	0'05	Nil	0'15	—0'15	4'46	1'58	+2 88	Bankura.
					Nil	0'08	0'00	0'18	Nil	0'13	—0'13	3 22	0'96	+2'26	Birbhum.
+0'5	55'9	88	0	Nil	Nil	0 07	0'00	0'08	Nil	0'15	—0'15	1'83	0'89	+0'94	Murshidabad.
—0'5	55'3	91	0	Nil	Nil	0'06	0'00	0'10	Nil	0'12	—0 12	1'11	1'48	—0'37	Pabna.
—0'8	54'7	84	0	Nil	Nil	0'07	0 00	0'11	Nil	0'15	—0'15	0'92	1'07	—0•15	Bogra.
9	57'0	77	0	Nil	Nil	0'09	0 00	0'07	Nil	0'12	—0'12	0'52	1'10	—0 58	Rajshahi.
—	55'5	86	0	Nil	Nil	0'07	0'00	0'07	Nil	0'13	—0'13	0'79	1 23	—0'44	Malda.
—0'2	53 3	89	0	Nil	Nil	0 01	0'00	0'05	Nil	0'08	- 0'08	0'43	0'74	—0'31	Dinajpur.
—0'1	53 0	91	0	Nil	Nil	0'03	0'00	0'07	Nil	0'18	—0'18	1'10	1'14	—0'04	Rangpur.
—0'3	55'9	93	0.	Nil	Nil	0'03	0'00	0'10	0'36	0'14	+0'22	1'13	2'25	—1'12	Jalpaiguri.
					Nil	0'01	0'00	0'02	Nil	0'18	—0'18	0'88	1'00	—0'12	Kuch Bihar.
—2'4	37'7	90	2'1	Nil	Nil	0'05	0'00	0'11	0'72	0'32	+0 40	3 41	2'24	+1'17	Darjeeling.
—	29'6	63	0	Nil											Sikkim.
—1'1	58'9	94	0 1	Nil	Nil	0'05	0'00	0 18	Nil	0'37	—0 37	12'79	4'87	+7'91	Chittagong.
					Nil	0'16	0'00	0'35	Nil	0'49	—0'49	6'69	4'27	+2'42	Chittagong Hill Tracts.
—1'3	58 1	87	0	Nil	Nil	0'19	0 00	0'27	Nil	0'36	—0'36	7'85	3 55	+4'30	Backergunge.
—0'8	58'7	89	0	Nil	Nil	0'24	0'00	0'28	Nil	0 72	—0'72	15'42	4'79	+10'63	Noakhali.
—0'0	58'0	89	0	Nil	Nil	0'0?	0'00	0'16	Nil	0'14	—0'14	7'23	1'54	+5'69	Faridpur.
—0'4	57'7	81	0	Nil	Nil	0'09	0'00	0'17	Nil	0'19	—0'19	8'76	2 24	+0 52	Dacca.
+0'5	58'5	89	0	Nil	Nil	0'13	0'00	0'24	Nil	0'34	—0 34	8'37	2 30	+0'07	Tippera.
—0'0	55 3	95	0	Nil	Nil	0'0?	0'00	0 11	Nil	0'23	—0'23	2'86	1'81	+1'05	Mymensingh.
—1'3	47'4	90	0	Nil	Nil	0'04	0'00	0'10	Nil	0'18	—0 18	0'02	1 26	—1'24	Purnea.
+1'4	51'5	78	0	Nil	Nil	0 05	0'00	0'18	Nil	0'13	—0'13	0'53	1'05	—0'52	Bhagalpur.
—0'3	53'4	87	0'4	Nil	Nil	0'10	0'00	0'10	Nil	0'19	—0'19	0'01	0'88	—0'87	Darbhanga.
—	51'2	93	0'9	Nil	Nil	0'10	0'00	0'22	Nil	0'22	—0'22	0'04	1'02	—0'98	Muzaffarpur.
—0'2	51'2	89	1'7	Nil	Nil	0'04	0'00	0'12	Nil	0'25	—0'25	Nil	0'54	—0 54	Champaran.
+1'4	53'1	85	1'1	Nil	Nil	0'03	0'00	0'12	Nil	0'19	—0'19	0'03	0'91	—0'88	Saran.
+2'4	57'3	76	0	Nil											
+1'2	59'0	64	1 4	Nil	Nil	0 04	0'00	0'11	Nil	0'35	—0 35	0 40	1'40	—1 00	Shahabad.
+1'8	54'5	81	0'6	Nil											
+0'5	53'9	77	1'7	Nil	Nil	0'05	0'00	0'10	Nil	0'28	—0'28	0'53	1'04	—0'51	Gaya.
+0'9	57'9	70	0'4	Nil	Nil	0'05	0'00	0'10	Nil	0'19	—0'19	0'21	1'25	—1'04	Patna.
					Nil	0'04	0'00	0 10	Nil	0'11	—0'11	1'33	1 24	+0'09	Monghyr.
+0'1	54'1	76	0	Nil	Nil	0'07	0'00	0'08	Nil	0'13	—0'13	1'45	1'14	+0'31	Sonthal Parganas.
+1'6	58'7	58	0 •	Nil	Nil	0'11	0'00	0'18	Nil	0'36	—0'36	3 97	1'25	+2'72	Hazaribagh.
+2'3	57'7	70	0'6	Nil	Nil	0'19	0'00	0'31	Nil	0'36	—0 56	6'16	1 75	+4 41	Lohardaga.
					Nil	0'09	0'00	0'15	Nil	0 33	—0 33	0 57	1'44	—0 87	Palamau.
+0'8	53'9	84	0	Nil	Nil	0'04	0'00	0'05	Nil	0'33	—0'33	6'00	1'79	+4'21	Singhbhum.
					Nil	0'06	0'00	0'16	Nil	0'21	—0'21	3'03	1'23	+1 80	Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 31st of December 1892.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 25th.	Monday, 26th.	Tuesday, 27th.	Wednesday, 28th.	Thursday, 29th.	Friday, 30th.	Saturday, 31st.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th October 1892.	Average rainfall from 16th October to date.
ORISSA ..	Puri	Puri ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·59	10·05	6·83
		Khurda ...	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·46	4·72	4·56
		Banpur ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	1·04	5·79	5·93
		False Point ...	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·62	8·24	7·08
		Gop ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·09	?
		Satpara ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	7·88	?
		Pipli ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·08	?
	Cuttack ...	Jagatsingpore	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·33	8·40	3·74
		Banki ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·62	3·66	4·01
		Cuttack ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·29	8·49	4·00
		Kendrapara ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·34	6·09	4·07
		Jajpur ...	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·73	3·42	3·38
		Dharmsala ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·65	?
		Salipore ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·18	?
		Pal Lahara ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·83	?
	Balasore ..	*Akhyapada* ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·19	?
		Chandbali ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·49	4·71	3·80
		Bhadrak ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·21	5·95	2·84
		Soro ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·15	6·48	2·65
		Balasore ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·32	10·02	3·51
		Jellasore ...	...	...	...	...	...	...	...	Nil	Nil	0·22	Nil	0·33	4·53	1·41
		Baripodah ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·26	7·89	1·82
SOUTH-WEST BENGAL.	Midnapore	Contai ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·29	10·24	4·82
		Tamluk ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·24	5·35	2·48
		Midnapore ...	...	...	...	...	...	...	...	Nil	Nil	0·22	Nil	0·34	7·82	2·18
		Ghatal ...	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·30	8·29	0·89
		Kukrahaty ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·51	?
		Garhbeta ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·31	?
	24-Parganas ..	Saugor Island	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·24	11·00	4·88
		Diamond Harbour ..	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·27	6·63	2·50
		Canning Town	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	9·24	?
		Alipore Observatory ...	...	...	...	...	...	...	...	Nil	Nil	0·22	Nil	0·52	4·85	2·34
		Barrackpore...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·23	7·70	1·63
		Dum-Dum ...	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·30	3·78	1·90
		Barasat ...	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·29	5·78	1·86
		Basirhat ...	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·19	6·26	1·84
	Howrah ..	Howrah ...	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·34	3·09	2·12
		Mohesreka ...	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·31	4·03	1·40
		Ulubaria ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·86	?
	Hooghly ..	Serampore ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·23	8·03	1·59
		Hooghly ..	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·22	7·81	1·65
		Jahanabad	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·17	4·97	1·48
	Nadia ...	Ranaghat ..	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·12	5·96	1·73
		Krishnagar ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·13	5·96	1·17
		Chuadanga ..	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·17		1·82
		Meherpore ...	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·24	2·09	1·47
		Kushtia	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·19	2·93	1·67
	Khulna ...	Satkhira	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·18	4·94	2·26
		Bagerhat	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·29	8·65	2·28
		Khulna .	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·30	7·20	2·48
		Nakipur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·14	?
		Rampal .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·00	?
	Jessore ...	Narail	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·24	9·10	2·37
		Jessore ..	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·21	13·74	2·19
		Jhenidah .	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·11	8·57	1·82
		Magura .	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·23	7·06	1·52
		Bangaon	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·17	7·48	1·87
	Burdwan ..	Kalna	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·08	7·39	1·53
		Burdwan ..	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·17	5·06	1·57
		Katwa	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·24	3·81	1·56
		Raniganj .	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·13	1·69	1·17
		Mankur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·73	?
	Bankura .	Bankura	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·18	4·30	1·62
		Vishnupur ..	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·12	5·42	1·47
		Maliara ..	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·12	1·33	1·18
		Khatra ..	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·19	6·59	2·03
		Indas ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·42	?
		Kotalpur ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·56	?
		Onda	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·80	?
		Gangajalghati	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·80	?
		Raipur .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·36	?
		Sonamukhi ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	6·21	?
	Birbhum ...	Suri ..	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·14	1·61	1·27
		Hetampore	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·14	4·50	0·61
		Rampur Hat...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·15	3·56	0·99
		Bolpur ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·25	?
		Murarai ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·90	?
	Murshidabad	Kandi ..	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·12	2·41	1·10
		Berhampore ...	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·19	1·47	0·99
		Lalbagh ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·15	3·01	0·79
		Azimganj ...	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·14	1·54	0·92
		Jangipur .	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·14	1·40	0·71
		Lalgola ..	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·16	1·15	0·81
		Akhriganj ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·95	?
		Pathabari .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·30	?
NORTH BENGAL.	Pabna ..	Pabna ..	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·14	1·05	1·35
		Sirajganj ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·11	0·27	1·53
	Bogra ...	Sherepore ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·14	0·78	1·29
		Nowkhilla ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·12	1·09	1·12
		Bogra ..	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·18	0·90	1·31
		Panchbibi ...	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·10	0·91	0·48
	Rajshahi ...	Boalia ...	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·16	1·22	1·13
		Nator ...	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·18	0·37	1·38
		Naogaon ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·03	Nil	0·78
		Lalpore ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·53	?
		Manda ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·14	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 31st of December 1892—contd.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 25th.	Monday, 26th.	Tuesday, 27th.	Wednesday, 28th.	Thursday, 29th.	Friday, 30th.	Saturday, 31st.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BENGAL—concld.	Malda	Malda	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·09	1·32	1·53
		Chanchal	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·15	0·28	0·86
		Gajol	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·34	?
		Sibganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·60	?
	Dinajpur	Mohadebpore	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·08	0·51	0·44
		Churaman	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·09	0·29	0·49
		Raiganj	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·12	0·51	0·36
		Dinajpur	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·11	0·28	1·16
		Balurghat	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·03	0·55	0·54
		Thakurgaon	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Rangpur	Bhawanigunge (*Gyabanda*)	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·20	0·53	1·33
		Rangpur	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·10	2·92	1·60
		Kurigaon	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·19	0·31	0·94
		Bagdogra (*Nilphamari*)	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·21	0·73	0·08
		Ulipore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Jalpaiguri	Jalpaiguri	...	...	...	...	...	...	...	Nil	Nil	0·03	0·[illegible]	0·14	1·13	2·35
		Alipore Dooar	...	...	...	...	...	...	...	Nil	Nil	?	0·23	?	1·98	?
		Fallacotta	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·11	?
		Debiganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·60	?
		Bhagatpore (*Nagrakatta*)	...	...	...	...	...	...	...	Nil	Nil	?	0·62	?	6·18	?
	Kuch Bihar	Dinhatta	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·24	0·44	0·94
		Kuch Bihar	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·13	1·24	1·19
		Mekliganj	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·19	0·82	1·00
		Mathabhanga	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·14	1·03	0·73
	Darjeeling	Buxa	...	...	...	...	...	...	...	Nil	Nil	0·07	1·15	0·30	0·35	3·51
		Siliguri	...	...	...	...	...	...	...	Nil	Nil	Nil	0·29	0·10	1·86	0·[illegible]8
		Darjeeling	...	...	...	...	...	...	...	Nil	Nil	0·11	0·62	0·38	0·92	3·50
		Kalimpong	...	...	...	...	...	...	...	Nil	Nil	0·01	0·79	0·31	1·40	0·86
		Kurseong	...	...	...	...	...	...	...	Nil	Nil	?	0·16	?	1·90	?
EAST BENGAL	Chittagong	Cox's Bazar	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·29	13·05	5·97
		Chittagong	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·44	12·50	3·[illegible]3
		Kutubdia	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1[illegible]·13	?
		Satkanya	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·8[illegible]	?
	Chittagong Hill Tracts.	Rangamati	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·49	6·6[illegible]	4·27
		Bundarban	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·70	?
	Backergunge	Patuakhali	...	...	...	...	...	...	...	Nil	Nil	0·23	Nil	0·42	7·94	4·04
		Pirojpur	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·33	7·86	3·20
		Barisal	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·26	7·39	3·45
		Gournaddi	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·83	?
		Bhola	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·40	8·18	3·45
		Daulatkhan	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	11·60	?
		Bauphal	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·49	?
	Noakhali	Noakhali	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·40	16·19	4·11
		Fenny	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	0·92	14·06	5·44
		Harishpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	19·18	?
		Ramganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	10·73	?
	Faridpur	Madaripur	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·14	6·09	1·63
		Faridpur	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·12	10·70	1·53
		Goalundo	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·17	1·94	1·46
	Dacca	Munshiganj	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·27	7·09	2·49
		Dacca	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·23	11·51	1·65
		Naryanganj	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·[illegible]7	10·00	3·30
		Manikganj	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·19	6·43	1·44
		Joydebpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·00	...
	Hill Tippera / Tippera	Agartola	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·42	6·64	2·73
		Comilla	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·36	8·70	2·44
		Chandpore	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·39	7·75	1·84
		Brahmanbaria	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·30	10·37	2·16
		Ramchandrapore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	7·97	?
		Nasirnagar	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	10·47	?
		Daudkandi	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·15	?
		Kasba	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	12·3[illegible]	?
		Laksham	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	6·50	?
	Mymensingh	Kishorganj	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·42	5·94	1·71
		Atia (*Tangail*)	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·11	[illegible]·70	1·36
		Mymensingh	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·23	0·61	1·01
		Jamalpur	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·2[illegible]	1·74	1·00
		Netrakona	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·10	3·27	2·39
		Subornakhally	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·21	...
		Durgapore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·1[illegible]	?
		Shereepore Town	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·2[illegible]	?
		Dewanganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·15	...
BIHAR	Purnea	Kishanganj	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·20	0·04	1·18
		Araria	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·13	Nil	0·96
		Purnea	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·20	0·03	1·30
		Gondwara (*Korah*)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Barsoe	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Forbesganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Kasbaganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Bhagalpur	Madhipura	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·13	Nil	0·99
		Bongaon (*Syjabad*)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Supaul	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·13	Nil	0·91
		Protabganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Bhagalpur	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·09	0·[illegible]	1·10
		Banka	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·16	1·01	1·17
		Colgong	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·54	?
	Darbhanga	Tajpur	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·22	Nil	0·94
		Darbhanga	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·19	0·02	0·91
		Madhubani	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·21	Nil	0·87
		Bahera	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Roshera	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 31st of December 1892—concld.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 25th.	Monday, 26th.	Tuesday, 27th.	Wednesday, 28th.	Thursday, 29th.	Friday, 30th.	Saturday, 31st.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BIHAR —concluded.	Muzaffarpur...	Sitamarhi ...	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·24	Nil	0·3
		Muzaffarpur	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·22	Nil	1·50
		Hajipur	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·18	0·12	0·[illegible]0
		Paru	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Mahua	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·08	?
		Sauhar	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pupri	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Champaran ...	Motihari	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·19	Nil	0·52
		Bettiah	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·29	Nil	0·54
		Bagaha	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·09	?
		Burhurwa	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Saran ..	Gopalganj ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·18	Nil	0·39
		Siwan	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·10	Nil	1·22
		Chapra ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·19	0·09	1·15
SOUTH BIHAR	Shahabad ...	Buxar	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·31	0·68	1·30
		Dehri	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·37	0·36	1·48
		Bhabhua	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·21	0·21	1·57
		Sasseram	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·31	0·23	1·53
		Arrah	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·25	0·29	1·09
		Mohanea	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Khiri	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Agiaon	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Ramagar	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Koath	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·12	?
		Sikroul	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Bassowan	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·11	?
		Monaharpur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·08	?
	Gaya ...	Aurangabad ..	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·38	0·74	0·88
		Gaya	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·27	0·41	1·22
		Nawadah	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·23	0·81	1·04
		Jahanabad ..	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·23	0·16	0·99
		Arwal	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·30	?
		Daudnagar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sherghati	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·[illegible]	?
		Rajauli ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·95	?
		Pakri Barawan	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·42	?
	Patna ...	Patna	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·22	0·14	1·24
		Dinapore	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·19	Nil	1·16
		Bihar	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·17	0·50	1·28
		Barh	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·15	0·15	1·30
		Bickram	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·20	?
		Hilsa	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·27	?
	Monghyr ...	Begusarai ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·10	2·20	1·48
		Monghyr	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·12	0·95	1·36
		Jamui	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·11	0·84	0·90
		Gogri	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·57	?
		Shaikpura	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·20	?
		Chakai Bamda	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·22	?
	Sonthal Parganas.	Rajmahal ...	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·04	0·68	1·06
		Godda	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·14	0·48	0·84
		Pakour	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·03	3·38	0·79
		Naya Dumka	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·24	1·45	1·29
		Deoghur ..	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·14	0·50	1·56
		Jamtara ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·15	2·19	1·31
		Belbodda ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Nanihat ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·12	?
CHOTA NAGPUR.	Hazaribagh ...	Pachamba (*Giridih*).	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·20	3·07	1·22
		Hazaribagh	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·38	2·68	1·38
		Semtaguran	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·36	3·77	1·03
		Mahudi Hills	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·41	5·05	1·11
		Jhumra Hill	...	...	...	...	...	...	...	Nil	Nil	0·1[illegible]	Nil	0·42	5·39	1·40
		Barhi ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·24	?
		Chatra ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·45	?
		Karagdeha	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·17	?
		Ramgar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·27	?
	Lohardaga ...	Lohardaga ...	...	...	...	...	...	...	...	Nil	Nil	0·28	Nil	0·80	5·82	2·02
		Ranchi ..	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·33	0·48	1·47
		Silli ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·35	?
	Palamau ...	Palamau (Daltonganj).	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·33	0·57	1·44
		Balumath	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·59	?
		Husainabad	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·62	?
		Garhwa	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·33	?
	Singhbhum ...	Chaibassa	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·33	6·00	1·79
		Chakardharpur.	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	6·07	?
		Ghatsila	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·15	?
		Baharagura	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·35	?
	Manbhum ..	Purulia ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·19	4·35	1·22
		Gobindpur	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·21	1·70	1·23
		Raghunathpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·69	?
		Barahabhum	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·17	?
		Jhalda ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·58	?
		Chas ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·61	?
		Pandra ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·08	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the* 3rd *January* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 31ST OF DECEMBER 1892.

THE meteorology of the week has again been of little importance, and fine settled weather of ordinary north-east monson character has prevailed throughout the period. On the 25th instant, or the first day of the week, pressure was rising slowly, and was above the normal by about 0·05″ to 0·07,″ while the general temperature of the province was nearly normal, slight defects being registered at the western stations, and slight excess temperatures in the east of the province. Winds were a little more strongly westerly than usual, and light westerly and north-westerly winds were generally reported. On the 26th the changes of pressure were. unimportant, but temperature had fallen and had become below the normal by from 1° to 2° Similar changes were reported on the 27th, but on the 28th pressure and temperature commenced to rise moderately, while on the 29th temperature was still rising slowly, though pressure was falling; on the 30th and 31st instants pressure was practically steady, and a further increase had taken place in the case of temperature, which had become in excess of the normal at all except a few of the eastern stations, the excess ranging up to 4°, 5° and 6° at the western stations in Bihar. During the last two days of the week also humidity had increased very decidedly over the province, and this rather rapid increase in temperature and humidity was apparently connected with a barometric depression which had appeared over North-Western India and which had steadily advanced in an easterly direction towards Bengal, and, as usual in such cases, a rapid increase of temperature and humidity took place in front of the advancing depression. Beyond these changes and a slight increase in cloud proportion at some of the western stations, the depression up to the end of the week had not materially affected Bengal, and winds were still north-westerly and westerly, and rainfall was quite absent from the province up to the close of the week.

Pressure—Has been in excess of the normal throughout the week, and the general excess has equalled about 0·06″ The excess, however, has been smallest at the northern stations, where in many cases it has only equalled about 0·04.″

Temperature—Was in slight defect of the normal for the earlier part of the week, but on the last two days it became rather largely in excess. Hence the mean temperature for the province for the week has been quite normal, the variation being considerably less than a tenth of a degree. Owing, however, to the rapid increase of temperature in the western districts at the end of the week, Bihar and Chota Nagpur show a general excess of about a degree, while North, East and South-West Bengal and Orissa show defects of about half a degree.

The distribution of temperature for the week in the province generally, and its variation from the normal value, are clearly seen in the table below, where the average maximum, minimum and mean temperatures at nine typical stations in different districts of the province are compared with their normal values for the period. Again, it will be seen that the night or minimum temperatures continue very decidedly defective.

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 31st December 1892.

	Normal mean maximum temperature for the week ending 31st December.	Actual mean maximum temperature for the week ending 31st December 1892.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 31st December.	Actual mean minimum temperature for the week ending 31st December 1892.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 31st December.	Actual mean daily temperature for the week ending 31st December 1892.	Variation of actual mean from the normal
Cuttack	81·7	80·6	−1·1	57·3	[illegible]	−1·2	69·5	68·4	−1·1
Calcutta	75·0	75·9	+0·9	53·8	51·6	−2·2	64·4	68·8	−0·6
Dacca	76·7	77·2	+0·5	55·0	53·6	−1·4	65·9	65·4	−0·5
Burdwan	76·7	77·6	+0·9	52·2	?	?	64·9	?	?
Patna	72·5	74·2	+1·7	49·0	49·1	+0·1	60·8	61·7	+0·9
Gaya	75·2	76·6	+1·4	50·6	50·2	−0·4	62·9	63·4	+0·5
Purnea	74·6	74·3	−0·3	47·5	45·2	−2·3	61·1	59·8	−1·3
Hazaribagh	71·4	73·6	+2·2	49·2	50·1	+0·9	60·3	61·9	+1·6
Darjeeling	47·0	43·0	−4·0	35·7	34·9	−0·8	41·4	39·0	−2·4

Rainfall—Has been entirely absent from the province throughout the week.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 31st of December 1892:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th Oct. 1892.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	84·2	49·4	78·8	55·7	67 3	—0·7	Nil	0·04	—0·04	0·00	0·07	—0·07	Nil	0·45	6·55	3·98
South-West Bengal ...	83 3	45 3	77 0	51·9	64·4	—0·3	Nil	0·09	—0·09	0 00	0·11	—0 11	Nil	0 21	5·56	1·76
North Bengal	77·9	45·0	73·4	48·6	61 9	—0·5	Nil	0·04	—0·04	0·00	0·07	—0·07	0·01	0·14	0·81	1·11
East Bengal	78·2	49 0	75·5	51 9	63·7	—0·6	Nil	0·12	—0·12	0·00	0·20	—0·20	Nil	0 30	7·06	2·76
North Bihar	79·3	41·0	74·6	46·6	60·6	+0·2	Nil	0·06	—0·06	0·00	0·15	—0·15	Nil	0·18	0·14	0·94
South Bihar	80·9	43 7	75 8	49·5	62·7	+1 2	Nil	0·05	—0·05	0·00	0·13	—0·13	Nil	0·20	0·80	1·19
Chota Nagpur	82·7	45 4	75·3	50·4	62·9	+1·6	Nil	0·10	—0·15	0·00	0·19	—0 19	Nil	0·35	4·07	1·38

METEOROLOGICAL OFFICE, BENGAL,
The 3rd January 1893.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 25th to 31st December 1892.

Month.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature.				Hygrometry.					Rainfall at 10 A.M. for past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
1892.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches
December ...	25th ...	30·152	63·8	75 9	24·2	51 7	69·4	61·7	·471	57·2	62	Nil
" ...	26th ...	·158	62 4	75·4	26 0	49 4	68·1	60·0	·412	53·6	60	"
" ...	27th ..	·158	62 7	75 9	26 4	49 5	67 1	59·2	·398	52 6	60	"
" ...	28th ...	·191	63 5	76·9	27·0	49·9	67 6	58·7	·376	51·0	56	"
" ...	29th ...	·145	65 3	78 9	27 2	51·7	69 6	62·7	·478	57·7	66	"
" ...	30th ...	·142	67 8	79 9	24 2	55 7	72 0	61·6	·510	59·5	65	"
" ...	31st ...	·130	63·3	80 6	24 2	55·9	73·1	64·6	·497	58·8	61	"

				Inches.
The mean 10 A.M. pressure of the seven days	...	...	...	30·154
				°
The mean temperature of the seven days	...	...	...	64·8
The extreme variation of temperature	...	.	...	31·2
The maximum temperature ...	...	...	...	80 6
				%
The mean 10 A.M. relative humidity of the seven days	...		...	61
				Inches.
The total fall of rain from 25th to 31st December 1892			...	Nil

The daily mean temperatures are the crude means of maximum and minimum temperatures.

C. LITTLE,
For Meteorological Reporter to the Govt. of India

METEOROLOGICAL OFFICE, INDIA,
The 2nd January 1893.

Results of the Meteorological Observations taken at the Alipore Observatory from 25th to 31st December 1892.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Maximum.	Range.	Minimum.	Hygrometry. Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Wind. Prevailing direction.	Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches.	°	%			Inches.	
Dec.	25th	127·7	9 1	30·082	62·3	74·5	22 5	52 0	56·5	0 384	51·6	71	NNW and calm	41	Nil	Clear, △.
"	26th	127·3	9·0	·070	60·7	74·6	25·6	49·0	54 6	·347	48 9	60	NNW and calm	27	"	Clear, △.
"	27th	125·8	8·4	·091	60·7	74·7	25 6	49 1	54·7	·353	49·4	70	NNW, WNW and calm.	22	"	Clear, △, ≡
"	28th	125·7	9·2	·103	61·5	75 7	26·2	49 5	55 6	·367	50·4	69	WNW and calm	26	"	Clear, △, ≡.
"	29th	127·7	9·2	·063	63·1	77 7	26 5	51·2	57 8	·414	53·7	74	WNW and calm	34	"	Clear, △, ≡.
"	30th	127 5	9·1	·0.2	65·7	73·8	21 8	54 0	59·9	·410	55·4	69	WSW and calm...	38	"	Clear, △, ≡.
"	31st	129·4	9·0	·080	66·7	79 5	21 0	55·5	59 1	·402	52·9	62	NNW and calm	40	"	Clear, △, ≡.

	Inches.
The mean pressure of the seven days	30·080
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	30·034
	Hours.
The total number of hours of bright sunshine	63 0
The maximum possible number of hours of sunshine	75·1
	°
The mean temperature of the seven days	63·0
The average temperature of the corresponding period for 24 years, S.-G.'s Office	66·9
The extreme variation of temperature	30·5
The maximum temperature	79·5
	Miles.
The highest velocity of the wind in one hour	7
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	69
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	71
	Inches.
The total fall of rain from 25th to 31st December 1892 ...	Nil
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·01
The total fall from 1st January to 31st December 1892	46·67
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	65·24

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

△, dew; ≡, fog.

C. LITTLE,
For Meteorological Reporter to the Govt. of Bengal.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;
Calcutta, the 2nd January 1893.

Vital statistics of the Districts of Bengal for the month of November 1892.

Divisions.	Districts.	Population under registration.	BIRTHS. Number registered.	BIRTHS. Ratio per 1,000 of population per annum.	DEATHS. Cholera. Number registered.	Cholera. Ratio per 1,000 of population per annum.	Small-pox. Number registered.	Small-pox. Ratio per 1,000 of population per annum.	Fever. Number registered.	Fever. Ratio per 1,000 of population per annum.	Dysentery and Diarrhœa. Number registered.	Dysentery and Diarrhœa. Ratio per 1,000 of population per annum.	Injury. Number registered.	Injury. Ratio per 1,000 of population per annum.	Other causes. Number registered.	Other causes. Ratio per 1,000 of population per annum.	Total of all causes. Number registered.	Total of all causes. Ratio per 1,000 of population per annum.	Average of corresponding month of previous five years. Number register.	Average. Ratio per 1,000 of population per annum.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Burdwan ...	Burdwan	1,391,883	2,580	22·20	438	3·72	...	...	2,620	22·56	92	·72	8	·06	500	4·20	3,653	31·44	2,931	25·20	
	Bankura	1,069,688	1,786	19·92	18	·12	10	·10	1,271	14·16	17	·12	19	·12	265	2·88	1,600	17·88	1,6?2	18·48	
	Birbhum	797,883	1,800	27·00	314	4·68	...	...	1,658	24·84	11	·12	11	·12	357	5·28	2,351	35·28	2,057	30·84	
	Midnapore	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*Return not received up to date.*
	Hooghly including Serampore	1,076,710	2,551	28·32	102	1·08	1	·01	2,390	26·52	103	1·80	33	·36	435	4·80	3,124	34·80	2,863	31·80	
	Howrah	721,211	2,016	33·48	128	2·04	...	...	1,129	18·72	253	4·20	22	·36	370	6·12	1,902	31·56	1,553	25·80	
Presidency ...	24-Parganas	1,893,033	3,850	24·36	232	1·44	29	·12	3,032	19·20	143	·84	61	·36	306	1·92	3,808	24·12	3,911	24·72	
	Nadia	1,644,1?8	5,566	40·56	529	3·84	...	...	3,917	28·56	20	·12	30	·12	486	3·48	4,982	36·36	5,979	43·44	
	Jessore	1,888,527	4,946	31·32	1,046	6·60	...	...	6,703	42·48	9	·04	45	·24	278	1·80	8,101	51·36	7,327	46·44	
	Murshidabad	1,250,946	4,175	39·96	130	1·20	6	·04	3,417	32·76	9	·08	17	·12	321	3·09	3,?60	37·32	4,083	39·12	
	Khulna	1,177,652	3,632	36·96	377	3·84	...	...	3,524	35·88	5	·04	30	·24	609	6·48	4,576	46·56	3,375	34·32	
Rajshahi ...	Dinajpur	1,555,835	3,371	25·92	...	...	6	·03	3,734	28·92	7	·04	20	·12	187	1·44	3,974	30·60	5,0?6	38·64	
	Rajshahi	1,313,336	4,698	42·84	260	2·28	1	·008	5,260	48·00	2	·01	15	·12	278	2·52	5,816	53·04	4,826	44·04	
	Rangpur	2,065,401	5,204	30·72	125	·72	...	...	5,730	33·24	8	·03	20	·10	243	1·32	6,123	35·52	6,054	35·16	
	Bogra	817,494	2,157	31·56	20	·24	1	·01	1,560	22·80	4	·04	29	·36	327	4·80	1,941	28·44	1,802	26·04	
	Pabna	1,302,392	5,522	48·60	542	4·68	9	·07	3,584	31·56	41	·24	18	·12	156	1·32	4,350	38·28	3,7?8	33·36	
	Darjeeling	223,314	242	12·96	1	·04	...	...	440	23·64	82	4·32	5	·24	97	5·16	625	33·48	362	19·44	
	Jalpaiguri	681,352	1,433	25·32	1	·01	...	...	1,738	30·60	7	·12	3	·04	12	·12	1,761	30·96	1,861	32·76	
Dacca ...	Dacca	2,420,656	9,722	48·12	461	2·28	61	·24	5,187	25·68	189	·84	34	·12	1,111	5·40	7,013	34·80	4,857	24·00	
	Faridpur	1,797,320	8,282	55·20	915	6·00	4	·02	5,066	33·72	52	·24	25	·12	703	4·68	6,765	45·12	4,052	27·00	
	Backergunge	2,153,965	9,241	51·48	210	1·08	...	...	7,538	41·88	65	·36	50	·24	2,437	13·56	10,309	57·36	5,840	32·28	
	Mymensingh	3,472,186	8,458	29·16	199	·60	39	·09	5,261	18·12	52	·12	19	·06	794	2·64	6,355	21·96	5,801	20·04	
Chittagong ...	Chittagong	1,290,167	3,467	32·16	26	·24	1	·008	2,013	18·60	29	·24	51	·36	191	1·80	2,314	21·48	2,075	19·20	
	Noakhali	1,009,683	4,148	49·20	242	3·96	...	...	1,916	22·68	19	·12	54	·48	267	3·12	2,599	30·72	1,991	23·64	
	Tippera	1,782,935	5,665	38·04	207	1·32	5	·02	2,486	16·68	40	·24	31	·12	585	3·84	3,358	22·56	2,989	20·04	
Patna ...	Patna	1,769,004	4,378	29·64	161	1·08	18	·12	4,161	28·20	219	1·44	34	·12	872	5·88	5,468	37·08	3,630	24·60	
	Gaya	2,138,331	6,587	36·96	125	·60	70	·36	5,207	29·16	50	·24	51	·24	677	3·72	6,184	34·68	5,279	29·52	
	Shahabad	2,043,080	4,836	28·68	81	·36	6	·02	6,12?	35·88	45	·24	69	·36	733	4·32	7,058	41·40	5,284	30·96	
	Muzaffarpur	2,711,445	9,379	41·40	175	·72	4	·01	6,496	37·56	98	·36	44	·12	1,126	4·92	9,943	43·92	4,541	20·01	
	Darbhanga	2,801,955	8,992	38·40	113	·48	3	·12	7,577	31·56	185	·72	46	·12	765	3·24	8,489	36·24	4,097	17·52	
	Saran	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*Ditto.*
	Champaran	1,85?,463	4,557	29·40	28	·12	...	...	5,938	38·28	51	·24	28	·12	1,174	7·56	7,219	46·56	3,809	24·48	
Monghyr ...	Monghyr	2,033,021	5,879	34·56	45	·24	10	·04	6,035	35·52	50	·24	41	·24	577	3·36	6,758	39·72	5,928	34·92	
	Bhágalpur	2,032,696	6,285	37·08	125	·72	2	·01	6,210	36·60	40	·12	21	·12	522	3·00	6,920	40·80	5,360	31·56	
	Purnea	1,944,658	4,074	25·08	99	·60	10	·06	4,828	29·76	8	·04	4	·02	62	·36	5,011	30·84	4,043	30·48	
	Malda	814,019	2,700	39·72	22	·24	...	...	2,657	39·48	4	·04	8	·10	93	1·32	2,814	41·40	3,425	50·28	
	Sonthal Parganas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*Complete returns not received up to date.*
Orissa ...	Cuttack	1,338,132	5,240	32·40	1,419	8·76	82	·48	2,720	16·80	279	1·80	65	·36	1,306	8·04	5,874	36·48	3,726	23·04	
	Puri	944,998	2,118	26·88	935	11·76	113	1·32	580	7·32	223	2·76	31	·36	1,062	13·44	2,941	37·32	2,013	25·32	
	Balasore	994,625	2,217	26·64	252	3·00	4	·04	1,274	15·36	362	4·32	35	·36	694	8·28	2,621	31·56	2,269	27·36	
Chota Nagpur.	Hazáribágh	1,164,321	3,074	31·68	25	·24	26	·36	3,036	31·44	25	·24	37	·36	367	3·72	3,546	36·48	2,583	26·52	
	Lohardaga	1,131,171	2,870	30·36	10	·09	18	·12	1,428	15·12	135	1·32	...	...	857	9·00	2,448	25·92	1,474	15·60	
	Palámau	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*Ditto.*
	Singhbhum	545,488	1,313	28·80	...	...	7	·12	625	13·68	32	·60	12	·24	125	2·64	801	17·52	698	15·24	
	Manbhum	1,193,328	2,474	24·84	2	·01	2	·01	1,624	16·32	37	·36	11	·10	323	3·24	1,999	20·16	1,457	14·64	
	Total ...	63,920,594	181,651	34·56	10,235	1·92	548	·09	147,505	28·44	3,196	·60	1,155	·12	22,703	4·32	157,442	35·64	147,508	28·08	
Average of the corresponding month of previous 5 years ...			Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		7,331	1·32	241	·03	116,635	22·20	3,410	·60	1,353	·24	18,538	3·48	147,508	28·08	—	—	
Difference + or —					+2,904	+·60	+307	+·06	+32,930	+6·24	−214	equal	−158	−·12	+4,165	+·84	+39,934	+7·56	—	—	

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,
The 31st December 1892.

W. H. GREGG, *Surgeon-Lieut.-Col.,*
Dip. Publ. Health, Camb., Sanitary Commr. for Bengal.

Vital statistics of Towns in Bengal with a population of 20,000 and over during the month of November 1892.

DISTRICTS.		TOWNS.	Population under registration.	BIRTHS.		DEATHS.														AVERAGE OF CORRESPONDING MONTH OF PREVIOUS FIVE YEARS.		REMARKS.
						CHOLERA.		SMALL-POX.		FEVER.		DYSENTERY AND DIARRHŒA.		INJURY.		OTHER CAUSES.		TOTAL OF ALL CAUSES.				
				Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Burdwan ...	1	Burdwan	34,477	97	33·96	2	·60	...	...	60	20·88	6	2·04	...	...	15	5·16	83	28·80	100	34·80	
Midnapore ...	2	Midnapore	32,264	51	18·96	2	·72	...	...	38	14·04	15	5·52	...	...	14	5·16	69	25·66	77	28·53	
Hooghly ...	3	Hooghly and Chinsura	32,562	82	30·12	10	3·69	...	...	60	22·08	9	3·24	1	·36	17	6·24	97	35·64	150	55·20	
	4	Serampore	35,952	81	27·00	33	10·12	1	·24	56	18·60	25	8·38	2	·60	19	6·24	136	45·36	160	53·40	
Howrah ...	5	Howrah	116,606	228	23·40	24	2·40	...	...	113	11·52	37	3·72	...	...	47	4·80	221	22·68	225	23·04	
24-Parganas...	6	Cossipore-Chitpur ...	31,423	54	20·52	5	1·80	...	...	24	9·12	5	1·80	...	...	7	2·64	41	15·60	138	52·68	
	7	Maniktala	32,865	54	19·68	2	·72	...	...	59	21·48	9	3·24	...	...	4	1·44	74	27·00	35	12·72	
	8	Barnagore	34,278	67	23·40	20	6·96	...	...	37	12·84	21	7·32	3	·96	14	4·80	95	33·24	119	41·24	
	9	South Suburban ...	69,642	122	21·00	14	2·40	...	...	84	14·40	19	3·24	1	·12	16	2·64	134	23·04	88	15·12	
	10	Khorda or South Barrackpore.	35,647	41	13·80	3	·96	...	...	43	14·40	9	1·80	...	...	6	1·92	61	20·52	88	29·52	
	11	Naihati	29,724	52	20·58	30	12·00	...	...	41	16·44	8	3·12	1	·36	5	1·92	85	34·20	82	33·00	
	12	Nawabganj or North Barrackpore.	20,980	54	30·84	11	6·24	...	...	48	27·36	6	3·36	2	1·08	4	2·28	71	40·56	87	49·68	
Nadia ...	13	Krishnagar	25,560	75	35·28	49	23·04	...	...	52	24·36	2	·84	...	...	10	4·68	113	53·16	54	25·32	
	14	Santipur	30,437	82	32·28	9	3·48	...	...	75	29·52	5	1·92	...	...	7	2·64	96	37·80	37	14·52	
Murshidabad	15	Murshidabad City ...	35,576	59	19·80	...	...	...	...	111	37·44	...	...	...	...	5	1·68	116	39·12	153	51·60	
	16	Berhampore	23,515	53	27·00	...	...	...	...	59	30·00	...	...	...	...	1	·48	60	30·60	70	35·64	
Rajshahi ...	17	Rampur Boalia ...	21,407	56	31·32	...	...	...	...	65	36·36	...	...	...	...	3	1·68	68	38·01	82	45·96	
Pabna ...	18	Sirajganj	23,267	67	34·44	1	·48	...	...	45	23·16	...	...	...	...	2	·96	48	24·72	44	22·68	
Dacca ...	19	Dacca	118,403	241	24·60	4	·36	...	...	126	12·72	28	2·76	3	·24	56	5·64	217	21·93	166	16·80	
Chittagong ...	20	Chittagong	24,069	54	26·88	...	...	...	...	38	18·84	...	...	1	·48	...	...	39	19·44	25	12·36	
Patna	21	Patna City	152,770	360	28·20	82	6·36	1	·07	239	18·72	82	6·36	6	·36	128	9·96	538	42·21	262	20·52	
	22	Bihar	47,723	114	28·56	...	...	...	...	82	20·52	10	2·40	5	1·20	46	11·52	143	35·88	76	19·08	
	23	Dinapore	44,419	57	15·36	23	6·12	...	...	30	8·04	7	1·80	1	·24	4	1·08	65	17·52	54	14·52	
Gaya ...	24	Gaya	80,353	189	28·20	104	15·72	...	...	192	28·56	31	4·68	8	1·08	64	9·48	402	60·00	283	42·24	
Shahabad ...	25	Arrah	46,905	137	35·04	1	·24	...	...	71	18·12	9	2·28	...	...	26	6·60	107	27·36	67	17·04	
	26	Sasaram	22,713	67	35·28	...	...	1	·48	53	27·96	3	1·56	...	...	6	3·12	63	33·24	40	21·12	
Muzaffarpur	27	Muzaffarpur	49,192	135	32·88	21	5·04	1	·24	101	24·60	9	2·16	1	·24	56	13·68	189	46·08	64	15·60	
	28	Hajipur	21,467	59	32·88	15	8·28	...	...	63	35·16	11	6·12	1	·48	25	13·92	115	61·20	39	21·72	
Darbhanga ...	29	Darbhanga	73,561	182	29·64	...	...	...	...	122	19·80	40	6·48	...	...	59	9·60	221	36·00	167	27·24	
Saran	30	Chapra	57,352	109	22·80	3	·60	...	...	40	8·28	8	1·56	5	·96	35	7·32	91	18·96	63	13·08	
Champaran ...	31	Bettiah	22,790	45	23·64	10	5·16	...	...	44	23·16	7	3·60	...	...	12	6·24	73	38·40	63	33·12	
Monghyr ...	32	Monghyr	57,077	245	51·48	5	·96	...	...	74	15·48	17	3·48	4	·84	51	10·68	151	31·68	158	33·12	
Bhagalpur ...	33	Bhagalpur	69,106	215	37·32	...	...	...	...	149	25·80	7	1·20	...	...	30	5·16	180	32·28	155	26·88	
Cuttack ...	34	Cuttack	47,150	65	16·44	33	8·28	...	...	19	4·80	19	4·80	1	·24	33	8·28	105	26·64	73	18·48	
Puri ...	35	Puri	28,794	60	24·96	122	50·76	1	·36	22	9·12	16	6·60	2	·72	40	16·66	203	84·60	153	63·72	
Balasore ...	36	Balasore	20,775	37	21·36	4	2·28	...	...	21	12·12	8	4·56	...	...	6	3·36	39	22·44	41	23·64	
Lohardaga ...	37	Ranchi	20,306	38	22·44	...	...	...	...	20	11·76	1	·48	...	...	3	1·68	24	14·16	23	13·56	
		Total ...	1,071,128	3,786	27·12	644	4·56	5	·02	2,576	18·48	490	3·48	48	·24	876	6·24	4,639	33·24	3,770	27·00	
		Average of corresponding month of previous five years	...	Complete average figures of past five years are not available.		504	3·60	15	·09	1,825	13·08	452	3·24	48	·24	926	6·60	3,770	27·00	...	...	
		Difference + or — ...	...	...	...	+140	+·96	−10	−·07	+751	+5·40	+38	+·24	Equal	Equal	−50	−·36	+869	+6·24	...	...	

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,
The 31st December 1892.

W. H. GREGG, *Surgeon-Lieut.-Col.,*
Dip. Publ. Health, Camb., Sanitary Commissioner for Bengal.

Supplementary Vital statistics for October 1892 received too late for publication with the figures of that month on the 3rd December 1892.

Divisions.	Districts.	Population under registration.	BIRTHS.		DEATHS.														AVERAGE OF CORRESPONDING MONTH OF PREVIOUS FIVE YEARS.	
			Number registered.	Ratio per 1,000 of population per annum.	CHOLERA. Number registered.	CHOLERA. Ratio per 1,000 of population per annum.	SMALL-POX. Number registered.	SMALL-POX. Ratio per 1,000 of population per annum.	FEVER. Number registered.	FEVER. Ratio per 1,000 of population per annum.	DYSENTERY AND DIARRHŒA. Number registered.	DYSENTERY AND DIARRHŒA. Ratio per 1,000 of population per annum.	INJURY. Number registered.	INJURY. Ratio per 1,000 of population per annum.	OTHER CAUSES. Number registered.	OTHER CAUSES. Ratio per 1,000 of population per annum.	TOTAL OF ALL CAUSES. Number registered.	TOTAL OF ALL CAUSES. Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Presidency ...	24 Parganas	1,842,633	8,204	20·88	19	·10	20	·12	2,275	14·28	120	·72	108	·60	250	1·56	2,780	17·52	3,131	19·80
Rajshahi ...	Pabna	1,362,302	5,174	45·93	167	1·44	2	·01	2,372	20·88	21	·12	38	·24	120	1·08	2,720	24·00	2,944	25·92
Patna ...	Patna	1,763,604	4,784	31·68	22	·12	2	·01	3,662	24·84	218	1·44	86	·48	886	6·10	4,876	33·09	4,327	29·28
	Shahabad	2,043,860	5,171	32·64	115	·60	2	·01	5,914	34·68	27	·12	87	·48	780	4·56	6,931	40·68	6,302	36·96
Orissa ...	Cuttack	1,935,132	4,467	28·08	315	1·92	72	·36	2,106	12·96	313	1·92	125	·72	850	5·16	3,771	23·28	2,131	18·12
	Total ...	9,004,021	23,202	30·84	637	·84	98	·12	16,339	21·72	690	·84	445	·48	2,899	3·84	21,057	28·08	19,635	26·16
	Average of corresponding month of previous five years.	......	Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		1,029	1·32	44	·01	14,576	19·32	757	·96	401	·48	2,828	3·72	19,635	26·16	......	......
	Difference + or −	......	....	....	−392	−·48	+54	+·03	+1,7 3	+2·40	−58	−·12	−44	Equal	+71	+·12	+1,452	+1·92	......	......
	TOTAL FOR THE PROVINCE ...	70,368,267	152,912	31·08	3,108	·48	445	·07	130,608	22·32	3,476	·48	2,442	·36	22,039	3·84	163,111	27·72	142,220	24·24
	Average of corresponding month of previous five years.	......	Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		4,735	·72	228	·03	110,172	18·72	4,088	·60	2,580	·36	20,037	3·36	142,220	24·24	.....	......
	Difference + or −	......	......	......	−1,627	−·24	+220	+·04	+20,436	+3·60	−612	−·12	−138	Equal	+2,552	+·48	+20,891	+3·48	......	......
Districts	*Towns.*																			
Patna ...	Patna City	152,770	341	23·76	4	·24	1	·07	192	15·00	77	6·00	8	·60	109	8·52	391	30·60	279	21·84
	Bihar	47,713	130	34·32	...	...	...	...	79	19·80	9	2·16	4	·96	31	7·68	123	30·84	93	23·04
Shahabad ...	Sasaram	22,713	67	35·28	...	...	...	...	54	28·44	2	·96	...		9	4·68	65	34·32	37	19·44
Cuttack ...	Cuttack	47,186	71	18·48	13	3·24	...	...	22	5·52	23	5·76	1	·24	18	4·56	77	19·56	59	15·00
	TOTAL ...	270,382	619	27·36	17	·72	1	·03	347	15·36	111	4·92	13	·48	167	7·32	656	29·04	497	20·64
	Average of corresponding month of previous five years.	......	Complete average figures of past five years are not available.		73	3·12	1	·07	203	9·00	53	2·28	11	·48	126	5·52	467	20·64	......	......
	Difference + or −	......	... ..	......	−56	−2·40	Equal	Equal	+144	+6·36	+58	+2·64	+2	Equal	+41	+1·80	+189	+8·40	......	......
	Total of towns with a population of 20,000 and over.	1,671,128	3,713	26·64	260	1·92	4	·02	2,203	15·72	511	3·60	68	·48	830	5·88	3,885	27·84	3,555	25·44
	Average of corresponding month of previous five years.	......	Complete average figures of past five years are not available.		461	3·24	12	·03	1,677	12·00	455	3·24	58	·36	892	6·36	3,555	25·44	......	......
	Difference + or −	......	......	......	−192	−1·32	−8	−·03	+526	+3·72	+56	+·36	+10	+·12	−62	−·48	+330	+2·40	......	......

OFFICE OF SANY. COMMR., BENGAL,
The 31st December 1892.

W. H. GREGG, *Surgn.-Lieut.-Col.,*
Dip. Publ. Health, Camb., Sanitary Commissioner for Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 24th December 1892, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 24th December 1892.			Week ending Saturday, the 26th December 1891.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	1,776	1,43,200	2,127	1,768	2,06,335	3,203
Jute	322	1,42,900	2,594	143	82,800	1,555
Firewood	86	48,700	736	104	69,550	1,063
Other articles	960	2,40,725	3,696	893	2,16,650	3,532
Total ...	3,144	5,75,525	9,153	2,908	5,75,335	9,353

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 17th December 1892, on 1,615$\frac{7}{10}$ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	239,052	2,96,236 10 0	28,08,455 0	6,79,273 12 0	18,657 10 0	9,94,168 0 0	76,352½	107,590¼	183,942¾
Or per mile of railway	......	183 5 7	......	420 6 9	11 8 9	615 5 1	......	......	......
For previous 23¾ weeks of half-year	6,091,202	65,46,346 7 0	5,47,13,325 0	1,25,43,411 1 0	3,83,830 3 0	1,94,73,587 11 0	1,745,103¼	2,193,218	3,938,321¼
Total for 24¾ weeks ...	6,330,254	68,42,583 1 0	5,75,21,780 0	1,32,22,684 13 0	4,02,487 13 0	2,04,67,755 11 0	1,821,455¾	2,300,808¼	4,122,204¼
Comparison.									
Total for corresponding week of previous year	245,118½	2,95,878 2 9	26,66,931 20	6,28,952 7 0	23,261 0 1	9,48,091 9 10	74,152	102,673	176,825
Per mile of railway corresponding week of previous year	......	186 15 2	......	397 6 3	14 11 2	599 0 7	......	......	......
Total for corresponding 24¾ weeks of previous year ...	6,406,918½	70,24,618 5 11	5,76,80,912 0	1,38,64,769 9 10	4,51,468 1 9	2,13,40,856 1 6	1,819,482	2,327,363	4,146,845

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 17th December 1892, on 22½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	15,247	3,824 10 0	12,098 20	600 15 0	10 0 0	4,435 9 0	876	146	1,022
Or per mile of railway	......	171 14 3	......	27 0 2	0 7 2	199 5 7	......	......	......
For previous 23¾ weeks of half-year	*436,621	*1,07,570 14 0	†1,75,269 30	†7,906 3 0	‡275 0 0	1,15,752 1 0	20,963	1,647	22,610
Total for 24¾ weeks ...	451,868	1,11,395 8 0	1,88,268 10	8,507 2 0	285 0 0	1,20,187 10 0	21,839	1,793	23,632
Comparison.									
Total for corresponding week of previous year ...	15,918½	3,833 8 2	7,244 0	323 2 0	8 4 6	4,163 14 8	895	150	1,045
Per mile of railway corresponding week of previous year ...	......	172 4 8	......	14 11 11	0 6 0	187 6 7	......	......	......
Total for corresponding 24¾ weeks of previous year .	447,371	1,09,992 13 6	2,20,390 0	8,773 4 0	694 2 0	1,19,460 4 3	21,923	2,038	24,561

* Added number of passengers 519 and Rs. 69 }
† Deduced maunds 35 and added " 3 } on account of difference between the approximate and audited figures for the week ended 12th November 1892.
‡ Added " 7 }

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 17th December 1892, on 162 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	14,989	11,686 14 0	60,897 20	10,452 11 0	62 0 0	22,201 9 0	5,500	3,131¾	8,631¾
Or per mile of railway	......	72 2 3	......	64 8 4	0 6 2	137 0 9	......	......	......
For previous 23¾ weeks of half-year	*390,230	*3,05,497 11 0	†10,01,587 20	†1,65,590 13 0	‡2,212 0 0	4,73,300 8 0	148,005¾	55,315½	203,321¼
Total for 24¾ weeks ...	405,219	3,17,184 9 0	10,62,485 0	1,76,043 8 0	2,274 0 0	4,95,502 1 0	153,505¾	58,447¼	211,953½
Comparison.									
Total for corresponding week of previous year	14,406½	10,928 5 10	45,701 20	8,421 11 0	79 8 3	19,429 9 1	6,407	2,045	8,452
Per mile of railway corresponding week of previous year ..	......	67 7 4	......	51 15 10	0 7 10	119 15 0	......	......	......
Total for corresponding 24¾ weeks of previous year	364,631½	2,92,954 0 2	10,21,101 10	2,07,157 6 4	2,603 4 6	5,02,714 11 0	155,602	40,241	195,843

* Added number of passengers 723 and Rs. 1,418 }
† Do. maunds 82,126 and deducted ,, 454 } on account of difference between the approximate and audited figures for the week ended 12th November 1892.
‡ Do. ,, 30 }

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[REGISTERED No. 29.] No. 2 of 1893.



SUPPLEMENT TO

The Calcutta Gazette.

WEDNESDAY, JANUARY 11, 1893.

OFFICIAL PAPERS.

Abstract of the Proceedings of the Council of the Lieutenant-Governor of Bengal, assembled for the purpose of making Laws and Regulations under the provisions of the Act of Parliament, 24 and 25 Vic., Cap. 67.

THE Council met at the Council Chamber on Saturday, the 7th January, 1893.

Present:

The HON'BLE SIR CHARLES ALFRED ELLIOTT, K.C.S.I., Lieutenant-Governor of Bengal, *presiding*.
The HON'BLE J. T. WOODROFFE, *Offg. Advocate-General.*
The HON'BLE T. T. ALLEN.
The HON'BLE H. J. S. COTTON, C.S.I.
The HON'BLE H. H. RISLEY, C.I.E.
The HON'BLE J. LAMBERT, C.I.E.
The HON'BLE H. LEE.
The HON'BLE DR. MAHENDRA LAL SIRCAR, C.I.E.
The HON'BLE A. H. WALLIS.
The HON'BLE MAHARAJAH SIR HARENDRA KISHORE SING BAHADUR, K.C.I.E.
The HON'BLE GONESH CHUNDER CHUNDER.
The HON'BLE P. PLAYFAIR.
The HON'BLE MAULVI SYED FAZL IMAM, KHAN BAHADUR.

NEW MEMBER.

The HON'BLE MAULVI SYED FAZL IMAM, KHAN BAHADUR, took his seat in Council.

STATEMENT OF THE COURSE OF BUSINESS.

THE HON'BLE THE PRESIDENT said:—"Gentlemen, I wish to make a brief statement regarding the prospects of legislative business during the present cold weather session. We have at present before us only two Bills—the Fire-Brigade Bill, and the Bill for amending the Municipal Act of 1884. You are all aware that, in consequence of the passing of the Indian Councils' Act, it is intended to introduce considerable changes into the Council of the Bengal Province, as well as those of the other provinces, and, possibly, the Supreme Legislative Council also; and, as soon as practicable, I understand that the Government of India intend to issue for our guidance the rules under which the business of the new and enlarged Councils will be carried on, and at the same time to instruct us to the extent to which this Council is to be enlarged, and the manner in which representatives are to be appointed to the Council. It seems to me, therefore, better on every ground that any legislation which affects the province at large, and is of great general importance, should be postponed until it can be dealt with by the enlarged and revised Council. But the Fire-Brigade Bill is one of purely local interest, and the interests which are concerned in it are interests which, I understand, will be represented in much the same way in the revised Council as they are now. I believe, for instance, that it is intended that the Calcutta Municipality shall be represented in the enlarged Council; and for that reason I obtained sanction to the appointment to the Council of the Chairman of the Calcutta Corporation to represent the municipality while the present Bill is under discussion, in order that the municipality may not be worse off, but may be as fully represented now as hereafter. I propose, therefore, that as soon as the Select Committee have disposed of

the business, and revised the Bill in the manner that seems best to them, we should proceed with the Bill as early as possible.

"But the Municipal Bill should not be carried further till the Council is revised and enlarged; and with regard to the Municipal Bill, I have to make a short statement as to the intentions of Government in dealing with it. A very large amount of official literature has come in, dealing with the proposed amendments, and these have been under the consideration of the Government; and it seems to me desirable, without in any way interfering with the authority of the Select Committee, that on any points on which the Government has come to a definite conclusion as to the manner in which the amendments proposed shall be dealt with, it would be desirable to facilitate the work of the Select Committee by announcing that decision, and so save them the trouble of discussing any points on which the Government has already decided. There has been a good deal of discontent and remonstrance against the Bill, as interfering with the principles of Local Self-Government, and as being a restrictive and reactionary step, putting the municipalities in a worse position than they were originally put when the present Act was passed in Lord Ripon's time. The sections which mainly come under these remonstrances, and which interfere, or seem to interfere, with the independence of municipalities, are six in number. Under section 4 Government reserves the power to alter the boundaries of a municipality, and to separate from a municipality any areas of land which seem to be unsuitable for municipal administration. At present that power rests only with Municipal Commissioners themselves, and, therefore, taking that power out of their hands, and placing it in the hands of the Government—or rather, not taking it out of their hands, but giving Government the power to act, in places where the municipalities are unwilling to do so—is distinctly an interference with municipal independence. Section 12, sub-clause 4, gives Government the power of placing any municipality in the 2nd Schedule, that is, of removing its power to elect its own Chairman, and to appoint an official Chairman instead. Section 25 gives Government the power to sanction the election of a Vice-Chairman, whereas at present no such sanction is required. These sections are those to which my attention has been specially called, as being the sections most seriously remonstrated against, and which have borne the brunt of a very large portion of the criticism to which this measure has been subjected. It was stated by the HON'BLE MR. RISLEY, when introducing the Bill, and by myself, on more than one occasion, that no serious interference with the authority of Municipal Commissioners was intended; and that Government only intended to use these powers when absolutely obliged to do so, and that they were introduced as being a less serious interference with Municipal liberty than the course provided for such emergencies by the present law. Under sections 65 and 66 of the present law, the Government has larger powers than it would generally desire to use when dissatisfied with the way a municipality is conducted, and when it seems to be necessary to remove the Chairman and appoint an official Chairman. Under the old law the only way was to practically destroy the municipality and reconstruct it. We thought that it was desirable and would not be unpopular to provide a gentle mode of interference than this, but the result shows that we were mistaken, and on further consideration we think it is not necessary to persevere in the proposal. I think you will all agree that it is right and wise of the Government to take note of the objections of those principally concerned; for no Government would act prudently in insisting on reforms distasteful to the majority of those concerned, so long as it was satisfied that the administration could be satisfactorily maintained by taking any other course. We have, as I said, received communications from a great number of quarters, and some of these have particularly attracted any attention, as they are not the representations of the Municipal Commissioners themselves, who might be supposed to be too captious or too ready to discern a slight to their authority which was not intended. I refer to those bodies who represent the public, or certain sections of the public, at large. We have, for instance, received memorials from the Bengal National Chamber of Commerce, from the Bhagalpur Landowners' Association, from the Indian Association, and from the Barrackpore People's Association, all of which have considerable importance and authority. The unanimous tone adopted by all these Associations is that the election of their Chairman is a privilege which is prized above all others by the Municipal Commissioners and the people they represent in the administration of municipalities, and they have represented that no sort of opposition has been shown by the municipalities where the Government has laid its finger on any faults, but that the municipalities have always shown themselves ready and willing to correct these errors to the best of their ability. I am bound to say that this representation

is quite accurate. There were two difficult cases brought before the Government at the time these amendments were introduced—one a case of the choice of an unsuitable Chairman, and the other a case of the inefficiency of a Chairman. In both of these cases the Municipal Commissioners showed a reasonable spirit in accepting the remonstrances of the Government; in the one case an efficient non-official has since been elected, and in the other the appointment of an official Chairman has been asked for. Since this Bill was introduced there have been similar occurrences in Howrah, Arrah, Raniganj, Puri, and Jessore. In all of these it seems to me that the Municipal Commissioners have shown a spirit of tact and concession. In the first four places I have mentioned, the Commissioners agreed to the appointment of an official Chairman till such time as the malpractices or inefficiencies complained of were corrected; and in the Jessore case they at once dismissed the Chairman complained of, and have appointed a thoroughly efficient non-official gentleman in his place. It is the bounden duty of Government to take notice of facts like these, and therefore we came to the conclusion that these two sections of the amending Bill might be dropped, and that we might rely in future, as we have done before, on the stronger coercive sections 65 and 66, to which I have referred—sections which can be employed as a last resource, but which it is seldom necessary for the Government to make use of. I think it also right to inform you that, after we had come to this decision, a despatch was received from the Secretary of State to the Government of India bearing on the same subject. He took very much the same line as I have just mentioned, as representing the course of opinion in my own mind, and considered the sections undesirable, and desired that we should withdraw them. It is right you should know this, and that the public should know it. Our course is very much facilitated by this communication, and we feel strengthened by the knowledge that the Secretary of State has come to the same conclusion as the Government had done independently. There are three other sections which I wish to mention here, which tend in the same direction. Section 29 authorises the appointment of a special officer to put municipal accounts in order, in cases where the auditing officer complains of those accounts being in an unsatisfactory condition, and considers such an appointment absolutely necessary. Section 31 deals with the appointment of assessors; it takes the assessment of taxes upon persons or houses altogether out of the hands of the Commissioners, and places them in the hands of an independent assessor. I have given this matter great consideration, and you are possibly aware that, in addressing a municipality recently in Chota Nagpur, I threw out a suggestion as to amending the Act in such a way as to provide for the appointment of an assessor only when complaints were made by Magistrates and when the Commissioner of the Division agrees that such a course was necessary. This is not a point on which Government has come to any definite conclusion, but desires to be guided by the deliberations of the Select Committee and of the Council. In all matters concerning the independence of the municipalities, and which have given rise to complaints, to the effect that Government is interfering unnecessarily with the powers of municipalities, or is taking a reactionary step, not justified by absolute necessity, the Government desires to be guided by the views of the Select Committee, in the first place, and by this Council in the second; and I hope you will consider this matter in that light, understanding that the Government places itself in your hands, and does not desire to do anything in the restrictive line, which the united wisdom of this Council does not consider necessary for the purpose of good administration. I trust, as far as I can foresee, that in the course of next month, the Council will be reconstituted under rules issued for our guidance; and that we shall then proceed to the discussion of the Municipal Bill, treating it in the spirit I have described to you."

BENGAL MUNICIPAL ACT, 1884, AMENDMENT BILL.

The Hon'ble Mr. Risley moved that the Bill to amend the Bengal Municipal Act, 1884, be referred back to the Select Committee for consideration and report.

The Motion was put and agreed to.

The Hon'ble Mr. Risley also moved that the Hon'ble Maulvi Syed Fazl Imam be added to the Select Committee on the above-mentioned Bill.

The Motion was put and agreed to.

The Council adjourned *sine die.*

C. H. REILY,

Assistant Secretary to the Government of Bengal,
Legislative Department.

Calcutta;
The 10*th January*, 1893.

THE CANAL REVENUE REPORTS FOR 1891-92.

No. 25*I.A.*

GOVERNMENT OF BENGAL,—PUBLIC WORKS DEPARTMENT.

IRRIGATION.

Accounts.

Dated Calcutta, the 7th January 1893.

RESOLUTION.

READ—

The Canal Revenue Reports for 1891-92, and the Chief Engineer's note on the same.

There are now in actual operation in Bengal 916 miles of canal, of which 495¼ miles are for irrigation and navigation, 242¾ miles are for irrigation only, and 178 miles are for navigation only. From the irrigation canals 2,381 miles of distributary channels are taken off. The total area commanded by the canals is 2,488,781 acres, the area irrigable in the present state of the works is 1,480,251 acres, and the area actually irrigated during the year was 742,346 acres, the crops grown on which were valued at Rs. 2,15,13,358. The number of boats plying in the canals during the year was 2,54,870, carrying goods of the aggregate value of Rs. 14,35,09,851.

2. The total outlay, direct and indirect, on canals in Bengal of which capital and revenue accounts are kept, has up to date been Rs. 7,36,27,728. Of this sum, Rs. 6,03,74,079* have been charged to loan funds, Rs. 1,04,00,175* have been provided from Provincial revenues, and Rs. 8,66,000 have been contributed by the Imperial Government from Famine Relief and Insurance Funds.

The outlay on each canal chargeable to capital account to date and during the last two years, is shown in the table below:—

Works.	During 1890-91.			During 1891-92.			To end of 1891-92.		
	Direct charges.	Indirect charges.	Total.	Direct charges.	Indirect charges.	Total.	Direct charges.	Indirect charges.	Total.
1	2	3	4	5	6	7	8	9	10
Major Irrigation Works.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Orissa Canal	3,31,596	6,672	3,38,268	3,88,740	8,042	3,96,782	2,46,06,606	5,54,230	2,51,60,896
Midnapore Canal ...	(—)35,890	159	(—)35,731	14,469	......	14,469	82,58,711	1,84,133	84,42,844
Hidgellee Tidal Canal	1,52,884	5,037	1,57,921	2,34,918	6,909	2,41,826	22,32,705	56,508	22,89,213
Soue Canals	1,71,361	2,793	1,74,154	2,04,098	5,191	2,09,289	2,57,32,094	9,10,551	2,66,42,645
Total ...	6,19,951	14,661	6,34,612	8,42,225	20,141	8,62,366	6,08,30,176	17,05,422	6,25,35,598
Minor Works and Navigation.									
Tirhut Project ...	......	......	......	......	......	......	5,31,425	74,650	6,06,075
Damuda Project ...	(—)1,200	......	(—)1,200	(—)1,200	......	(—)1,200	1,47,541	16,239	1,63,780
Calcutta and Eastern Canals.	5,613	80	5,693	(—)10,329	2	(—)10,327	52,22,543	61,027	52,83,570
Orissa Coast Canal ..	17,212	852	18,064	3,940	(—)65	3,875	42,38,999	1,02,953	43,41,952
Saran Canals ...	......	......	......	......	......	......	6,69,570	27,183	6,96,753
Total ...	21,625	932	22,557	(—)7,589	(—)63	(—)7,652	1,08,10,078	2,82,052	1,10,92,130
GRAND TOTAL ...	6,41,576	15,593	6,57,169	8,34,636	20,078	8,54,714	7,16,40,254	19,87,474	7,36,27,728

3. The completion of the Orissa Canals has, for various causes,—chiefly delay in preparing the requisite detailed plans and estimates,—been retarded. As stated in last year's Resolution, detailed estimates had then for the most part been sanctioned, and the progress during the year under review has been more satisfactory. During the visit of the Lieutenant-Governor to Orissa in February 1892, the extent to which distributary channels and subsidiary works are to be allowed was finally settled, and revised estimates were submitted to the Government of India immediately after His Honour's return to Calcutta, providing for the expenditure of Rs. 12,38,020 from the 1st April 1892. These estimates have lately been sanctioned by the Secretary of State. It is expected that the canals and subsidiary works will be practically completed by the 1st April 1895. The Taldanda Canal Extension was opened on the 16th of July 1891, and there are now two distinct lines of navigation from Cuttack to the seaboard. The principal works finished in 1891-92 were the Paradeep lock and the Barera weir. During the year 24¾ miles of canal and 125 miles of distributaries were opened, and the irrigable area increased by 55,993 acres.

The Midnapore Canal is complete, the only expenditure incurred during the year debitable to capital account being for dredging plant.

* Exclusive of indirect charges amounting to Rs. 19,87,474.

The extensive remodelling scheme sanctioned in 1888-89 for improving the Hidgellee Canal has, with the exception of two works, been carried out. The canal bed has been lowered, and two new supply sluices leading into long feeder channels, in which the silt will be deposited instead of in the canal itself, have been completed. The new pipe across the Russulpore river and the reconstruction of the Kalinagar lock yet remain to be taken in hand: these works have been postponed partly owing to the difficulty in providing funds, and partly owing to the deterioration of the Russulpore river, which appears to have now ceased in consequence of the construction of the Balliaghye outfall drain.

The Sone Canals are practically complete, the works still remaining to be executed being in connection with village channels and drainage. An estimate providing for the expenditure of Rs. 7,05,707 from the 1st of April 1891, was submitted to the Government of India on the 8th June 1892, and it is understood that it has lately been sanctioned by the Secretary of State This estimate provided for the surrender of Rs. 16,54,994 on the estimate for the complete scheme sanctioned in Government of India's letter No. 118*I*., dated 17th March 1883, for Rs. 2,78,88,697.

4. The revenue accounts of the four canal schemes, classed as Major Irrigation Works, are shown in the table below:—

Particulars.		Year.				
		1887-88.	1888-89.	1889-90.	1890-91.	91-92.
1		2	3	4	5	6
		Rs.	Rs.	Rs.	Rs.	Rs.
Receipts	Irrigation	7,48,292	10,01,937	11,32,662	9,69,962	11,61,987
	Navigation	2,93,888	3,31,138	3,34,893	3,27,026	3,71,339
	Miscellaneous	61,049	53,294	53,719	49,739	69,384
Total receipts ...		11,03,229	13,94,369	15,21,274	13,46,727	16,02,710
Deduct refunds of revenue ...		16,149	13,190	16,800	7,586	4,102
Net receipts ...		10,87,080	13,81,179	15,04,474	13,39,141	15,98,608
Working Expenses	Works and repairs	8,04,069	7,34,079	6,58,131	6,30,614	6,13,104
	Engineering establishment ...	3,66,702	3,20,561	3,26,011	3,09,952	3,55,682
	Revenue and navigation establishment	2,38,539	2,67,981	2,71,162	2,61,833	2,71,935
	Tools and Plant	78,126	82,272	82,600	79,894	1,09,320
	Other items	84,734	82,395	84,464	89,843	87,894
Total Working Expenses ...		15,72,170	14,87,295	14,22,368	14,32,136	14,37,935
Net revenue ...		—4,85,090	—1,06,116	82,106	—92,995	1,60,673
Charges for interest ...		23,13,446	23,39,849	23,65,030	23,87,119	24,16,363
Deficit ...		27,98,536	24,46,965	22,82,924	24,80,114	22,55,690
Rate per cent. on capital outlay ...		4·68	4·04	3·74	4·02	3·60

The result of the year's operation is a surplus above working expenses of Rs. 1,60,763, the interest charges amounting to Rs. 24,16,363.

The year's gross revenue is the highest yet earned, and the net revenue has only been exceeded in one year, 1885-86, when it amounted to Rs. 3,75,981. In that year, however, instead of, as at present, the actual cost of establishment employed on the works being charged thereto, 23 per cent. on the cost of the works themselves was debited, the balance being charged to buildings and roads. The statement below shows clearly how this item affects the accounts:—

Year.	Receipts less refunds.	Working Expenses.				
		Establishment.		Works and repairs.	Other items.	Total.
		Direction and executive.	Revenue.			
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1885-86	15,74,272	1,52,856	2,43,850	6,64,961	1,36,624	11,98,291
1891-92	15,98,608	3,55,682	2,71,935	6,13,104	1,97,214	14,37,935

Making allowance for the extra establishment charges which, under present rules, would have been debited to working expenses, the net revenue in 1885-86 would have been reduced to Rs. 1,83,258, against Rs. 1,60,673 in the year under review. The collections in 1885-86, it may be added, were largely swollen by the collection of arrears, as will be obvious from the following statement further comparing the results of the two years:—

YEAR.	Balance at commencement of year.	Assessments.	Total.	Remissions.	Collections	Balance.
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1885-86 ...	8,94,121	10,32,826	19,26,947	1,82,105	12,03,714	5,41,128
1891-92 ...	4,72,113	11,42,334	16,14,447	48,341	11,61,986	4,04,120

The assessments represent the demands received by collecting officers during the financial year, and not the amount due on the area irrigated during the year, which the Lieutenant-Governor desires may be prominently brought forward in future. On the information available, the amount earned was Rs. 10,26,500 in 1885-86 and Rs. 13,73,844 in 1891-92.

5. There has been, more especially in the case of the Sone canals, great improvement made in the accuracy of the assessments, as well as in the promptitude with which recoveries have been made, as will be evident from the table below, which includes the three great irrigation projects, and extends over seven years:—

YEAR.	Balance at beginning of year.	Balance at end of year.	Remissions, including cancelled demand statements and extraordinary remissions.	Irrecoverable items.
1	2	3	4	5
	Rs.	Rs.	Rs.	Rs.
1885-86 ...	8,84,289	5,33,175	1,41,162	41,229
1886-87 ...	5,33,175	3,69,789	57,375	22,612
1887-88 ...	3,69,789	5,59,883	32,356	19,796
1888-89 ...	5,59,883	5,79,987	42,666	14,074
1889-90 ...	5,79,987	5,09,188	80,282	20,592
1890-91 ...	5,09,188	4,72,113	48,674	16,476
1891-92 ...	4,72,113	4,04,120	38,421	12,126

For the remissions other than extraordinary and cancelled demand statements the engineers are mainly responsible, except in Orissa, where, under a system which has now ceased, large areas were included in leases, and, if not irrigated, yearly remissions granted. In the case of the Sone Canals, the balance at the end of the year has fallen from Rs. 6,95,208 in 1885-86 to Rs. 1,11,444 at the end of 1891-92. The amounts remitted by the Engineers or written off by the Collector as irrecoverable have fallen from Rs. 1,27,830 in the former to Rs. 17,427 in the latter year. In the Patna district, the arrears in which for several years had been increasing, the balance at the close of the year was Rs. 29,153, against Rs. 93,744 at its commencement: for this reduction credit is mainly due to Babu Siva Sankar Singh, who was specially deputed from

Shahabad to take charge of the collections. He has since been promoted to be an Officiating Deputy Collector. Sir Charles Elliott desires that, in future reports, the dates on which demand statements are received, whether within the time fixed or not, may be stated, and a comparison made between the amounts assessed by due date, and those in which they are in arrears. Recurrent assessment on long leases will be included in the former figures, as the object is to ascertain the sums which could, with proper energy, be collected within the year.

6. A change of some importance was made in the administrative arrangements for collections in respect to the irrigation revenue derived from the Sone Canals. The establishments in the three districts of Shahabad, Patna and Gaya have been amalgamated and placed in charge of a Deputy Collector, instead of as formerly being dealt with by separate establishments under the control of the District Collectors. The Deputy Collector is placed in charge of what is known as the Revenue Division, exercising powers corresponding with those of an Executive Engineer; but as regards legal and some other matters, he remains under the supervision of the Collectors of the several districts. The principle followed has been to place the entire responsibility of assessments and collections on the Irrigation Department, and more especially on the Superintending Engineer, whilst retaining in the hands of Collectors the fullest powers to secure justice to individuals who may be aggrieved by these assessments. Since the close of the year under review, a revenue division, in charge of a Deputy Collector, has been established in Orissa, and arrangements approximating to those in force in Bihar introduced there.

7. The revenue derived from irrigation for the last five years has been shown in paragraph 4 of this Resolution. The following table shows the areas under irrigation:—

	Orissa Canals.				Midnapore Canal.				Sone Canals.				Total.			
	Kharif.	Rabi.	Perennial.	Total.	Kharif.	Rabi.	Perennial.	Total.	Kharif, including five-year leases.	Rabi and hot weather*	Perennial.	Total.	Kharif.	Rabi.	Perennial.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1887-88 ...	108,867	502	137	109,506	65,864	...	...	65,864	220,428	69,945	25,007	315,380	456,345	28,003	6,402	490,750
1888-89 ...	156,319	2,779	194	159,292	66,408	3,369	...	*69,777	238,895	100,142	16,872	355,909	504,219	75,965	4,794	584,978
1889-90 ...	180,568	5,897	162	186,627	68,370	440	...	*68,810	230,741	55,613	18,928	305,282	528,880	26,073	5,106	560,719
1890-91 ...	175,829	4,250	220	180,299	82,002	...	...	*82,002	211,726	51,318	17,970	281,014	513,811	24,882	4,622	543,315
1891-92 ..	173,453	3,943	289	177,685	83,905	68	...	*83,973	248,819	210,907	14,997	474,723	553,577	181,319	1,485	736,381

* Exclusive of lands surreptitiously irrigated for which leases were granted in subsequent years.

The area irrigated during the year was 151,403 acres in excess of any year to date, mainly owing to the extensive rabi irrigation on the Sone Canals, consequent on there having been practically no rain since September. The assessments on rabi irrigation are not due until the 1st of April, so that the revenue of the year was only slightly affected thereby. The kharif irrigation also exhibited an advance on previous results.

8. The navigation revenue, which has always formed a satisfactory feature of the Bengal canals, continues to advance slowly, the tollage collection for the last five years and for 1885-86 being given below:—

Year	Orissa Canals.	Midnapore Canal.	Hidgellee Tidal Canal.	Sone Canals.	Total.	Miles open.	Tollage per mile.
1	2	3	4	5	6	7	8
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1885-86 ...	64,093	1,33,013	52,143	41,711	2,90,960	490	593·7
1887-88 ...	66,628	1,26,574	40,406	50,984	2,84,592	490	580·7
1888-89 ...	69,830	1,46,760	53,910	52,162	3,22,662	496½	649·9
1889-90 ...	78,032	1,45,356	40,338	51,189	3,14,922	496½	634·3
1890-91 ...	1,06,961	1,10,830	27,145	56,593	3,01,529	496½	607·3
1891-92 ...	1,20,761	1,32,572	36,348	57,339	3,47,020	524¼	662·2

9. The progress made towards the completion of the Orissa Canals has already been noticed. In other respects improvement has also been made. The gross income of these canals is the largest on record, and the working expenses show a satisfactory decrease on those incurred during any of the last five years. In the five years ending 1890-91, the working expenses have exceeded the receipts by an average of Rs. 2,11,594. In 1891-92 the deficit has been reduced to Rs. 52,164, and there will, despite heavy expenses for flood damages, be a further improvement in the year now current. The Lieutenant-Governor, on first visiting these canals in January 1891, took exception to the arrangements under which, even on long leases, the demand fluctuated, certain lowlands which ordinarily do not require water being included in the lease, and remissions, necessitating lengthy enquiries, being annually granted when water was not required or taken. Independently of the objection to these yearly investigations, the collections were retarded until the results of the enquiries had been recorded and revised demand statements prepared. The full evil of this system, which is characterized by the Superintending Engineer as pernicious, will be understood when it is stated that Rs. 12,646, out of Rs. 30,485 remitted in 1891-92, appertained to the irrigation of 1889-90, the enquiries regarding which were not completed until the year under review. In February 1892, Sir Charles Elliott again visited Orissa, and a system under which a fixed demand took the place of fluctuating assessment was elaborated, a lower rate being charged for lands not irrigated in ordinary years. The establishment, since the 1st April 1892, of a separate revenue division has already been adverted to, but other improvements were also effected, notably in the Certificate Department, the number of certificates pending having been reduced from 9,044 on the 1st April 1891 to 4,603 on the 1st of April 1892, of which 3.575 had been disposed of by the 1st of August 1892. The effect of the reforms instituted has been that the Collecting Department has been put on a satisfactory footing, whilst a good beginning, more especially in the Brahmini-Byturni Division, has been made towards establishing the assessments on a basis which will, for a term of years, relieve both the cultivators and the engineers from the labour and annoyance inseparable from what are *de facto* settlement operations.

10. The Midnapore Canal is complete, and expenditure debitable to capital, except for the construction of such small works as can be provided for from Provincial funds, has ceased. The area assessed was slightly in excess of that charged during the year previous, but no considerable improvement is practicable, the discharge of the river Cossye, from which water is supplied, falling to 300 cubic feet per second in October when water is much required. The duty in that month, calculated on the average gross supply, was 210 acres per cubic foot per second for the area commanded by the Midnapore weir, which is quite double that which can be obtained elsewhere. Improvements in the detailed arrangements are practicable, and measures have already been taken to introduce what is known as the block system, permits being refused where unleased lands would receive water. Revised water-rate rules are now under consideration, as also the expediency of constructing permanent outlets. Some slight improvement has been made in the percentage of the demand collected during the year, the balance unrealized being Rs. 58,972 at its close against Rs. 64,966 at its commencement. Some of the items, however, appertain to 1890-91 and previous years, showing avoidable delay in dealing with long standing arrears. Approximately half the gross revenue of the canal is derived from navigation dues, *i.e.*, tolls on boats, in the payment of which the regular lines of steamers enjoy considerable advantages. It is reported that the carrying trade is being diverted from the country boats, and that in consequence the number of boats is yearly lessening and the navigation revenue suffering. The expediency of granting concessions to lines of steamers running at fixed intervals, full or empty, is fully recognized, but the necessity of continuing the full deductions for engine space hitherto granted is under consideration. It must not be forgotten that the steamers cause extra expenditure estimated at Rs. 6,000 a year in repairs to the canal banks. The large amount spent on repairs to the Midnapore Canal during the year was due to the desire to avoid closing the canal more frequently than is absolutely necessary. The greater part of the expenditure was incurred on works that can only be carried out when the canal is dry, and there had been no closure since April 1888.

11. The remodelling scheme sanctioned for the Hidgellee Tidal Canal has already been noticed. The construction of the Balliaghye drain has resulted in some improvement of the crossing of the river Rasulpur, which, of late years, has been steadily deteriorating. This improvement is of considerable importance in connection with the Argawal circuit embankments, the demolition of which, involving heavy expenditure, is under consideration. The drain is also being utilized as a canal by boats up to 1,000 maunds burden. This work, besides answering the purpose for which it was designed, has thus been of service in other directions, and it is contemplated to maintain it as a canal, tolls being imposed.

12. The chief incident of the year in respect to the Sone Canals was the large area under irrigation during the year, amounting to 474,723 acres against 223,556 acres in the year previous, and 370,661 acres in 1884-85, which was the highest area attained to date. This large increase was mainly owing to the failure of the autumn rains, and the consequent demand for water for rabi sowings for which irrigation is not usually required. The area irrigated during the rabi season, including 13,325 acres hot-weather irrigation, was 210,907 acres, against 117,960 acres in 1883-84, the highest rabi irrigation to date. The steady increase in the area under long lease is satisfactory. The following tables show the areas irrigated under long and short leases during the last five years:—

		1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
Long leases	...	210,164	200,102	224,268	223,556	234,791
Short leases	...	105,216	155,807	81,014	57,458	239,932
Total	...	315,380	355,909	305,282	281,014	474,723

The sudden extension of irrigation caused a great strain on the establishment, which can only be kept up to meet an average demand. On this subject the followig remarks by the Superintending Engineer deserve attention:—

The demand of the year under review was greatest in the Buxar Division, and caused a considerable strain on the establishment, which was well met. Distributaries that had scarcely been used for years had to be run full, with consequent risk of breaches. An area much greater than usual had to be measured, while it is very difficult to enlarge the measuring staff to any considerable extent.

Although, as I have said, we are more accustomed to a great demand for water in the kharif season, it should not be forgotten that the large volume of water which was supplied in the autumn of 1891, could only be given and utilised by careful regulation and by constant supervision on the part of all concerned.

The demand was, on the whole, well met, and the Lieutenant-Governor agrees with the Superintending Engineer's remark that the Department may, in respect to the irrigation in this circle, fairly congratulate itself on the result of the year's work.

13. The Superintending Engineer's report does not clearly show the dates on which the assessment papers reached the Deputy Collector. It appears, however, that out of 474,723 acres irrigated, 354,541 acres were assessed during the year, and 120,182 acres after its close. In 1890-91 the area remaining to be assessed on the 31st March was 2,696 acres only. The increase in rabi irrigation on annual leases, 177,308 acres in 1891-92 against 20,632 acres in the previous year, sufficiently accounts for the difference. The Lieutenant-Governor attaches much importance to promptitude in preparing demand statements, and desires that in future the months in which the demand statements are due and submitted may be shown. It is not, however, desired that accuracy shall be sacrificed in order to attain the object desired, the steady decrease in the remissions, which are practically demands which cannot, when questioned, be upheld, from Rs. 11,284 in 1888-89 to Rs. 3,304 in 1891-92, being a specially satisfactory feature of the year's work. The reduction in the number of certificates instituted for the recovery of water-rates by process of law from 4,891, covering Rs. 46,974 in 1890-91, to 3,178, covering Rs. 31,176 in 1891-92, and of the balance, which, at the commencement of the year, was 1,586 certificates for Rs. 25,284, and at its close 234 certificates for Rs. 9,193, also speaks well for the canal administration, as does the advance made in the registration of village channels, and the increase on the acreage irrigated by each

outlet, which has risen from 59 acres in 1890-91 to 78 acres in the year under review. The increase in the number of complains was a natural result of the increased irrigation under annual leases. The Lieutenant-Governor, in November 1892, for the second time inspected a part of this canal system, and is satisfied that the utmost endeavours are made to utilise to the best advantage the full water-supply the canals are capable of carrying and also that the wants and grievances of the cultivators are carefully enquired into and met in a generous spirit.

14. The financial results of the year's working for the canals classed as minor works are shown in the table following:—

Particulars.	Minor Works and Navigation.											
	Saran Canals.		Calcutta and Eastern Canals.		Orissa Coast Canal.		Nadia Rivers.		Eden Canal.		Madhuban Canal.	
	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.
1	2	3	4	5	6	7	8	9	10	11	12	13
RECEIPTS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Water-rates	36,823	15,785	......	... ..	. . ..	..	.	. ...	2,795	9,430	.. ...	......
Navigation	... ..	......	5,19,263	5,15,125	61,220	60,051	2,00,508	1,92,718	.. ...	......	......	. ..
Miscellaneous	160	46	5,883	10,218	1,410	2,072	136	247	802	728	42	92
Total	36,983	15,831	5,25,146	5,25,343	65,630	62,123	2,00,644	1,92,965	3,597	10,158	42	92
Less—Refunds of revenue ...	... ..	.. ..	61	124	44	66	162	228	......	39	...	. ..
Total receipts	36,983	15,831	5,25,085	5,25,219	65,586	62,057	2,00,482	1,92,737	3,597	10,119	42	92
WORKING EXPENSES												
Direct charges.												
I.—Maintenance and repairs—												
Works (extensions and improvements)	.....	.. .	36,676	36,289	... .	.. .	......	......	584	4	6,236	.. ...
Repairs ...	26,454	9,021	1,49,872	1,72,457	42,312	48,598	52,182	62,704	24,612	18,623	2,011	7,300
Establishment, including direction and accounts) ..	10,560	3,710	64,041	65,757	15,452	17,100	21,780	22,704	8,915	6,541	3,293	3,003
Tools and Plant ..	389	(—)193	20,691	12,541	9,784	3,464	2,476	1 330	684	495	287	203
Suspense account	... ..	... ..	......	.. ..	. . ..		3,169	(—)3,015	......	......	......	....
Total ..	37,403	12,538	2,71,280	2,87,044	67,558	69,162	79,907	83,723	34,795	25,663	11,827	10,506
II.—Revenue management—												
Irrigation establishment ..	.....	......		... ..	......	... ..	......	......	......	......	......	.... .
Navigation ditto ..	. ....	...	38,343	41,359	6,208	6,134	23,630	23,134	.. ...	......	......	..
Total ...	... ..	......	38,343	41,359	6,208	6,134	23,630	23,134	...	...	......	.. ..
Total direct charges ...	37,403	12,538	3,09,623	3,28,403	73,766	75,296	1,03,537	1,06,857	34,795	25,663	11,827	10,506
Indirect charges.												
Leave and pension allowances ...	1,478	519	14,334	14,996	3,032	3,253	6,357	6,417	.. ...	.. ..	......	... .
Total indirect charges ..	1,478	519	14,334	14,996	3,032	3,253	6,357	6,417	. .	. ....	......	......
Total working expenses .	38,881	13,057	3,23,957	3,43,399	76,798	78,549	1,09,894	1,13,274	34,795	25,663	11,827	10,506
Net revenue ...	(—)1,898	2,774	2,01,128	1,81,820	(—)11,212	(—)16,492	90,588	79,463	(—)31,198	(—)15,544	(—)11,785	(—)10,414

15. Of the canals classed as minor works, the Saran, Eden, and Madhuban Canals are not navigable.

The Saran Canals were intended chiefly to provide water for the manufacture of indigo, and secondarily to supply water for the irrigation of that crop. There was originally a guarantee, which expired on the 1st of April 1891, and since that date the canals have been managed by Mr. Reid of the Moniara Concern on payment of a sum which substantially covers working expenses. The agreement is yearly, and it is doubtful if it will be renewed.

The primary object of the Eden Canal was to supply the Hooghly and Burdwan districts with wholesome drinking water; but under the force of circumstances it has developed into an irrigation work. The area irrigated during the year was 14,185 acres, mostly on five-years' leases. The receipts were Rs. 6,635 in excess of the previous year, and the expenses Rs. 9,132 less. Colonel A. D. McArthur, R.E., the Superintending Engineer, has shown a very marked improvement in the results obtained from this small work; it is satisfactory to be able to record that irrigation has yet further advanced in the year now current.

The Madhuban Canal is a small irrigation scheme on the borders of Champaran, the head works of which have always given trouble owing to the sudden floods in the hill stream over which they are constructed. These floods are caused by embankments in Nepal giving way, and it is a matter of both difficulty and expense, out of all proportion so far to results achieved, to keep the weir in working order. The area irrigated during the year was 3,586 acres.

16. The remaining canals classed as Minor Works are for navigation, viz., the Calcutta and Eastern Canals, the Orissa Coast Canal, and the Nadia rivers.

The Calcutta Canals, the capital expenditure on which has reached 53 lakhs of rupees, form in some respects the most important means of communication between Calcutta and the Eastern districts of Bengal. The revenue for some years has been almost stationary, whilst the working expenses have largely increased. Since the construction of the new locks at Dhappa and Chitpore, there has been a tendency to endeavour to improve the rest of the canals, and there is little doubt that, but for these measures, there would, owing to the railway competition, have been a serious decrease in the gross revenue. The net revenue is now 3·4 per cent. only on the capital expenditure, and the Lieutenant-Governor, in response to petitions for alteration in the scale of tolls, has found it necessary to declare that no change involving a decrease in the net receipts is admissible. The whole matter was considered by a Committee, of which Colonel A. D. McArthur, R.E., was the President, and Mr. W. C. Boyce and Babu Sita Nath Roy, members; and in disposing of the report, the Lieutenant-Governor sanctioned a reduction in the rate of tolls on articles of general consumption, mainly firewood and lime, whilst tolls on boats returning from Calcutta, which have hitherto passed free, will be levied. It is expected that these measures will slightly add to the revenue derived from the canals, whilst the tolls imposed on boats returning are very slight. Recent enquiries show that the cost of carriage on these canals varies from 0·04 pies to 0·26 pies per maund per mile, of which from 0·012 pies to 0·017 pies represents toll.

The Orissa Coast Canal has so far not answered the expectations formed when it was sanctioned, the failure to do so being partly owing to the Hidgellee Canal, the remodelling of which is not yet quite complete, not having been kept in a condition suitable for the passage of large boats, but the low revenue is chiefly due to competition by the sea route. The feeder roads sanctioned are now approaching completion, and it is hoped that, with these and other measures which are under contemplation, a greater measure of success will be obtained in future years. This canal must be looked on rather as a famine protective than revenue earning work, but the receipts should at least cover the working expenses, which at present they are insufficient to meet. It is feared that owing to changes in the course of the river Subarnarekha it will be necessary to build a new lock some miles away from Jamcunda in place of that now in use. The changes in the river had not, however, at the close of the present flood season reached their full development, and no expenditure will be incurred until it is no longer possible to defer taking further action.

The receipts during the year from tolls imposed on boats using the Nadia rivers, amounted to Rs. 1,92,737 against Rs. 2,00,482 in 1890-91, whilst the expenditure aggregated Rs. 1,13,274 against Rs. 1,09,894. The falling off in the receipts and the increased expenditure are due to the same cause—the low level of the river Ganges—which led to the upper heads of the Nadia rivers being blocked with silt. The rivers were closed to large boats at an earlier date than usual, whilst increased expense was incurred in training works. Hitherto works in these rivers have been mostly confined to training works with the object of keeping the channels open as long as possible, but this year, to supply the want of marks to guide vessels during the flood season, a number of temporary beacons have been erected and are reported to have been useful.

17. The Lieutenant-Governor is not satisfied that the important duty of office inspection receives the attention it deserves. From the tables attached to the Chief Engineer's note, it appears that the divisional offices were not all inspected by Superintending Engineers during the year, whilst, outside the Sone Circle, but few sub-divisional offices were inspected. His Honour requires that in future Superintending Engineers shall inspect all divisional offices yearly, and all sub-divisional offices and toll offices once in two years at least. Executive Engineers must inspect all sub-divisional offices and toll

offices yearly. In the case of both Superintending and Executive Engineers, the report of the inspection must be submitted for examination by the Chief Engineer. The record of tours shows that, with scarcely an exception, canal officers have fully satisfied the requirements of Government as regards the time to be spent on tour, which His Honour considers should not be less than one-third of the year in the case of Superintending Engineers, and one-half to one-third in the case of Executive and Assistant Engineers. For Sub-divisional Officers who do not belong to the Engineer establishment, no specific rule can be laid down other than that, when holding charges analogous to those of Assistant Engineers, the same length of tours will be required, whilst, on the other hand, when posted to workshops they will be employed almost exclusively at head-quarters.

18. The qualifications of officers are dealt with in separate reports, but Sir Charles Elliott is satisfied that during the year under review the engineers and subordinates employed in the Irrigation Department have not been unmindful of the instructions contained in last year's Resolution, and that they have, sometimes under circumstances of great hardship, done everything in their power to make the most of the canals in a season when every drop of water was valuable. His Honour also notices with pleasure the advance made in the Sone Circle in promptly realizing water-rates, being convinced that the exaction of payment when due is not only beneficial from an administrative point of view, but, in the long run, to the advantage of the cultivator.

ORDER.—Ordered that a copy of this Resolution and of the Chief Engineer's note, and its accompaniments, be submitted to the Government of India, in the Public Works Department, and published in the *Calcutta Gazette*; also that it be circulated to other Governments and to all departments and officers of this Government as usual.

By order of the Lieutenant-Governor of Bengal,

C. W. ODLING,

Joint-Secretary to the Govt. of Bengal.

Government of Bengal.

PUBLIC WORKS DEPARTMENT.

IRRIGATION BRANCH.

REVENUE REPORT.

Note by C. W. ODLING, ESQ., M.E., M. INST. C.E., *Chief Engineer, on the Canal Revenue Reports for the year* 1891-92.

THE Capital expenditure on Irrigation Works, for which Capital Accounts are kept, amounted during the year 1891-92 to Rs. 8,34,636 for direct and Rs. 20,078 for indirect charges:—

	Direct charges.	Indirect charges.	Total.
	Rs.	Rs.	Rs.
Capital expenditure not charged against Revenue	8,42,225	20,141	8,62,366
Minor Works and Navigation ...	(—) 7,589	(—) 63	(—) 7,652
Total ...	8,34,636	20,078	8,54,714

2. The total Capital outlay at the end of the year 1891-92, including indirect charges, was as follows:—

	Direct charges.	Indirect charges.	Total.
	Rs.	Rs.	Rs.
Major Irrigation Works—			
Productive Public Works ...	6,08,30,176	17,05,422	6,25,35,598
Minor Works and Navigation—			
Protective grants—Imperial ...	8,66,000	...	8,66,000
Ordinary revenue { Imperial and Provincial. }	99,44,078	2,82,052	1,02,26,130
Total ...	7,16,40,254	19,87,474	7,36,27,728

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3. The above outlay is divided under the different projects in the following statement:—

WORKS.	During 1891-92.			To end of 1891-92.		
	Direct charges.	Indirect charges.	Total.	Direct charges.	Indirect charges.	Total.
1	2	3	4	5	6	7
Major Irrigation Works—	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Orissa Canals ...	3,88,740	8,042	3,96,782	2,46,06,666	5,54,230	2,51,60,896
Midnapore Canal ...	14,469	...	14,469	82,58,711	1,84,133	84,42,844
Hidgellee Tidal Canal ...	2,34,918	6,908	2,41,826	22,32,705	56,508	22,89,213
Sone Canals ...	2,04,098	5,191	2,09,289	2,57,32,094	9,10,551	2,66,42,645
Total ...	8,42,225	20,141	8,62,366	6,08,30,176	17,05,422	6,25,35,598
Minor Works and Navigation—						
Tirhut project ...	...	...	...	5,31,425	74,650	6,06,075
Damodar project ...	(—) 1,200	...	(—) 1,200	1,47,541	16,239	1,63,780
Calcutta and Eastern Canals	(—)10,329	2	(—)10,327	52,22,543	61,027	52,83,570
Orissa Coast Canal ...	3,940	(—) 65	3,875	42,38,999	1,02,953	43,41,952
Saran Canals ...	...	...	...	6,69,570	27,183	6,96,753
Total ...	(—) 7,589	(—) 63	(—) 7,652	1,08,10,078	2,82,052	1,10,92,130
GRAND TOTAL ...	8,34,636	20,078	8,54,714	7,16,40,254	19,87,474	7,36,27,728

REVENUE. 4. The total receipts, working expenses, and charges for interest in respect of the works which are classed as Major Irrigation Works are shown in the following statement during the year 1891-92, and for the four previous years:—

PARTICULARS.	1887-88	1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts from all sources (less refunds of revenue)	10,87,080	13,81,179	15,04,474	13,39,141	15,98,608
Working expenses (direct and indirect charges)	15,72,170	14,87,295	14,22,368	14,32,136	14,37,935
Net revenue ...	(—) 4,85,090	(—) 1,06,116	82,106	(—) 92,995	1,60,673
Charges for interest	23,13,446	23,39,849	23,65,030	23,87,119	24,16,363
Deficit	27,98,536	24,45,965	22,82,924	24,80,114	22,55,690
Rate per cent. on Capital outlay ...	4·68	4·04	3·74	4·02	3·61

INTEREST. 5. The total amount of interest payable to the Imperial Treasury on account of Major Irrigation Works for the year 1891-92 is Rs. 24,03,107.

6. The following statement shows the financial results of both Major Irrigation Works and Minor Works and Navigation, of which Capital and Revenue Accounts are kept, to the close of the year 1891-92:— FINANCIAL RESULTS.

		Major Irrigation Works. Rs.		Minor Works and Navigation. Rs.
Direct revenue	...	1,96,27,666		2,23,88,232
Working expenses (direct charges)	...	1,98,59,055		92,09,246
Results on direct charges only ...	Loss	2,31,389	Profit	1,31,79,986
Indirect charges debitable to revenue	...	10,87,826		2,58,458
Results on both direct and indirect charges	Loss	13,19,215	Profit	1,29,21,528
Charges for interest on Capital ...	...	4,12,32,439		Not calculated.
Net results, including interest to end of 1891-92	Loss	4,25,51,654		......

7. The financial results to the close of the year 1891-92 of Minor Works and Navigation, of which only Revenue Accounts are kept, are shown below:—

		Rs.
Direct revenue	...	84,01,250
Working expenses (direct charges)	...	45,42,194
Results on direct charges only	Profit	38,59,056
Indirect charges debitable to revenue ...	...	2,39,982
Results on both direct and indirect charges ...	Profit	36,19,074

8. The expenditure on, and receipts from, Irrigation, Navigation, and Agricultural Works during the year 1891-92, as compared with those of the year 1890-91, are shown below:— EXPENDITURE.

EXPENDITURE.	1890-91. Rs.	1891-92. Rs.
42—Major Irrigation Works, Working Expenses— (Direct and indirect charges) Provincial ...	14,32,136	14,37,935
43—Minor Works and Navigation—		
Irrigation and Navigation Works— (Direct and indirect charges) Provincial ...	6,18,709	5,76,796
Agricultural Works—		
Provincial	7,52,844	7,58,262
Contributions	3,890	6,927
Total ...	7,56,734	7,65,189
49—Irrigation—Capital expenditure not charged against Revenue	6,34,612	8,62,366
GRAND TOTAL ...	34,42,191	36,42,286

RECEIPTS.

RECEIPTS.	1890-91. Rs.	1891-92. Rs.
XXIX—Major Irrigation Works—Direct Receipts— Provincial	13,39,141	15,98,608
XXX—Minor Works and Navigation—		
Irrigation and Navigation Works— Provincial	8,31,775	8,06,055
Agricultural Works— Provincial	12,015	11,406
Total ...	21,82,931	24,16,069

AREAS IRRIGATED.

9. The areas irrigated during the year 1891-92, and the four previous years, by the Major Irrigation Works, are shown in the following statement:—

	Orissa Canals.				Midnapore Canal.				Sone Canals.				Total.			
	Kharif.	Rabi.	Perennial.	Total.	Kharif.	Rabi.	Perennial.	Total.	Kharif, including five-year leases.	Rabi and hot weather.	Perennial.	Total.	Kharif.	Rabi.	Perennial.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1887-88	108,867	502	137	109,506	65,864	...	...	65,864	220,428	69,945	25,007	315,380	456,345	28,003	6,402	490,750
1888-89	156,319	2,779	194	159,292	66,408	3,369	...	*69,777	238,895	100,142	16,872	355,909	504,219	75,965	4,794	584,978
1889-90	180,568	5,897	162	186,627	68,370	440	...	*68,810	230,741	55,613	18,928	305,282	528,880	26,673	5,166	560,719
1890-91	175,829	4,250	220	180,299	82,002	...	...	*82,002	211,726	51,318	17,970	281,014	513,811	24,882	4,622	543,315
1891-92	173,453	3,943	289	177,685	83,905	68	...	*83,973	248,819	210,907	14,997	474,723	553,577	181,319	1,485	736,381

* Exclusive of lands surreptitiously irrigated for which leases were granted in subsequent years.

The year's working and its financial results will now be dealt with separately for each of the canal systems of the province, as in previous years.

ORISSA CANALS.

The figures in all statements showing totals of receipts or expenditure are those of the Examiner of Accounts In dealing with details the figures of the Commissioner or of the Superintending Engineer are used.

10. The Capital, Interest, and Revenue Accounts of these canals are given below:—

CAPITAL ACCOUNT.

I.—CAPITAL ACCOUNT.

Heads of Account.	Outlay during 1891-92.	Outlay to end of 1891-92.
1	2	3
Direct Charges.	Rs.	Rs.
I.—Works	3,24,441	1,77,75,631
II.—Establishment	57,375	44,64,543
III.—Tools and plant	2,855	20,20,731
IV.—Suspense accounts	4,138	1,63,791
Loss by exchange	...	2,68,070
Total ...	3,88,809	2,46,92,766
V.—*Less*—Receipts on Capital account	69	86,100
Net total Direct Charges ...	3,88,740	2,46,06,666
Indirect Charges.		
Capitalization of abatement of land revenue	9	33,068
Leave and pension allowances	8,033	5,21,162
Total Indirect Charges ...	8,042	5,54,230

A full account of the works in progress and completed during the year has been given in the Progress and Administration Report of this province for the year under review. The more important works completed were the construction of a new weir at Barera on the Machgong Canal, the improvement of the river Gobri, and drainage cuts at Tampua and Bhimai Hâd, while the construction of the distributaries sanctioned by the Secretary of State in 1883 was so far advanced, that 125¾ miles were opened for irrigation during the year, in addition to many detached lengths nearly completed, but from which supply could not be given. The Taldundah Extension Canal was opened for traffic, being very nearly completed, and among the works with which progress was made may be mentioned the Sukendapat drainage scheme, other minor drainage cuts and channels, flood embankments on the right of the Byturni and left of Burra Kharsua, and refuge-mounds on the Sankarisahai Island.

2.—INTEREST ACCOUNT. INTEREST ACCOUNT.

			Rs.
Interest charges to end of 1890-91	...	...	1,56,93,666
Ditto for 1891-92 ...	...	...	9,76,492
	Total	...	1,66,70,158

3.—REVENUE ACCOUNT—(Actuals). REVENUE ACCOUNT.

PARTICULARS.	EXPENDITURE—		PARTICULARS.	RECEIPTS—	
	During 1890-91.	During 1891-92.		During 1890-91.	During 1891-92.
1	2	3	4	5	6
DIRECT CHARGES.	Rs.	Rs.		Rs.	Rs.
I.—Works, maintenance, and repairs.					
Works (extensions and improvements).	...	5,001	Water-rates ...	2,09,806	2,17,256
Repairs	2,22,638	1,70,637	Navigation ...	1,21,498	1,35,902
			Miscellaneous ...	13,708	17,843
Establishment, including direction and accounts.	1,32,859	1,19,775	Total ...	3,45,012	3,71,001
Tools and plant ...	13,951	27,023	*Less*—Refunds of revenue.	76	79
Profit and loss ...	1,225	...			
Total ...	3,70,673	3,22,436			
II.—Revenue management.					
Irrigation establishment	52,591	57,074			
Navigation ditto ...	16,119	16,506			
Total ...	68,710	73,580			
Total Direct Charges ...	4,39,383	3,96,016			
INDIRECT CHARGES.					
Capitalized abatement of land revenue.	...	...			
Leave and pension allowances.	28,220	27,070			
Total Indirect Charges	28,220	27,070	Net total receipts	3,44,936	3,70,922
			Deficit ...	1,22,667	52,164
Total Working Expenses	4,67,603	4,23,086	Total ...	4,67,603	4,23,086

The net result shows a marked improvement compared with last year, the deficit of 1890-91 having been reduced by over 57 per cent., that is, from Rs. 1,22,667 to Rs. 52,164. This has been caused by increases under all heads of the receipts, combined with economy in working expenses. The only marked increases occurred under revenue establishment caused by the payment of arrears of commission properly belonging to previous years, and tools and plant, mainly due to the provision of a new boiler for the *Garnet* having been found necessary. The economy in repairs is partly due to the small amount of damage done to the aprons of weirs and the banks of canals and distributaries owing to the absence of any high floods during the year. The expenditure under extensions and improvements was incurred on the construction of an escape at Ganpur and additions to the Deputy Revenue Superintendent's Office and an Overseer's bungalow at Jobra.

EARNINGS. 11. The net result, calculated on the earnings as opposed to collections, and actual outlay is shown below for the year under review and the preceding year:—

	1890-91.	1891-92.
Earnings.	Rs.	Rs.
Irrigation	2,69,310	2,66 587
Navigation	1,21,498	1,35,902
Miscellaneous ...	13,708	17,843
Total ...	4,04,516	4,20,332
Deduct refunds ...	76	79
Net earnings ...	4,04,440	4,20,253
Outlay	4,67,603	4,23,086
Net deficit	63,163	2,833

The figures given as earnings include the actual realizations of navigation and miscellaneous revenue with the assessed revenue from irrigation, less refunds. The increase in the earnings is entirely under the heads navigation and miscellaneous, there having been a small decrease in assessed water rates which were Rs. 2,66,587 in 1891-92 against Rs. 2,69,310 in the year preceding. These figures are somewhat misleading owing to areas being included in which water rates are not chargeable, and remission is granted yearly after a special enquiry. This system is in course of alteration

FINANCIAL RESULTS. 12. Below are shown the revenue receipts and working expenses for the last ten years:—

PARTICULARS.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6	7	8	9	10	11
RECEIPTS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Water-rates ...	1,80,325	1,11,856	51,245	1,06,842	96,976	1,37,869	1,51,365	1,99,844	2,09,806	2,17,256
Navigation ...	1,08,473	1,10,152	79,802	84,012	67,048	71,604	77,908	88,632	1,21,498	1,35,902
Miscellaneous ...	31,212	15,860	12,538	16,496	15,587	14,171	14,242	15,747	13,708	17,843
Total ..	3,20,010	2,37,868	1,43,585	2,07,350	1,79,611	2,23,044	2,43,515	3,04,223	3,45,012	3,71,001
Less—Refunds of revenue ..	385	68	78	6	92	365	221	99	76	79
Total receipts ...	3,19,625	2,37,800	1,43,507	2,07,344	1,79,519	2,22,679	2,43,294	3 04,124	3,44,936	3,70,922
WORKING EXPENSES.										
Direct Charges.										
I.—Works, maintenance and repairs—										
Works (extensions and improvements) ...	...	...	...	...	...	...	...	...	...	5,001
Repairs ...	2,22,431	1,89,617	2,03,137	2,22,690	3,52,761	3,10,980	2,36,694	2,31,068	2,22,638	1,70,637
Establishment, including direction and accounts ...	51,160	43,600	50,958	51,190	81,117	98,153	70,201	1,09,434	1,32,859	1,19,775
Tools and plant ...	14,923	11,292	15,167	19,159	15,486	16,391	21,156	19,722	13,951	27,023
Profit and loss	...	...	...	...	...	...	...	...	1 225	...
Direct expenditure in England ...	2,061	427	...	...	...	...	...	...	...	...
Total ...	2,90,575	2,44,936	2,69,262	2,93,048	4,49,364	4,25,524	3,28,051	3,60,224	3,70,673	3,22,436
II.—Revenue management—										
Irrigation establishment .	37,002	33,432	33,909	34,304	37,005	40,300	43,161	55,502	52,591	57,074
Navigation ditto	13,578	11,681	12,488	15,219	15,471	15,125	15,734	15,871	16,119	16,506
Total .	50,580	45,113	46,397	49,523	52,476	55,425	58,895	71,373	68,710	73,580
Total Direct Charges ..	3,41,155	2,93,049	3,15,659	3,42,571	5,01,840	4,80,949	3,86,946	4,31,597	4,39,383	3,96,016
Indirect Charges.										
Capitalized abatement of land revenue ..	...	...	...	...	...	...	...	...	...	...
Leave and pension allowances ..	13,741	12,840	13,629	14,101	18,703	21,501	18,073	25,313	28,220	27,070
Total Indirect Charges ..	13,741	12,840	13,629	14,101	18,703	21,501	18,073	25,313	28,220	27,070
Total Working Expenses .	3 54,896	3,05,889	3,29,288	3,56,672	5,20,543	5,02,450	4,05,019	4,56,910	4,67,603	4,23,086
Net revenue ...	(—)35,271	(—)68,089	(—)1,85,781	(—)1,49,328	(—)3,41,024	(—)2,79,771	(—)1,61,725	(—)1,52,786	(—)1,22,667	(—)52,164

The most noticeable feature of the results tabulated above is that since the year 1886-87 the receipts have shown a steady yearly increase, accompanied by a reduction of the total working expenses, the effect on the net revenue being a reduction of the deficit from Rs. 3,41,024 to Rs. 52,164. With the extension of irrigation consequent on the completion of the new distributaries, it is hoped that the yearly deficit will be replaced by a surplus.

LENGTHS OF CANALS AND DISTRIBUTARIES.

13. The lengths of the canals and distributaries in operation at the close of the year 1891-92, compared with 1890-91, are given in the following table:—

Name of Canal.	1890-91.								1891-92.							
	Navigable canals.	Canals for irrigation only.	Distributaries and village channels.	Area protected from flood.	Area under command.	Area provided with distributaries.	Area irrigated.	Percentage of area irrigated to area provided with distributaries.	Navigable canals.	Canals for irrigation only.	Distributaries and village channels.	Area protected from flood.	Area under command.	Area provided with distributaries.	Area irrigated.	Percentage of area irrigated to area provided with distributaries.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Mahanadi Series.	Miles.	Miles.	Miles.	Acres.	Acres.	Acres.	Acres.		Miles.	Miles.	Miles.	Acres.	Acres.	Acres.	Acres.	
Taldundah	27	...	71¼	19,520	15,250	15,250	41,806	73·5	51¾	...	76¼	75,278	75,278	21,850	41,006	54·90
Machgong	4	28	122¼	97,057	97,057	41,600			4	28	149¼	97,057	97,057	54,480		
Kendrapara	39	...	337	129,421	101,110	92,982			39	...	363¼	129,421	101,110	95,120		
Gobri with extension	21	...	...	27,251	53,290	...			24	...	15¾	27,251	53,290	6,118		
Pattamoondee	...	47	33¼	65,600	51,250	10,172	74,070	72·7	...	47	98¼	65,600	51,250	37,829	74,180	53·34
Kendrapara Extension ...	15	...	...	8,960	7,000	...			15	...	...	8,960	7,000	...		
High Level Canal, Range I ..	33	...	131¼	80,128	48,815	48,815	21,984	45·0	33	...	131¼	80,128	48,815	48,815	22,423	45·93
Total Mahanadi Series ...	139	75	715¼	427,937	373,772	208,819	138,760	66·4	166¾	75	834¼	483,695	433,800	264,212	138,509	52·42
Brahmini-Byturni Series.																
High Level Canal, Range II ...	12½	...	...	...	10,000	...	2,503	...	12½	...	...	...	10,000	...	2,513	...
Do. do., do. III ...	19	...	49¼	...	57,500	44,047	39,036	88·6	19	...	49½	...	57,500	44,047	36,211	82·21
Jajpur Canal	6½	..	...	...	70,000	...	...	...	6½	...	6¼	...	70,000	600	452	75·33
Total Brahmini-Byturni Series	38	...	49¼	...	137,500	44,047	41,539	94·3	38	...	56	...	137,500	44,647	39,176	87·74
Total Orissa Canals ...	177	75	764¼	427,937	511,272	252,866	180,299	71·3	204¾	75	890¼	483,695	571,300	308,859	177,685	57·53

Twenty-seven and three-quarter miles of navigable canal and one hundred and twenty-five and three-quarter miles of distributaries have been completed during the year, resulting in an increase of the total area under command and that provided with distributaries by 60,028 and 55,993 acres, respectively, while 55,758 acres have been added to the area protected from flood owing to the completion of the left bank of the Taldundah Extension Canal, which forms a flood embankment up to the 49th mile.

RAINFALL

14. The average rainfall at thirteen stations, situated within the canal irrigated area, for the kharif and rabi seasons of the last five years, is as follows:—

		Average of thirteen stations.				
		1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1		2	3	4	5	6
		Inches.	Inches.	Inches.	Inches.	Inches.
Kharif season ...	July ...	11·67	8·91	13·10	12·59	10·34
	August ...	8·49	21·61	13·11	7·58	16·98
	September ...	6·12	8·36	5·30	14·40	19·45
	October ...	2·69	1·11	9·16	8·63	1·17
	Total ...	28·97	39·99	40·67	43·20	47·94
Rabi season ...	November ...	0·87	2·88	11·24	1·94	6·77
	December ...	......	......	0·15	0·05	......
	January ...	1·70	0·06	0·06	......	......
	February ...	1·26	0·81	0·02	0·99	0·20
	Total ...	3·83	3·75	11·47	2·98	6·97
	Whole year ...	47·79	49·07	67·95	63·17	61·03

The rainfall of the whole year was slightly less than that of last year, though 4·96 inches in excess of the average for the past 22 years. Both in the rabi and kharif seasons the fall was greater than in 1890-91, but it was unseasonably distributed. The fall was scanty up to the end of July, unusually abundant in August and September, and almost entirely failed in October, being succeeded by a cyclonic storm on the 5th November.

FLOODS.

15. The average rainfall of the year at ten stations in the Central Provinces which are drained by the Mahanadi was 56·14 inches, or 3·39 inches more than that of 1890-91.

There were heavy floods in all the rivers in the Orissa Circle during the year. The highest flood readings of the rivers Mahanadi, Brahmini-Byturni, Salindi, Katjuri, and Beropa during the year, as also those of the highest known floods, are given in the following statement:—

Name of river	Locality.	1891-92.		1890-91.		Highest recorded.	
		Date.	Reading.	Date.	Reading.	Date.	Reading.
	2	3	4	5	6	7	8
Mahanadi	Naraj above weir	30th July 1891 ...	87·90	12th July 1890 ...	85·90	4th July 1872 ...	92·10
	Do. below weir	30th " " ...	87·90	12th " " ...	83·65	4th " " ...	92·00
	Jobra above weir	30th " " ...	71·75	12th " " ...	70·05	4th " " ...	75·95
	Do. below weir	30th " " ...	70·10	12th " " ...	67·25	4th " " ...	73·95
Brahmini	Janapur above weir	15th September 1891	68·00	12th " " ...	64·60	18th " 1881 ...	68·75
	Ditto below weir	15th " "...	65·90	12th " " ...	64·50	18th " " ...	68·00
Byturni	Akhoapada above weir... ...	14th August 1891 ...	62·70	27th September " ...	59·30	16th " " ...	66·60
	Ditto below weir... ...	14th " " ...	59·20	27th " " ...	52·30	16th " " ...	63·79
Salindi	Randia	4th " " ...	56·88	27th " " ...	53·58	17th June 1868 ...	59·29
Katjuri	Bellevue	30th July " ...	78·80	12th July " ...	75·75	4th July 1872 ...	83·20
Beropa	Jagatpur above weir	30th " " ...	67·60	11th " " ...	66·40	4th " " ...	71·10
	Ditto below weir	30th " " ...	64·20	11th " " ...	62·60	4th " " ...	70·60

IRRIGATION.

16. The table below compares the areas of each crop irrigated during the last ten years with the yearly rainfall:—

Year.	Kharif.	Rabi.	Perennial.	Total.	Rainfall.
1	2	3	4	5	6.
	Acres.	Acres.	Acres.	Acres.	Inches.
1882-83 ...	128,530	4,100	398	133,028	59·03
1883-84 ...	47,035	1,381	344	48,760	57·21
1884-85 ...	54,181	2,994	197	57,372	50·40
1885-86 ...	70,563	1,605	171	72,339	52·59
1886-87 ...	75,115	2,440	154	77,709	60·07
1887-88 ...	108,867	502	137	109,506	47·84
1888-89 ...	156,319	2,779	194	159,292	49·07
1889-90 ...	180,568	5,897	162	186,627	67·95
1890-91 ...	175,829	4,250	220	180,299	63·17
1891-92 ...	173,453	3,943	289	177,685	61·03

17. The whole of the area shown above as irrigated was assessed. The figures below show the nature of assessment compared with the figures of the two preceding years:—

Crop.		Rate per acre.	1889-90. Area.	1889-90. Amount.	1890-91. Area.	1890-91. Amount.	1891-92. Area.	1891-92. Amount.
1		2	3	4	5	6	7	8
		Rs. A. P.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.
Kharif	Flow ...	1 8 0	(a) 172,104	2,57,935	(b) 168,227	2,52,173	(c) 168,655	2,56,314
	Lift ...	1 0 0	(a) 5,065	5,065	(b) 5,596	5,596	(c) 4,787	4,790
Perennial crops ..	Flow ...	6 0 0	67	397	121	712	141	843
	Lift ...	4 0 0	95	381	88	351	148	594
Rabi	Flow	0 8 0 to 2 0 0	4,903	5,583	3,634	3,888	3,259	3,435
	Lift ...	0 5 0 to 1 8 0	994	764	615	474	632	513
Unauthorised irrigation	Kharif		3,399	12,612	2,006	6,080	11	20
	Rabi	...	...	...	12	36	52	78
Total ...		...	186,627	2,82,737	180,299	2,69,310	177,685	2,66,587

(a) All 5-year leases.
(b) 173,577 acres 5-year lease, and 246 acres annual lease.
(c) 170,816 acres 5-year lease, and 2,626 acres annual lease.

It is satisfactory to note that the area of unauthorised irrigation assessed was only 63 acres, against 2,018 and 3,399 in the two previous years. The reduction in the total area under lease is due to the exclusion from assessment, on re-measurement of old leases, of 5,605 acres, consisting mainly of unirrigated *Beali* lands and low-lying lands which derive no benefit from irrigation.

The Superintending Engineer gives the two statements reproduced below, showing the alterations which have taken place in the area of each crop upon the various canals, together with the percentages of the area provided with distributaries as well as that commanded, which had been leased in each case, at the close of the official year:—

Canal system.	1891-92. Kharif.	1891-92. Perennial.	1891-92. Rabi.	1890-91. Kharif.	1890-91. Perennial.	1890-91. Rabi.	Kharif. More.	Kharif. Less.	Perennial. More.	Perennial. Less.	Rabi. More.	Rabi. Less.
1	2	3	4	5	6	7	8	9	10	11	12	13
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Kendrapara	70,636	50	3,494	71,358	45	3,567	...	722	5	...	...	73
Taldundah	41,545	25	336	41,221	26	559	324	...	...	1	...	223
High Level Canal, Range I ...	22,383	11	29	21,880	13	91	503	...	...	2	...	62
Ditto do. II ...	2,451	...	62	2,473	...	30	...	22	...	...	32	...
Ditto do. III ...	35,986	203	22	38,897	136	3	...	2,911	67	...	19	...
Jajpur	452	...	...	...	...	...	452	...	...	...	...	...
Total ...	173,453	289	3,943	175,829	220	4,259	1,279	3,655	72	3	51	358
							2,376		69		307	

Name of Canal.	Area under command.	Area provided with distributaries.	Area under lease on 31st March 1892.	Percentage of area leased.	
				Under command.	Provided with distributaries.
1	2	3	4	5	6
	Acres.	Acres.	Acres.		
Kendrapara	101,110	95,120	55,370	54·76	58·21
Gobri ...	21,290	4,668	3,386	15·90	72·54
Gobri Extension	32,000	1,450	3,438	10·74	237·10
Pattamundi	51,250	37,829	12,829	25·03	33·91
Taldundah	75,278	21,850	10,884	14·46	49·81
Machgong	97,057	54,480	33,405	34·42	61·32
High Level Canal, Range I ...	48,815	48,815	22,102	45·27	45·27
Ditto do. II ...	10,000	...	2,591	25·91	...
Ditto do. III ...	57,500	44,047	40,993	71·29	93·06
Jajpur Canal	70 000	600	667	0·95	111·17
Total ..	564,300	308,859	185,665	32·90	60·11

The Superintending Engineer further remarks:—

"The area provided with distributaries is also increased from 252,866 to 308,859 acres by the completion of 126 miles of new distributaries during the year, owing to which no fair comparison can be made between the percentages of the area leased during the two years. It may, however, be remarked that, as the new distributaries were completed up to certain lengths late in the year, only a small number of leases have been taken on some of them.

* * * *

"In the irrigation of the leased areas no difficulty was experienced in the Mahanadi Division in giving a full supply. In the Brahmini-Byturni Division, however, the floods at the end of July completely silted up the Jugatpur supply channel, and supply had to be partially shut off in consequence. The heavy rainfall of August made up for the limited supply, and the crops did not suffer. An estimate is now in hand for an alternative supplementary head sluice and channel for the Kendrapara Canal. Full supply was given throughout the season on the High Level Canal ranges, although some difficulty was experienced in the middle of July from the low pools in the Brahmini and Byturni rivers.

"The monsoon did not break until the end of June. There was considerable demand in July owing to the scanty rainfall. August and September were months of heavy rainfall, and there was little demand. In October there was an almost entire cessation of rainfall, and unirrigated crops suffered severely. The demand for canal water was keen, the canals running full supply, and there were but few and casual complaints of short supply. The raiyats on irrigable but unleased lands held out until late in October, when applications were received for new leases, more particularly on the Machgong Canal. On the Taldundah Canal the raiyats held off in the belief that irrigation could be effected by bunding the main drainage, being misled by designing people. On the Jajpur Canal a considerable area was irrigated, though only a small part of this was assessed, the assessment being made only on the areas declared by the villagers. The drought continued until the 4th November, when with the heavy rainfall accompanying a cyclonic storm irrigation ceased.

On the High Level Canal, Range III, the first section of the Kendrapara Canal, and on the first section, Taldundah Canal, the area leased has nearly reached its maximum. An

interesting table for Range III, High Level Canal, submitted by the Executive Engineer, Acquapada-Jajpur Division, is annexed:—"

NAME OF CANAL.	Irrigable area under command.	CULTURABLE AREA. Leased area.	Irrigable low lands.	Chaukidars' jagirs.	Area irrigable but unleased	Total.	Homestead and waste lands.	Total of columns 7 and 8.	DIFFERENCE OF COLUMNS 2 AND 9. Less.	More.
1	2	3	4	5	6	7	8	9	10	11
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Distributary No. 2 ...	1,581	1,020	2,379	15	...	3,420	986	4,685	..	2,659
Ditto " 2A ...	445			6			279			
Ditto " 3 ...	4,465	10,221	716	45	220	11,370	1,072	13,284	...	3,114
Ditto " 3A ...	1,308			16	...		222			
Ditto " 3B ...	4,377			52	100		620			
Ditto " 4 ...	6,126	5,845	372	128	145	6,490	2,799	9,289	...	3,163
Ditto " 5 ...	5,589	3,668	2,416	84	151	6,318	743	7,061	...	1,472
Ditto " 6 ...	1,010	947	49	18	...	1,014	607	1,621	...	611
Ditto " 7 ...	5,138	4,655	892	75	1,200	5,822	2,685	9,507	...	4,369
Total distributaries ...	30,059	26,356	6,824	438	1,816	35,424	10,013	55,447	...	15,388
Main and Branch Canal ...	5,915	4,923	1,894	76	97	6,902	2,827	9,819	...	3,904
Total ...	35,974	31,279	8,720	514	1,913	42,426	12,840	55,266	...	19,292

18. The figures below show the duty, stated in acres irrigated for each cubic foot per second of discharge, calculated from the gross discharge at canal heads for the last three years:— DUTY OF WATER.

PARTICULARS.		Kendrapara Canal system.	Taldundah Canal system.	High Level Canal, Range I.	High Level Canal, Range II.	High Level Canal, Range III.	Jajpur Canal.
1		2	3	4	5	6	7
91-92	Kharif ... Acres	70,686	41,570	22,394	2,451	36,189	452
	Duty on gross supply	80 05	103·99	84·75	24·95	117·69	...
	Rabi ... Acres	3,494	336	29	62	22	...
	Duty on gross supply	7·60	3·50	0·14	2·88	1·02	...
90-91	Kharif ... Acres	71,403	41,247	21,893	2,473	39,033	...
	Duty on gross supply	66·42	102·22	66·07	37·61	107·81	...
	Rabi ... Acres	3,567	559	91	30	3	...
	Duty on gross supply	9 46	13·31	1·79	2·11	0·43	...
89-90	Kharif ... Acres	73,122	39,641	26,121	2,501	39,345	...
	Duty on gross supply	80·77	78·19	102·92	44·46	83·01	...
	Rabi .. Acres	4,752	605	478	62	...	...
	Duty on gross supply	15·92	3 71	3·95	2·38	...	...

The area under irrigation in the *rabi* season is so small that the duty in that season is of no importance. There is a satisfactory increase in the duty in the *kharif* season in the case of all the canals in which the area is considerable.

The following table gives the duty attained during the month of October only, when the greatest strain on the canals occurred:—

	Kendrapara Canal system.	Taldundah Canal system.	HIGH LEVEL CANAL— Range I.	Range II.	Range III.	Jajpur Canal.	Total (omitting Jajpur Canal).
1	2	3	4	5	6	7	8
Area of kharif	70,686	41,570	22,304	2,451	36,180	452	173,290
Discharge at head	1,328	654	409	202	431	...	3,024
Duty on gross supply	53·22	63·56	54·75	12·16	83·97	...	57·34

On the Kendrapara Canal system the average discharge from the 6th October to the 4th November inclusive was 1,450 cubic foot per second, which gives a duty of 48·75 acres per cubic foot per second on the average maximum sustained discharge. The maximum average discharge for seven consecutive days occurred from 28th October to 3rd November inclusive, and amounted to 1,695 cubic feet per second. Calculated on this figure, the duty for the maximum discharge was only 41·70 acres. Regarding the Taldundah Canal system, the Superintending Engineer writes:—

"A considerably higher duty was obtained on the Taldundah Canal system during October, regarding which Mr. Butler makes the following observations:—

'The greatest demand for irrigation was during the last ten days of October, and during that time the average discharge of both Taldundah and Machgong Canal was 638 cubic feet per second, the area irrigated being 43,559 acres. The duty was 68 acres per cubic foot per second. Taking the Taldundah and Machgong Canals separately, the discharges were 188 and 450 cubic feet per second, and the areas irrigated 10,264 and 3,295 acres, and the duty 57 and 74 acres per cubic foot per second. There being no rain and hot sun all during October, the distributaries were put to as severe a test as may ever be expected. The duty obtained, viz., 68 acres per cubic foot per second, is low, but with the outlets properly sized and regulated, a duty of 80 acres per cubic foot per second could easily be obtained, and I should think with very careful regulation we might obtain a duty of 90 as on the Machgong Canal. With the outlets very imperfectly sized and regulated, and with an area of 2,500 acres irrigated from the new distributaries, which being perfectly dry absorbed a large quantity of water, a duty of 74 acres per cubic foot per second was obtained. I can account for the low duty obtained on the Taldundah Canal only by the fact that the length of the distributaries compared with the area irrigated is very long, and the outlets are too large and numerous.

'There was great demand for water between the 5th October and 5th November, and more particularly during the last week of October, until the rain came. Practically no water was escaping, and, assuming that the whole area received two waterings during the month, the gross duty of the whole canal system is fifty acres per cubic foot. If we take the water supplied from the 5th October to 5th November, and assume that it all reached the fields, it would have been sufficient to cover the area irrigated to a depth of 15¾ inches.'

"There can be little doubt that up to now there has been considerable, if not a great, waste of water, and this can only be remedied by a more economical use and retention of supply by the raiyats, and by a more carefully regulated supply from the canal based on a more exact knowledge of the irrigable lands, and on a more careful selection of the areas that should be leased. The change of procedure under the new rules will ensure this."

CROP EXPERIMENT.

19. The outturn of crops was tested during the year by 261 experiments, of which 162 were on land irrigated by canal water and 99 on unirrigated land. The results are tabulated below:—

Name of division.	Number of experiments.	Outturn per acre from irrigated land.		Number of experiments.	Outturn per acre from unirrigated land.		Value of outturn from irrigated land.		Value of outturn from unirrigated land.	
		Paddy.	Straw.		Paddy.	Straw.	Paddy at Re. 1 per maund.	Straw at 9 maunds per rupee.	Paddy at Re. 1 per maund.	Straw at 9 maunds per rupee.
1	2	3	4	5	6	7	8	9	10	11
		Mds.	Mds.		Mds.	Mds.	Rs.	Rs.	Rs.	Rs.
Mahanadi	46	800·00	673·00	27	287·00	256·00	800·00	74·78	287·00	28·45
Brahmini-Byturni	69	1,016·38	1,194·09	34	408·65	437·17	1,016·38	132·68	408·65	48·57
Acquapada-Jajpur	47	872·73	1,252·85	38	507·34	663·61	872·73	139·21	507·54	73·73
Total ...	162	2,689·11	3,119·94	99	1,203·19	1,356·78	2,689·11	346·67	1,203·19	150·75
Average of all experiments per acre	...	16·60	19·26	...	12·15	13·70	16·60	2·14	12·15	1·52
Average of five years ending with 1890-91	1890-91	20·76	23·59	...	15·05	16·12	20·76	2·51	15·05	1·79
	1889-90	21·01	23·00	...	13·71	14·40	21·01	2·56	13·71	1·60
	1888-89	16·23	20·12	...	11·02	14·02	16·23	2·24	11·02	1·56
	1887-88	12·32	16·84	...	9·38	12·00	12·25	1·67	9·31	1·19
	1886-87	15·66	23·87	...	12·25	19·29	15·61	2·40	12·21	1·94

20. The following figures show the balances outstanding at the commencement of the year under review:— ASSESSMENTS, COLLECTION AND BALANCES.

		Rs.
Water-rates	... ...	1,98,364
Miscellaneous Revenue	... ...	267
	Total ...	1,98,631

as against the balances outstanding on 1st April 1892, which were—

		Rs.
Water-rates	... ...	2,33,704
Miscellaneous Revenue	... ...	267
	Total ...	2,33,971

20. The balances, assessments, and recoveries of water-rates for the last five years are given in the table below:—

YEAR.	Amount outstanding at commencement of year.	Amount falling due during the year.	Total for recovery.	Cash realizations.	Remitted. or written off.	Balance at the end of the year.
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1887-88 ...	87,458	1,50,297	2,37,755	1,37,869	7,777	92,109
1888-89 ...	92,109	1,96,765	2,88,874	1,51,365	22,912	1,14,597
1889-90 ...	1,14,597	2,87,277	4,01,874	1,99,844	25,268	1,76,762
1890-91 ...	1,76,762	2,69,650	4,46,412	2,09,806	38,242	1,98,364
1891-92 ...	1,98,364	2,82,880	4,81,244	2,17,256	30,284	2,33,704

During the last five years the outstanding balance has steadily risen from Rs. 87,458 at the beginning of 1887-88 to Rs. 2,33,704 at the close of the year under review. This unsatisfactory state of affairs is in some measure attributable to the failure of the ijáradári system of collection, but this is not in itself sufficient to account for the high figure to which the unrealised balance has been allowed to rise. The Commissioner, in a marginal remark on the Special Deputy Collector's Report for the year under review, attributes the bad percentage of collections to a want of energy and bad management on the part of the officer responsible, who has been transferred to other duty. The Special Deputy Collector, who assumed charge of the collections after the close of the year under review, has since been making strenuous efforts to reduce arrears, and in the first seven months of the year now current Rs. 204,048 have been collected. The balance on the 1st of November stood at Rs. 97,820, and it is expected that the figures at the end of the year will show a marked improvement on the results of the last three years' administration.

CERTIFICATES

21. The following table shows the progress of the year in realizing arrears and current demand:—

Year in which irrigation occurred.	Demands.			Collected or remitted.	Balance on 31st March 1892.
	Arrears on 31st March 1891.	Demands for 1891-92.	Total.		
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
1888-89 and previous years.	31,897	9,074	40,971	32,621	8,350
1889-90 ...	58,043	8,339	66,382	46,000	20,381
1890-91 ...	1,08,424	87,053	1,95,477	1,13,537	81,940
1891-92 ...	...	1,78,414	1,78,414	55,382	1,23,033
Total ...	1,98,364	2,82,880	4,81,244	2,47,540	2,33,704

On 31st March 1891 the oldest arrears were Rs. 1,022, which fell due in the year 1886-87, out of which Rs. 544 were collected during the year. On this subject the Commissioner remarks:—

"The older an arrear is the greater is the difficulty of realising it and the more heart-burnings it causes to the detriment of the department."

The Special Deputy Collector adds:—

"Every endeavour is being made to work off these arrears."

ARREARS.

22. The amount realised by the Collectors on water-rates and miscellaneous revenue was Rs. 2,28,451, out of which Rs. 34,336 were recovered on certificates issued under the Public Demands Recovery Act. The amount so collected in 1890-91 was Rs. 24,964. The following statement gives details of the amounts recovered by certificate:—

By whom collected.	Water-rates.	Miscellaneous.	Total water-rates and miscellaneous.	Value of court-fee stamps affixed on the certificates realised by the Certificate Officer during 1891-92.
1	2	3	4	5
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Cattack Certificate Officer ...	25,666 4 4	1,279 8 1	26,945 12 5	2,734 6 8
Balasore Certificate Officer ...	7,337 10 5	52 12 11	7,390 7 4	270 0 0
Total, 1891-92 ...	33,003 14 9	1,332 5 0	34,336 3 9	3,004 6 8
Total, 1890-91 ...	24,281 13 1	681 11 3	24,968 8 4	6,667 5 0

In the following table is shown (approximately) the amount of certificate work done in each district :—

	Cuttack.				Balasore.				Total.			
	1891-92.		1890-91.		1891-92.		1890-91.		1891-92.		1890-91.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
1	2	3	4	5	6	7	8	9	10	11	12	13
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Cases for disposal—												
1. Cases pending at the close of the preceding year ..	7,560	23,599	6,227	16,106	1,484	3,900	211	805	9,044	27,499	6,438	16,906
2. Cases instituted during the year	7,694	24,049	11,226	29,853	949	4,470	2,368	5,711	8,643	28,519	13,594	35,564
Total ...	15,254	47,648	17,453	45,959	2,433	8,370	2,579	6,516	17,687	56,018	20,032	52,470
Cases disposed of—												
1. By being struck off owing to the demand having been remitted	1,299	2,464	372	58	76	142	8	52	1,375	2,607	580	110
2. By being wholly satisfied ...	9,573	25,094	9,321	22,297	2,136	7,198	1,087	2,564	11,709	32,292	10,408	24,861
Total ...	10,872	27,558	9,693	22,355	2,212	7,341	1,095	2,616	13,084	34,899	10,988	24,071
Balance outstanding at the close of the year	4,382	20,090	7,560	23,604	221	1,029	1,484	3,900	4,603	21,119	9,044	27,499

Although good progress has been made during the year in disposing of certificate cases, the number pending at the close of the year was still large. It is satisfactory to be able to note that, out of the 4,603 cases pending, 3,575 had been disposed of by August 1892. The Special Deputy Collector remarks:—

"The number of cases struck off in the Cuttack district was unduly large. It is to be hoped that these cases will be reduced in future by the exercise of proper discretion in filing them. Instructions have been issued to zilladars to the effect that in pursuance of the provision of the Public Demands Recovery Act they should, as a rule, apply for such dues as may not afterwards be found irrecoverable."

23. The number of objections against assessment filed and disposed of during the year are shown in detail below :— **Complaints.**

Division.	(I)—Ordinary Remissions.				(II to IV)—Other Complaints.				Total complaints received during the year excluding those pending from previous year.	Pending.	Remarks.
	Received during the year and pending from previous year.	Disposed of.		Pending.	Received during the year and pending from last year.	Disposed of.		Pending.			
		Remission allowed.	Remission refused.			Allowed.	Rejected.				
1	2	3	4	5	6	7	8	9	10	11	
1.—Water-rates—											
Lands not irrigated	787	536	159	88	...	...	...	...	561	88	
Do. damaged	388	289	46	53	...	...	...	...	229	53	
Erroneous assessment ...	610	427	75	108	...	...	...	...	249	108	
Regulators not allowed in drainage cuts.	22	14	5	3	...	...	...	...	17	3	
Chowkidars' jaghir	189	155	14	20	...	...	...	...	147	20	
Double assessments	192	163	29	...	...	...	...	...	134	...	
Appeals	7	7	...	...	...	...	...	...	6	...	
2.—Miscellaneous	406	272	42	92	...	...	...	...	319	92	
3.—Mutations and other complaints.	...	...	...	...	2,604	1,949	189	466	2,118	466	
Total, 1891-92 ...	2,597	1,863	370	364	2,604	1,949	189	466	3,780	830	
Total, 1890-91 ...	4,560	5,338	287	935	1,795	1,273	36	486	3,185	1,421	

The Special Deputy Collector writes:—

"The number of objections filed was greater than that in the previous year, but the disposal of cases was more satisfactory. The number pending at the end of the previous year was 1,421, whereas at the end of the year 1891-92 it was only 830.

"The timely issue of purchas and prompt collection are the best means of reducing the number of objections."

REMISSIONS. 24. Sums aggregating Rs. 30,485 were remitted and written off as irrecoverable during the year, against Rs. 38,688 in the year previous. The following is the Deputy Revenue Superintendent's classification of the reasons for remission:—

Revision of Assessment.

	Rs.	A.	P.
(a) Unirrigated crops	16,360	3	5
(b) Damaged ,, ...	8,034	4	11
(c) Chowkidar's jageer	2,087	0	6
Total ...	26,481	8	10

Remissions.

	Rs.	A.	P.
(a) Waste land	926	4	1
(b) Land occupied by canals	44	6	7
(c) Twice assessed	491	6	4
(d) Barred by limitation	105	15	1
(e) Excessive realizations	562	4	9
(f) Change of rates	195	11	6
(g) Erroneous assessments	591	8	6
(h) On account of death of defaulter ...	101	14	6
(i) Absconding of defaulter	322	11	9
(j) Lease cancelled	138	1	1
Total ...	3,480	4	2

Written off.

	Rs.	A.	P.
Irrecoverable demands	523	9	5
Total ...	30,485	6	5

The Superintending Engineer remarks:—

"The remissions granted under *a*, &c., amounting to four-fifths of the whole, are to a large extent fictitious, as noted in last year's report, and are the result of a pernicious system of including in the lease and demand high lands that cannot be irrigated and low lands that do not require irrigation. Under the rules recently introduced this will be done away with, and the area leased will truly show the area to which irrigation is to be given, and for which the Engineers will be responsible for giving a full supply that will ensure a full crop. In this connection I beg to refer to the correspondence ending with Bengal Government's No. 2741 of 4th March 1892.

"The undernoted table shows against what year's dues the remission of Rs. 29,760 have been granted; that they should only last year have been granted for dues since 1886-87 shows a lamentable want of energy and system in the Collecting Department:—

Year.	Amount. Rs.	A.	P.
1886-87	61	3	1
1887-88	331	4	0
1888-89	2,085	3	0
1889-90	10,169	6	7
1890-91	16,820	12	11
1891-92	292	5	6
Total ...	29,760	3	1"

25. The statement below compares the cost of the revenue establishment for the last five years:—

	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6
Establishment under Collector.	Rs.	Rs.	Rs.	Rs.	Rs.
Permanent establishment, including travelling allowance	20,255	21,448	22,116	21,848	22,014
Temporary establishment	8,494	9,941	19,112	17,451	17,504
Contingencies	2,218	2,889	4,482	2,928	3,458
Headmen's fees	2,208	1,680	2,244	2,803	6,591
Establishment under Executive Engineer.					
Permanent and temporary establishment ...	2,964	3,052	3,398	3,417	3,447
Water-regulation establishment	4,161	4,151	4,150	4,144	4,127
Total ...	40,300	43,161	55,502	52,591	57,141
Collections of water-rates and miscellaneous revenue by the Canal Revenue Department	1,46,039	1,60,328	2,09,823	2,19,692	2,28,451
Percentage ...	27·6	26·9	26·4	23·9	25·0

There has been an increase in the cost of establishment to the extent of Rs. 4,550, which is mainly due to arrears of headmen's fees amounting to Rs. 3,788, due for previous years, having been paid in this year.

26. The receipts from navigation include the earnings of the transport service maintained by Government on the High Level Canal between Cuttack and Bhuddruck and Acquapada and Jajpur, a distance of 80½ miles each way, in addition to tolls on boats and rafts. The management of the canals is, in this respect, entirely in the hands of the engineering staff.

An increase of 24¾ miles has taken place in the total length of the canals owing to the opening of the Taldundah Extension Canal and of three miles of feeder channel on the Gobri Extension Canal.

27. The tollage receipts of each of the canal systems for the last five years are shown below:—

Year.	Taldundah Canal System.		Kendrapara Canal System.		High Level Canal, Range I.		High Level Canal, Range II.		High Level Canal, Range III.		Jajpur Canal.		Total.	
	Number of miles open.	Tollage receipts.	Number of miles open.	Tollage receipts.	Number of miles open.	Tollage receipts.	Number of miles open.	Tollage receipts.	Number of miles open.	Tollage receipts.	Number of miles open.	Tollage receipts.	Number of miles open.	Tollage receipts.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.	No.	Rs.
1887-88	31	6,267	75	46,659	33	8,306	12½	4,085	19	1,311		..	170½	66,628
1888-89	31	4,310	75	53,786	33	6,642	12½	3,392	19	1,601	6½	99	177	69,830
1889-90	31	4,426	75	60,245	33	8,386	12½	3,133	19	1,386	6½	163	177	78,039
1890-91	31	2,148	75	86,907	33	12,229	12½	3,185	19	2,174	6½	318	177	1,06,961
1891-92	55¾	4,357	78	98,462	33	12,854	12½	3,027	19	1,775	6½	286	204¾	1,20,761

The total Rs. 1,20,761 includes private traffic to the amount of Rs. 1,15,881, the balance, Rs. 4,880, being the toll charges on Government boats. The increase in tollage from private traffic, compared with 1890-91, is Rs. 16,638. This is due in some measure to the canals having been closed for shorter periods this year, but the principal cause is the expansion of local traffic, mainly in rice, which occurred on the Taldundah Canal and Ranges I and II of the High Level Canal. On the Kendrapara Canal there was a falling-off of 5,974 tons in the grain traffic.

The Superintending Engineer writes:—

"It is known that during the freshets in the Mahanadi last rains, the rice merchants sent their cargoes by the Taldundah Canal, owing to the Kendrapara Canal head lock being

partly silted up, and this accounts for part of the increase. The Executive Engineer reports that a part of the increase on the Taldundah Canal is undoubtedly due to an increase in local traffic, which was unfortunately checked by breaches in the Taldundah Extension Canal, caused by the cyclonic storm of November last. The local traffic chiefly consists of rice, which is carried by boats from Rahama in the 38th mile to Bhutmundi in the 50th mile, where it is stored for despatch to False Point along the Mahanadi river. Rice is also sent from near Tirtole to Cuttack by canal, and a gradual expansion of this local traffic is anticipated.

"The increases on the High Level Canal, Ranges I, II, and III, are explained by the Executive Engineer as due to a large quantity of rice having been imported into Cuttack. Less rice was exported from Jajpur than last year."

The increase in the navigation revenue, especially in the Kendrapara Canal, the tollage on which averages Rs. 1,262 per mile, is encouraging; over the whole system the tollage amounts to Rs. 584 a mile.

TRAFFIC.

28. Details regarding the traffic (excluding the transport service) of all the canals in Orissa for the last ten years are given in the following table:—

		1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1		2	3	4	5	6	7	8	9	10	11
Number of miles open ...	No.	164½	164½	164½	170½	170¼	170½	177	177	177	204¾
Toll collections	Rs.	66,736	61,602	52,784	64,093	58,664	66,628	69,830	78,039	1,06,961	1,20,764
Rate of toll per mile .	,,	405·6	374·4	320·8	375·9	344·1	390·7	394·3	440·9	604·3	589·8
Number of boats plying cargo and passenger .	No.	13,425	15,507	18,768	20,662	14,311	12,084	11,475	11,937	12,995	12,946
Tonnage of cargo and passenger boats .. .	Tons.	142,093	145,685	157,017	180,142	128,398	175,996	153,674	186,019½	250,243	266,601½
Estimated value of cargo, including rafts . .	Rs.	43,98,758	47,59,655	44,80,105	46,32,733	41,81,650	50,32,093	47,40,957	48,68,255	85,21,551	93,49,756

TRANSPORT SERVICE.

29. The cost of working the transport service between Bhuddruck and Cuttack and between Acquapada and Jajpur was Rs. 16,636, and the actual receipts Rs. 14,967. The loss incurred on this service is therefore Rs. 1,669, against a loss of Rs. 3,851 in the previous year.

The working charges for 1891-92 include Rs. 4,880 as tollage, while the earnings include Rs. 690, hire of boats; allowing for which the expenditure was Rs. 11,756 and the earnings Rs. 14,277, or a net profit of Rs. 2,521 against Rs. 1,626 in the previous year.

MISCELLANEOUS RECEIPTS.

30. The miscellaneous receipts for the last five years are shown in the following statement:—

DETAILS.		1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1		2	3	4	5	6
		Rs.	Rs.	Rs.	Rs.	Rs.
Sale of water		96	41	243	222	56
Plantations		1,131	1,450	728	1,035	917
Other canal produce		377	895	568	845	936
Water-power		...	...	...	...	...
Rent of buildings		5,000	4,855	4,781	3,067	6,332
Fines		...	...	...	...	...
Miscellaneous	Rent of lands ...	5,678	5,857	7,659	6,793	8,232
	,, fisheries ...	768	877	920	1,039	1,104
	Cost of process ...	278	68	63	6	...
	Sales of old materials	...	31	65	100	96
	Other items ...	843	168	116	601	170
Total ...		14,171	14,242	15,143	13,708	17,843

31. The Superintending Engineer gives the charge for maintenance and repairs during the year as Rs. 1,75,467, distributed as below:— MAINTENANCE AND REPAIRS.

	1889-90.	1890-91.	1891-92.
1	2	3	4
	Rs.	Rs.	Rs.
Extensions and improvements	...	11,081	8,679
Head-works	75,300	74,407	48,154
Main canals	1,09,839	90,592	82,741
Distributaries	23,988	21,992	15,324
Drainage and protective works	15,508	12,676	10,389
Cost of working transport service	5,829	11,478	10,180
Total ...	2,30,464	2,22,226	1,75,467

32. The maintenance of the weirs accounts for Rs. 38,681 out of the total Rs. 48,154 spent on head-works. Details are given below:— HEAD-WORKS.

NAME OF WEIR.	Length.	EXPENDITURE.			RATE PER RUNNING FOOT.		
		1889-90.	1890-91.	1891-92.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6	7	8
	Feet.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Naraje	3,833	10,275	4,728	3,194	2·68	1·23	2·68
Mahanadi ...	6,349	30,331	33,340	19,484	4·78	5·25	4·78
Beropa	1,980	4,709	7,616	8,433	2·38	3·85	2·38
Brahmini... ...	4,000	2,170	4,302	2,721	0·54	1·08	0·54
Pattia	783	2,203	4,194	2,538	2·81	5·36	2·81
Byturni	1,026	6,295	3,792	1,244	6·14	3·70	6·14
Burrah	526	5,470	4,450	1,067	10·40	8·46	10·40
Total of all weirs ...	18,497	61,453	62,422	38,681	3·32	3·37	3·32

The reduction of expenditure on repairs to weirs is due to the absence of heavy floods. At the Beropa weir the rubble packing was worn out, and had to be replaced.

MAIN AND BRANCH CANALS.

33. The expenditure on each canal for the last three years is shown below:—

Canals.	1889-90.			1890-91.			1891-92.		
	Miles.	Cost.	Per mile.	Miles.	Cost.	Per mile.	Miles.	Cost.	Per mile.
1	2	3	4	5	6	7	8	9	10
	No.	Rs.	Rs.	No.	Rs.	Rs.	No.	Rs.	Rs.
Kendrapara	39	29,190	748	39	30,723	787	39	24,459	627
Ditto extension ...	15	2,832	189	15	1,835	122	15	2,442	163
Gobri	15	7,410	494	15	8,448	563	15	10,286	685
Do. extension	6	3,222	537	6	14,406	2,401	9	7,516	835
Pattamundi	47	3,999	85	47	9,972	212	47	4,367	93
Taldundah	27	22,124	819	27	6,471	239	51¾	7,587	146
Machgong	19	12,713	669	32	5,405	172	32	6,671	208
High Level, Range I ...	33	13,145	398	33	12,017	364	33	9,160	277
Ditto, do. II ...	12½	5,793	463	12½	3,757	300	12½	4,071	326
Ditto, do. III ...	19	8,690	457	19	5,589	294	19	4,907	258
Jajpur Canal	6½	721	111	6½	1,033	158	6½	1,275	196
Total ...	239	1,09,839	460	252	99,746	395	279¾	82,741	295

The maintenance charges of main canals fell from Rs. 99,756 to Rs. 82,741. The expenditure by subheads in each canal is commented on by the Superintending Engineer with explanations of increases and decreases. The Kendrapara Canal shows a reduction of expenditure at the rate of Rs. 1,607 per mile, or Rs. 6,267 in all, in spite of increased charges for silt clearing, owing to the supply lock and channel having silted up during floods, and of damages to buildings by the cyclone. There is a small increase on the Kendrapara Extension Canal. A large amount of jaffry work for bank protection was carried out on the Gobri Canal, and silting was heavy, while the damage done to buildings by the cyclone also caused excess, the result being a raising of the mileage rate by Rs. 122·5. There were material reductions on the Gobri Extension Canal and on the Pattamundi Canal, the expenditure on the latter being Rs. 4,367 against Rs. 9,972 last year, owing to economy in repairs to banks and masonry works. Expenses have risen on the Taldundah Canal, the causes being increased silt-clearing and dredging, cyclone damages, and the cost of repairs to ferry boats which is now charged to repairs instead of to tools and plant as heretofore. The two last-mentioned causes also operated to raise the charges on the Machgong Canal, and, combined with increased cost of repairing the canal banks, brought the mileage rate up to Rs. 208·5 against Rs. 171·8 in 1890-91. On the High Level Canal there was, on the whole, a reduction, mainly on Range I, under all heads except repairs to banks, and on the Jajpur Canal a small excess of Rs. 243, due to bank repairs.

DISTRIBUTARIES.

34. The average mileage rate for the maintenance of distributaries was Rs. 20·94 as compared with Rs. 30·06 in the previous year:—

	1889-90.			1890-91.			1891-92.		
	Miles.	Cost.	Per mile.	Miles.	Cost.	Per mile.	Miles.	Cost.	Per mile.
1	2	3	4	5	6	7	8	9	10
DISTRIBUTARIES.	No.	Rs.	Rs.	No.	Rs.	Rs.	No.	Rs.	Rs.
Kendrapara Canal System	333¾	9,826	29·44	357	9,975	22·34	357	6,574	18·41
Taldundah Canal	71½	3,068	42·91	71½	1,953	27·31	71½	1,166	16·30
Machgong Canal	122½	5,909	48·34	122½	4,084	33·41	122½	2,753	22·52
High Level Canal, Range I	131½	5,185	39·50	131½	3,961	30·18	131½	2,663	20·20
Ditto, do. II	......	......	......	......	......	......	......	......	......
Ditto, do. III	......	......	......	49½	2,019	4·80	49½	2,168	43·80
Total ...	658¾	23,988	36·41	731½	21,992	30·06	731½	15,324	20·94

The lengths of distributaries in the above are those which have been brought on the revenue account, and consequently differ om the lengths given in paragraph 13 which include all so far advanced as to be fit for use, whether the capital account is still open or not.

The Superintending Engineer remarks: —

"The expenditure on distributaries is Rs. 6,668 less than that of the previous year; the mileage rate being only Rs. 20·94, against 30·06 for a length of 731½ miles. This rate is abnormally low, and a considerably increased expenditure will be required for the next two years to place the distributaries in good working condition. Levels are now being taken of all distributaries and recorded, and *datum* blocks are being fixed throughout their length. When this has been completed, bed clearance will be effected in a more systematic and economical way than has hitherto been found possible, and the branch distributaries more particularly will be made fully effective."

Drainage and Protective Works.

35. The total expenditure on drainage and protective works was Rs. 10,389 against Rs. 12,696 in 1890-91. The most important items under this head are the protective embankments on the High Level and Taldundah Canals, and the drainage channels connected with the Kendrapara, Taldundah, and Machgong Canals.

Dredging and Silt-clearing.

36. The cost of silt-clearing and dredging during the year 1891-92 is given in the following table:—

	Silt-clearing.			Dredging.		
	Quantity.	Cost.	Rate per 1,000 c. ft.	Quantity.	Cost.	Rate per 1,000 c. feet.
1	2	3	4	5	6	7
	C. feet.	Rs.	Rs.	C. feet.	Rs.	Rs.
Kendrapara Canal	696,541*	2,989	4·29	1,151,704	7,797	6·77
„ Extension ..	...	...	...	18,710	128	6·84
Pattamundi Canal	65,201	161	2·16	...	...	...
Gobri Canal	687,620	1,547	2·25	...	57	...
„ Extension	352,889	883	2·50	...	1,415	...
High Level Canal, Range I ...	316,800	948	3·00	...	...	...
Taldundah Canal	295,055	1,685	5·71	79,380	529	6·66
Machgong Canal	20,956	52	2·48	...	...	...
High Level Canal, Range II ...	456,221	1,113	2·44	61,166	207	3·38
Jajpur Canal	24,337	78	3·20	...	...	...
High Level Canal, Range III ...	392,310	924	2·36	...	...	...
Total	3 307,980	10,380	3·14	1,310,960	10,133	7·73

* 486,011 cubic feet of silt hand dredged are included in this item; hence the high rate.

The cost of raising and delivery of the silt has amounted to Rs. 4·34, and that of haulage and discharge to Rs. 2·43 per thousand cubic feet on the Kendrapara Canal. The rates for the Kendrapara Extension Canal are Rs. 4·59 and Rs. 2·25, respectively.

PLANTATIONS.

37. The following table shows the state of the plantations for the last two years :—

Year.	Trees over 12 feet.	Saplings from 4 to 12 feet.	Seedlings below 4 feet.	Total.
1	2	3	4	5
	No.	No.	No.	No.
1890-91 ...	69,741	26,806	50,061	146,608
1891-92 ...	66,307	34,469	23,244	124,020

MIDNAPORE CANAL.

CAPITAL ACCOUNT.

38. The Capital, Interest, and Revenue Accounts of this Canal are given below :—

1.—CAPITAL ACCOUNT.

Heads of Account.	Outlay during 1891-92.	Outlay to the end of 1891-92.
1	2	3
Direct charges.	Rs.	Rs.
I.—Works	...	53,53,307
II.—Establishment	...	19,25,180
III.—Tools and plant	14,469	9,16,982
IV.—Suspense accounts	...	......
Loss by exchange	...	94,800
Total ...	14,469	82,90,269
V.—*Less*—Receipts on Capital Account	...	31,558
Total direct charges ...	14,469	82,58,711
Indirect charges.		
Capitalization of abatement of land revenue	...	168
Leave and pension allowances ...	...	1,83,965
Total indirect charges ...	...	1,84,133

All capital expenditure on this canal is now, agreeably to the orders of the Government of India, charged to the head 43—Minor Works and Navigation, and provided from Provincial Funds, the canal being no longer classed as a productive work. The expenditure of the year, amounting to Rs. 14,469, was incurred on the construction of a steam-tug.

2.—INTEREST ACCOUNT.

INTEREST ACCOUNT.

		Rs.
Interest charges to end of 1890-91	... ...	60,79,140
Ditto for 1891-92	... ...	3,30,059
Total	...	64,09,199

3.—REVENUE ACCOUNT (Actuals).

REVENUE ACCOUNT.

Particulars.	Expenditure. During 1890-91.	Expenditure. During 1891-92.	Particulars.	Receipts. During 1890-91.	Receipts. During 1891-92.
1	2	3	4	5	6
	Rs.	Rs.		Rs.	Rs.
DIRECT CHARGES.					
I.—*Maintenance and repairs.*					
Works (extensions and improvements) ...	......	......	Water-rates ...	1,15,438	1,32,981
Repairs	1,05,038	1,41,262	Navigation ...	1,12,754	1,32,572
Compensation ...	......	......	Miscellaneous ...	9,004	19,147
Establishment, including direction and accounts ...	39,562	35,278	Total ...	2,37,196	2,84,700
Tools and plant ...	23,929	51,761	*Less*—Refunds of revenue	205	3
Total ...	1,68,529	2,28 301	Total receipts ...	2,36,991	2,84,697
II.—*Revenue management.*					
Irrigation establishment	22,809	21,273			
Navigation ditto ...	7,711	7,750			
Total ...	30,520	29,023			
Total direct charges ...	1,99,049	2,57,324			
INDIRECT CHARGES.					
Capitalized abatement of land revenue ...	... ..	......			
Leave and pension allowances	9,811	9,002			
Total indirect charges...	9,811	9,002			
Total working expenses	2,08 860	2,66,326			
Net revenue ...	28,131	18,371			
Total ...	2,36,991	2,84,697			

EARNINGS. 39. The receipts under "water rates," Rs. 1,32,981, shown above, are the actual cash collections during the year, and include a sum of Rs. 70,959 on account of irrigation which occurred in years previous to 1891-92. The "earnings" of the last four years, including all sums due for irrigation which occurred during each year respectively, whether leases for the irrigation were executed during or subsequent to the year in which the irrigation occurred, are given in the table below. For the year under review the earnings cannot be given exactly, as the amounts which will fall due in subsequent years are for irrigation on unleased areas, where the justice of the demand is disputed by the cultivators, and the assessment is consequently delayed. The total of such sums for 1891-92 is estimated at Rs. 3,329. For 1890-91 a further amount may have to be added next year.

Year in which the irrigation occurred.	Year in which leases were executed.	Earnings of 1888-89.	Earnings of 1889-90.	Earnings of 1890-91.	Earnings of 1891-92.
1	2	3	4	5	6
		Rs.	Rs.	Rs.	Rs.
1888-89	1888-89	1,18,243	...	...	...
	1889-90	13,200	...	...	...
	1890-91	366	...	...	...
	1891-92	Nil.	...	...	...
1889-90	1889-90	...	1,03,404	...	...
	1890-91	...	7,050	...	...
	1891-92	...	102	...	...
1890-91	1890-91	...	...	1,23,043	...
	1891-92	...	...	3,800	...
1891-92	1891-92	...	...	...	1,25,916
	Subsequent years ...	...	Estimated at	...	3,329
	Total ...	1,31,809	1,10,556	1,26,843	1,29,245
Deduct refunds	... ...	285	181	205	3
	Net Total ...	1,31,524	1,10,375	1,26,638	1,29,242

The net financial results calculated on the earnings for the last four years are, therefore, as shown in the following statement, the figures in which should be substituted for those given in the revenue reports of the corresponding years. The figures for "navigation" and "miscellaneous" are the actual realizations during the year:—

Year.	1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5
	Rs.	Rs.	Rs.	Rs.
Earnings—				
(a) Irrigation	1,31,809	1,10,375	1,26,638	1,29,242
(b) Navigation ...	1,49,480	1,48,164	1,12,754	1,32,572
(c) Miscellaneous ...	11,299	13,016	9,004	19,147
Total Earnings ...	2,92 588	2,71,555	2,48,396	2,80,961
Outlay	2,09,804	2,08,806	2.08,860	2,66,326
Net profit	82,784	62,749	39,536	14,635

40. The Receipts on Revenue Account and Working Expenses of the Midnapore Canal during the last ten years are shown below:— FINANCIAL RESULTS.

PARTICULARS.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6	7	8	9	10	11
RECEIPTS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Water-rates	1,04,060	1,31,000	1,16,807	1,08,709	1,08,834	90,837	91,016	1,16,424	1,15,438	1,32,981
Navigation	1,46,922	1,20,580	1,28,747	1,37,578	1,09,693	1,26,574	1,49,480	1,48,164	1,12,754	1,32,572
Miscellaneous	17,028	12,996	12,401	16,197	15,658	16,967	11,299	13,016	9,004	19,147
Total ...	2,68,010	2,64,576	2,57,055	2,62,484	2,34,185	2,34,378	2,51,795	2,77,604	2,37,196	2,84,700
Less—Refunds of revenue	...	44	112	...	211	453	285	181	205	3
Total receipts ...	2,68,010	2,64,532	2,57,843	2,62,484	2,33,974	2,33,925	2,51,510	2,77,423	2,36,991	2,84,697
WORKING EXPENSES.										
DIRECT CHARGES.										
I.—Works, Maintenance, and repairs.										
Works and repairs ...	1,40,067	1,27,628	1,34,036	1,24,857	1,37,752	1,31,181	1,06,391	1,13,507	1,05,035	1,41,262
Compensation	...	30	...	...	...	...	...	...	...	...
Establishment, including direction and accounts	32,218	29,342	30,822	28,651	31,677	46,467	36,111	29,753	39,562	35,278
Tools and plant	31,354	31,229	26,591	25,952	25,003	31,409	24,335	27,612	23,929	51,761
Total ...	2,03,639	1,88,229	1,91,419	1,79,460	1,94,432	2,09,057	1,66,585	1,70,872	1,68,529	2,28,301
II.—Revenue management.										
Irrigation establishment	20,337	19,862	24,004	22,790	24,154	22,797	25,927	21,903	22,809	21,273
Navigation ditto ...	14,101	7,511	7,609	7,610	7,575	7,759	7,550	7,719	7,711	7,750
Total ...	34,438	27,373	31,613	30,400	31,729	30,556	33,477	29,622	30,520	29,023
Total direct charges ...	2,38,077	2,15,602	2,23,062	2,09,860	2,26,161	2,39,613	2,00,062	2,00,494	1,99,049	2,57,324
Indirect charges	8,425	7,940	8,741	8,267	8,877	10,783	9,742	8,312	9,811	9,002
Total working expenses ...	2,46,502	2,23,542	2,31,803	2,18,127	2,35,038	2,50,396	2,09,804	2,08,806	2,08,860	2,66,326
Net revenue ...	21,508	40,990	26,040	44,357	(—) 1,064	(—) 16,471	41,706	68,617	28,131	18,371

41. The length of canal open for navigation during 1891-92 remained the same as that for the previous year, viz., 72 miles, and no additions were made during the year to the areas protected or commanded. The table below shows the capabilities of the canal and distributaries, and the areas protected, commanded, irrigable, and assessed:— LENGTHS OF CANALS AND DISTRIBUTARIES.

NAME OF CANAL.	1890-91.								1891-92.							
	Navigable canals.	Canals for irrigation only.	Distributaries and village channels.	Area protected from floods.	Area under command.	Area provided with distributaries.	Area irrigated.	Percentage of area irrigated to area provided with distributaries.	Navigable canals.	Canals for irrigation only.	Distributaries and village channels.	Area protected from floods.	Area under command.	Area provided with distributaries.	Area irrigated.	Percentage of area irrigated to area provided with distributaries.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Miles.	Miles.	Miles.	Acres.	Acres.	Acres.	Acres.	Acres.	Miles.	Miles.	Miles.	Acres.	Acres.	Acres.	Acres.	Acres.
Under Midnapore weir	44	...	286	294,400		100,000	76,645	76·6	44	...	286	294,400		100,000	77,631	77·6
Under Panchkurah weir ...	12	...	35	112,640	180,000	23,000	4,981	21·7	12	...	35	112,640	180,000	23,000	5,966	25·9
Tidal reaches, Ranges I and II ...	16	...	18·00	30,080		2,000	376	18·8	16	...	18	30,080		2,000	376	18·8
Total Midnapore Canals ...	72	...	339*	437,120	180,000	125,000	82,002	65·6	72	...	339*	437,120	180,000	125,000	83,973	67·2

* Of this, the length of distributaries is 283·19 miles.

OUTLETS. 42. The statement below shows the area commanded by distributary channels and the number of outlets in use in the Division:—

PORTION OF CANAL.	Total length of channel.	Area commanded.	NUMBER OF TEMPORARY OUTLETS.		NUMBER OF PERMANENT OUTLETS.	
			1890-91.	1891-92.	1890-91.	1891-92.
1	2	3	4	5	6	7
	Miles.	Acres.				
Under Midnapore weir ...	229·94	100,000	1,249	1,260	55	55
Do. Panchkurah weir ...	35·25	23,000	202	202	10	10
Do. Tidal Reaches, Ranges I and II	18·00	2,000	6	6	11	11
Total ...	283·19	125,000	1,457	1,468	76	76

RAINFALL. 43. The following statement shows the rainfall for the year 1891-92 and the four previous years at four registering stations which lie within the area irrigated by the Midnapore Canal:—

STATIONS.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	Average of former years.	
						No. of years.	Average rainfall.
1	2	3	4	5	6	7	8
	Inches.	Inches.	Inches.	Inches.	Inches.		Inches.
Midnapore ...	55·38	68·00	48·71	57·64	55·08	22	56·26
Panchkurah ...	56·21	59·47	51·78	55 84	41·60	22	56·19
Luchmapore ...	47·00	60·93	45·61	59·30	57·48	6	58·50
Mowah ...	49·76	60·14	31·80	49·93	53·07	6	54·77
Average ...	52·09	62·13	44·48	55·68	51·81	......	56·43

The total rainfall was somewhat below the average of former years, especially at the Panchkurah observing station. It was unevenly distributed, being fairly abundant in the early part of the season, and beginning to fail in September, while October and all succeeding months to the end of the year were marked by an almost complete absence of rain. The distribution over the months of the kharif season is shown below:—

	Midnapore.	Panchkurah.	Luchmapore.	Mowah.	Average, 1891-92.	Average, 1890-91.
1	2	3	4	5	6	7
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
July ...	8·22	10·35	10·79	8·58	9·48	5·69
August ...	23·27	8·85	20 45	20·65	18·30	4·42
September ...	10·44	10·33	11·33	11·97	11·02	10·56
October ...	0·58	0·54	2·27	1·30	1·17	5·20
Total, kharif season, 1891-92.	42·51	30·07	44·84	42·50	39·97	25·87
Do. 1890-91 ...	24·56	28·26	26·68	23·97	25·87	......

FLOODS. 44. There were no heavy floods during the year. The highest gauge-readings of the river Cossye at Midnapore and Panchkurah above and below weir,

and those of the river Rupnarain at Dainan and Kantapukhur are shown in the statement below, the readings being the height in feet above mean sea level:—

River.	Locality.	1891-92.		1890-91.		Highest recorded.	
		Date.	Reading.	Date.	Reading.	Date.	Reading.
1	2	3	4	5	6	7	8
Cossye	Midnapore above weir	14th August 1891 ...	87·80	30th July 1890 ...	86·50	1868 ...	92·30
	Ditto below weir	Ditto ...	80·00	Ditto ..	81·00	Do. ...	91·55
	Panchkurah above weir	Ditto ...	33·50	25th June 1890 ...	29·40	10th October 1876 ...	35·00
	Ditto below weir	Ditto ...	31·90	Ditto ...	29·00	Ditto ...	31·30
Rupnarain	Dainan	19th August 1891 ...	14·20	31st July 1890 ...	14·20	26th August 1865 ...	17·3[illegible]
	Kantapukhur	Ditto ...	13·80	28th September 1890 ...	14·40	Ditto ...	16·80

The discharge of the river Cossye reached its maximum, 58,453 cubic feet per second, on the 14th August 1891, and from that date diminished rapidly. the average discharge during September being 7,290, and during October 1,658 cubic feet per second, and falling to 401 cubic feet per second in November.

45. The area of each crop irrigated during 1891-92 and the nine previous years exclusive of unleased areas compared with the yearly rainfall is shown below:— IRRIGATION.

Year.	Kharif.	Rabi.	Perennial.	Total.	Rainfall.
1	2	3	4	5	6
	Acres.	Acres.		Acres.	Inches
1882-83 ...	101,939	...	...	101,939	58·81 *
1883-84 ...	97,919	...	...	97,919	47·99 *
1884-85 ...	69,294	1,835	...	69,294	53·01 *
1885-86 ...	68,769	..	...	70,604	81·28 *
1886-87 ...	69,762	...	...	69,762	53·05
1887-88 ...	64,702	1,162	...	65,864	22·08 †
1888-89 ...	66,408	3,369	...	69,777	62·13 †
1889-90 ...	68,370	440	...	68,810	44·47 †
1890-91 ...	82,002	...	...	82,002	55·68 †
1891-92 ...	83,905	68	...	83,973	51·81 †

* Mean of observations of two stations—Midnapore and Panchkurah.

† Average of four stations throughout the irrigated areas under the Midnapore and Panchkurah weirs.

The Superintending Engineer writes—

"Owing to want of rain from September 1891, it was found impossible to irrigate the full area leased, which was slightly in excess of the area actually irrigated. When water was most wanted, the discharge of the Cossye ran as low as 200 to 300 cubic feet per second, so that in the months of October and November the river pools were drained in order to meet the demands for water. As it turned out, the irrigation operations of the year may be considered very successful, considering the water available. Of the total area under irrigation during the year, quite 90 per cent. was under the Midnapore weir, and the rest under the Panchkurah weir and in the tidal reaches."

46. In the following table information is given as to the areas under lease of each kind at the beginning of the year, the progress of leasing during the year, and the leases which remained in force after its close. The figures do not include assessments for illicit irrigation for which leases were executed after 31st March 1892:—

Particulars.	Kharif.			Sugarcane and other perennial irrigation.	Rabi.	Total.
	Long leases.	Annual leases.	Surreptitious irrigation.			
1	2	3	4	5	6	7
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Leases in f(rce at the end of 1890-91	81,927	75	...	...	...	82,002
" which expired at the end of 1890-91 ...	2,468	75	...	...	...	2,543
" in force at th- beginning of 1891-92 ...	79,459	...	...	...	...	79,459
" executed during 1891-92	4,446	...	...	...	68	4,514
" in force at the end of 1891-92	83,905	...	...	...	68	83,973
" which expired at the end of 1891-92 ...	17,133	...	...	...	68	17,201
in force at the beginning of 1892-93 ...	66,772	...	...	...	...	66,772

UTY OF WATER.

47. The duty obtained from the gross discharge during the past three years is detailed in the following statement:—

Particulars.			Under Midnapore weir.	Under Panchkurah weir.
1			2	3
1889-90	Kharif ...	Acres	63,598	4,314
		Duty on gross supply ...	**134**	**77**
1890-91	Kharif ...	Acres ...	76,645	4,981
		Duty on gross supply ...	**160**	**89**
1891-92	Kharif ...	Acres	77,631	5,898
		Duty on gross supply ...	**172**	**64**

The duty calculated from the average gross supply during October 1891 is under the Midnapore weir 210, and under the Panchkurah weir 24 acres per cubic foot per second. The very high duty attained tends to throw doubt on the contention that the area actually irrigated is much in excess of that assessed with water rates. Probably at some periods during the year other than leased lands benefit by canal water, but it is improbable that any considerably increased area could be regularly supplied with water.

The areas irrigated in the Tidal Reaches, Ranges I and II, are not taken account of in the above statement. That area in the year under review was 376 acres, being the same as last year.

F EXPERIMENTS.

48. No experiments on outturn of crops were carried out during the year.

ASSESSMENTS, COLLECTIONS, AND BALANCES.

49. The following comparative statement shows the balances, assessments, and recoveries of water-rates on the Midnapore Canal during the last five years:—

Year.	Amount outstanding at commencement of year.	Amount falling due during the year.	Total for recovery.	Cash realization.	Remitted or written off.	Balance at the end of the year.
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1887-88 ...	50,749	1,02,532	1,53,281	90,837	5,951	56,493
1888-89 ...	56,493	1,23,337	1,79,830	91,016	4,041	84,773
1889-90 ...	84,773	1,17,202	2,01,975	1,16,424	34,907	50,644
1890-91 ...	50,644	1,30,595	1,81,239	1,15,438	834	64,967
1891-92 ...	64,967	1,29,822	1,94,789	1,32,981	2,836	58,972

The figures in the above statement have been furnished by the Deputy Superintendent of Canal Revenue, and agree with those given in the Examiner's memorandum.

In the arrear balance of Rs. 64,967 with which the year opened, there were no demands of older standing than 1887-88. Rupees 58,960 were for dues incurred in 1890-91, and Rs. 6,007 for those of the three preceding years.

The current demand, amounting to Rs. 1,29,822, was composed of Rs. 1,25,916 earned within the year, and Rs. 3,906 earned in the four preceding years, but not recoverable till 1891-92.

ARREARS.

50. The whole amount for recovery, including arrears, was Rs. 13,550 more than that in 1890-91, while the collections were Rs. 17,543 more, the final result being a decrease of Rs. 5,995 in the balance outstanding at the end of the year. In the following table, arrear and current dues are distinguished, the sums composing the demand are distributed by the years in which they

were earned, and the proportions of each year's earnings, recovered or remitted, are separately shown:—

YEAR.	Amount previously due and unrealized.	Amount falling due within the year.	Total amount due to end of the year.	ADJUSTMENT OF THE YEAR.				Balance unrealized at end of the month of March 1891.	Percentage adjusted.
				Cash recoveries.	Remission authorized.	Written off as being irrecoverable.	Total.		
1	2	3	4	5	6	7	8	9	10
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Per cent.
1887-88 ...	44 6 6	4 6 9	48 13 3	18 5 6	..	30 7 9	48 13 3		100·0
1888-89 ...	1,431 0 9	0 1 6	1,261 2 3	411 8 3	224 4 9	...	635 13 0	625 5 3	50·4
1889-90 ...	−170 0 0 4,531 7 3 +170 0 0	102 1 0	4,803 8 3	3,660 4 0	1,080 12 6	62 0 0	4,803 0 6	0 7 9	100·0
1890-91 ...	58,959 12 6	3,799 13 6	62,759 10 0	57,932 3 0	385 9 3	...	58,317 12 3	4,441 13 9	92·9
1891-92 ...	...	1,25,916 7 9	1,25,916 7 9	70,958 13 6	1,052 15 6	...	72,011 13 0	53,904 10 9	57 2
Total ...	64,966 11 0	1,29,822 14 6	1,94,789 9 6	1,32,981 2 3	2,743 10 0	92 7 9	1,35,817 4 0	58,972 5 6	69·8

The percentage of the total amount due for water-rates which have been collected or otherwise adjusted during the year is 69·8 against 64·1 last year, and this improvement, so far as it goes, is satisfactory. But about 30 per cent. of the demand was still unadjusted at the close of the year, and the outstanding balance, though slightly diminished, is still unduly high.

51. The following classification of the remissions granted is given by the Deputy Revenue Superintendent:— REMISSIONS

	Rs.	A.	P.
By Collector, under rule 27 ...	2,491	8	3
Remissions granted by officers disposing of certificate objection cases ...	350	7	6
Total ...	2,841	15	9

Of this sum, Rs. 5-14 are for miscellaneous revenue. Deducting this amount from the total remissions, there remains a balance of Rs. 2,836-1-9, which is the figure shown in the foregoing statements.

52. Information regarding the number of certificates issued and disposed of during the year is given below:— CERTIFICATES

PARTICULARS.	MIDNAPORE.			
	1890-91.		1891-92.	
	No.	Amount.	No.	Amount.
1	2	3	4	5
Cases for disposal.		Rs.		Rs.
1. Cases pending at the close of the preceding year ...	3,414	16,195	1,958	6,085
2. Cases instituted during the year	7,664	32,944	3,428	17,765
Total ...	11,108	49,139	5,386	23,850
Cases disposed of.				
1. By being struck off, owing to the demand having been remitted.	3,839	26,396	1,422	6,239
2. By being wholly satisfied	5,311	16,658	3,515	14,039
Total ...	9,150	43,054	4,937	20,278
Balance outstanding at the close of the year ...	1,958	6,085	449	3,572

The decreases which occurred in the number of cases instituted and the balance outstanding at the end of the year are satisfactory.

The decrease in the number issued is attributable mainly to the raising of the process fees to 12 annas, which took effect from April 1891, and, to some extent, to greater discrimination being exercised in issuing them. Of the 5,386 certificates for disposal, 1,474 were for surreptitious irrigation, and 3,912 for the satisfaction of demands under kabuliyats.

COMPLAINTS. 53. The following table shows the number of complaints filed during the last two years, and how they have been disposed of :—

Year.	Class of complaints.	Received.			Disposed of.			Balance pending at end of the year.		
		Balance pending from previous year.	Received during the year.	Total.	Allowed.	Refused.	Total.	Received during previous years.	Received during the year.	Total.
1	2	3	4	5	6	7	8	9	10	11
1890-91 ...	Ordinary remission	93	991	1,084	238	743	981	...	...	103
	Other complaints	55	259	314	59	188	247	...	...	67
	Total ...	148	1,250	1,398	297	931	1,228	...	..	170
1891-92 ...	Ordinary remission	103	474	577	112	407	519	...	...	58
	Other complaints	67	152	219	26	156	182	..	..	37
	Total	170	626	796	138	563	701	...	...	95

On the 1st April 1891, 170 complaints were pending, 626 were received during the year as compared with 1,250 in the previous year, making a total of 796, of which 701 were disposed of during the year, 19·7 per cent. being established, and 80·3 per cent. being rejected.

REVENUE ESTABLISHMENT. 54. The following statement compares the cost of the revenue establishment during the last four years:—

Establishment under the Collector.	1888-89.	1889-90.	1890-91	1891-92.
1	2	3	4	5
	Rs.	Rs.	Rs.	Rs.
Permanent establishment, including travelling allowances ...	20,474	18,984	19,757	17,947
Temporary establishment ...	660	604	649	682
Contingencies	1,459	1,253	1,260	1,154
Headmen's fees .. .	2,135	49	60	335
Total ...	24,728	20,890	21,726	20,118

The sums mentioned below were paid by the Executive Engineer for water-regulation in addition to the amounts specified in the foregoing table :—

	Water-regulation. Permanent.	Water-regulation. Temporary.
	Rs.	Rs.
1887-88	572	625
1888-89	546	653
1889-90	480	533
1890-91	488	595
1891-92	473	682

The cost of collection was 15·1 per cent. on the amount realized against 17·9 per cent. in 1890-91.

NAVIGATION. 55. The total navigation receipts of the year were Rs. 1,32,572, against Rs. 1,10,830 in 1890-91. This marked increase is almost entirely due to the

steamer traffic, the tolls realized from the Calcutta Steam Navigation Company having risen from Rs. 21,274 to Rs. 41,180 owing to their underbidding the native boats. The tonnage of native boats plying on the canal has, on the contrary, decreased, though there is an increase of Rs. 1,836 in the toll collections. The Superintending Engineer writes:—

"The increase in the total receipts may be attributed to the great activity in the Calcutta rice market. Large quantities of this grain were steadily exported from the Midnapore district since September 1891. The Calcutta Steam Navigation Company's vessels were largely employed in this trade, which helped to increase the toll receipts of the year."

The exports of rice from September 1891 to January 1892 were 18,776 tons, valued at Rs 12,28,229, against 12,700 tons, valued at Rs. 8,50,012 during the corresponding period of 1890-91.

The usual particulars regarding the traffic carried in vessels, including those of the Calcutta Steam Navigation Company, for the last ten years are given below:—

DESCRIPTION.		1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1		2	3	4	5	6	7	8	9	10	11
Miles open	No.	53	53	53	53	53	53	53	53	53	53
Toll collections .	Rs.	1,06,157	1,08,931	1,19,797	1,25,331	1,01,054	1,08,460	1,25,332	1,16,409	89,556	(a)1,32,572
Rate of toll per mile	,,	2,002	2,055	2,260	2,364	1,906	2,046	2,365	2,196	1,689	1,724
Number of boats, including empty boats	No.	52,554	52,069	47,653	42,240	45,799	49,628	54,214	52,060	45,054	42,328
Tonnage of boats . .	Tons	360,973	382,979	412,379	372,008	387,440	409,866	470,806	462,418	417,803	411,892
Passengers carried ...	No.	181,251	170,745	111,257	122,094	(b)208,582	(c)160,567	(d)167,259	(e)176,226	(f)187,700	(g)163,836
Estimated value of cargo, including rafts	Rs.	1,69,43,032	1,79,53,406	1,57,52,997	1,27,22,175	97,25,587	1,18,44,844	1,31,70,269	1,45,12,442	1,48,33,391	1,26,65,724

(a) Inclusive of tolls, Rs. 41,180 paid by the Calcutta Steam Navigation Company.
(b), (c), (d), (e), (f), and (g) Inclusive of passengers 96,443, 86,783, 85,319, 96,397, 105,360, and 82,358 carried by the Calcutta Steam Navigation Company's steamers.

The following figures compare the value of cargo carried by steamers and flats with that carried by country boats for the last two years.—

		1890-91.	1891-92.
		Rs.	Rs.
Steamers and flats	...	64,22,317	73,39,767
Country boats	...	84,11,074	53,25,957
Total	...	1,48,33,391	1,26,65,724

56. The table below shows the miscellaneous receipts for the last five years:— MISCELLANEOUS RECEIPTS.

DETAILS.		1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1		2	3	4	5	6
		Rs.	Rs.	Rs.	Rs.	Rs.
Sale of water		...	...	...	...	...
Plantations		44	...	35	52	40
Other canal produce ...		154	4	299	37	5
Water-power		..	...	...	...	...
Rent of buildings ...		534	727	738	721	711
Fines		...	...	...	...	...
Miscellaneous	Rent of lands	8,268	7,182	7,984	6,079	8,758
	,, of fisheries	1,440	1,084	812	736	4,447
	Cost of process	3,023	1,113	2,400	1,009	2,516
	Other items ...	3,504	1,189	748	370	2,670
Total ...		16,967	11,299	13,016	9,004	19,147

The increase in all items of miscellaneous receipts is attributable to the more systematic management of leasing, which was this year undertaken by the Canal Officers.

MAINTENANCE AND REPAIRS.

57. The following figures show the actual cost of maintenance and repairs during the last three years distributed by subheads:—

		1889-90.	1890-91.	1891-92.
		Rs.	Rs.	Rs.
Head works, including buildings	...	10,541	11,610	8,373
Main canal and branches	...	77,488	77,323	1,18,241
Distributaries ...	...	19,769	11,851	10,365
Drainage and protective works	...	2,262	1,151	1,239
Working steamers ...	...	3,447	3,103	3,044
Total	...	1,13,507	1,05,038	1,41,262

HEAD WORKS AND WEIRS.

58. The expenditure on the Midnapore and Panchkurah head works during the year was Rs. 4,582 and Rs. 3,790, respectively, against Rs. 7,120 and Rs. 4,490 in last year. On weirs the expenditure was at the rate of Rs. 0·30 per foot run at Midnapore, and Rs. 1·84 at Panchkura, against Rs. 0·86 and Rs. 0·79 respectively last year.

MAIN CANAL.

59. The outlay on repairs to the main canal, including that on head works, on working steamers, and on drainage works, was Rs. 1,30,897 against Rs. 93,187 in the previous year. The heavy cost of maintenance of the main canal and its branches, exceeding that of 1890-91 by Rs. 40,918, was caused by the extensive silt clearing operations which were carried out in the tidal reaches after a lapse of many years. The subheads affected were "earthwork" and "navigation works" (repairs to locks), the expenditure under which was Rs. 26,649 and Rs. 16,928, respectively, in excess of that incurred in the previous year. The repairs to the lock gates also involved an extraordinary expenditure of Rs. 14,513 under the head "tools and plant" on special iron caissons and pumping machinery, and Rs. 37,296 under the same head was spent on repairing dredgers, opportunity having been taken of the closure to have them thoroughly overhauled and repaired. The total expenditure on tools and plant was Rs. 51,761 against Rs. 23,929 in 1890-91.

DISTRIBUTARIES.

60. On distributaries the expenditure on repairs was Rs. 10,365, or Rs. 36 per mile, against Rs. 11,851, or Rs. 41 per mile, in the previous year. The saving was effected mainly under masonry works and was in a great measure due to the non-occurrence of floods.

61. In the following table, mileage rates for the last ten years, both for main canals and distributaries, are shown:—

Year.		Main Canal and Head Works, &c.			Distributaries.		
		Length of canal open.	Total cost of work.	Rate per mile.	Length of distributary channels.	Total cost of work.	Rate per mile.
1		2	3	4	5	6	7
		Miles.	Rs.	Rs.	Miles.	Rs.	Rs.
1882-83	...	48	1,01,821	2,121	277	20,407	73
1883-84	...	48	1,06,425	2,216	277	21,195	76
1884-85	...	48	1,15,171	2,399	277	18,865	68
1885-86	...	48	1,10,360	2,299	277	14,424	52
1886-87	...	48	1,20,135	2,503	283	17,617	63
1887-88	..	48	1,10,494	2,301	283	20,687	74
1888-89	...	48	83,675	1,743	283	22,464	79
1889-90	...	48	93,728	1,953	283	19,769	69
1890-91	...	48	93,187	1,941	283	11,851	41
1891-92	...	48	1,30,897	2,727	283	10,365	36

DREDGING AND SILT CLEARING

62. The quantity of silt dredged during the year was 4,030,769 cubic feet, at an average rate of Rs. 4·76 per 1,000 cubic feet, whereas the quantity during the previous year was 5,159,375 cubic feet, and the rate Rs. 5·43. The smaller outturn of work was due to the closure of the canal, during which the work could not be carried on.

The work done by the steam-dredgers during the year under review and the cost of working them is shown below:—

Name of dredger.	Quantity of earth dredged.	Actual cost of lifting.	Cost of removing		Total.	Lifting rate per 1,000 cubic feet.	Removing rate per 1,000 cubic feet.	Total rate per 1,000 cubic feet.
			Steam hopper-barges.	Ordinary hopper-barges.				
1	2	3	4	5	6	7	8	9
	C. ft.	Rs.	Rs.	Rs.	Rs.			
Hector dredger ...	373,830	1,637	835	...	2,472	4·37	2·23	6 61
Ajax ditto	886,395	3.102	1,579	...	4,681	3·49	1·78	5·28
Atlas ditto	1,964,860	5,622	2,862	...	8,484	2·86	1·45	4·31
Combination ditto	289,024	1,253	...	...	1,253	4·30	..	4·30
Marchants ditto	...	52	...	...	52	...	...	...
Cadmus steam excavator ...	516,660	2,277	...	...	2,277	4·40	...	4·40
Total for 1891-92	4,030,769	13,913	5,276	...	19,219	3·45	1·30	4·76
Total for 1890-91	5,159,375	20,400	7,582	34	28,016	3·95	1·47	5·43

63. The state of the plantations for the last two years is shown in the following statement:— PLANTATIONS.

Year.	Trees upwards of 12 feet high.	Saplings between 4 and 12 feet.	Seedlings below 4 feet.	Total.
1	2	3	4	5
	No.	No.	No.	No.
1890-91 ...	9,706	10,705	3,141	23,552
1891-92 ...	10,082	10,351	2,452	22,885

64. From a financial point of view, the results of the year were disappointing. The receipts under all items were greater than last year, but the increase was more than swallowed up by the heavy expenditure incurred in repairs, the net profit being only Rs. 18,371 against Rs. 28,131 in 1890-91. The failure of the rainfall in September and October caused a heavy demand for canal water for kharif irrigation, which was met with great difficulty, owing to the small supply in the river. The increase in the rice traffic, owing to the scarcity in other parts of the country, is noticeable, and in this connection it may be remarked that a yearly increasing proportion of the carrying trade is being diverted from country boats to the Steamer Companies. GENERAL RESULTS.

HIDGELLEE TIDAL CANAL.

65. The Capital, Interest, and Revenue Accounts of this Canal are given below:— CAPITAL ACCOUNT.

1.—CAPITAL ACCOUNT.

Heads of account.	Outlay during 1891-92.	Outlay to end of 1891-92.
1	2	3
Direct charges.	Rs.	Rs.
I.—Works	1,44,112	15,58,416
II.—Establishment	49,346	5,33,372
III.—Tools and plant	41,470	1,19,052
IV.—Suspense accounts	......	......
Loss by exchange	......	22,790
Total ...	2,34,928	22,33,630
V.—*Less*—Receipts on capital account	10	925
Net total direct charges ...	2,34,918	22,32,705
Indirect charges.		
Capitalization of abatement of land revenue	.. ...	11,210
Leave and pension allowances	6,908	45,298
Total indirect charges ...	6,908	56,508

An extensive remodelling scheme has, for rather more than a year, been in progress on the Hidgellee Tidal Canal, having for its object the facilitation of navigation by increasing the depth of the canal and the exclusion of silt, the removal of which entailed very heavy annual expenditure and long closures of the canal. The scheme involves the lowering of the canal bed in Ranges I and II; the provision of two new supply sluices, by means of which the silty water will be led to the canal through long feeder channels, in which the silt will be deposited instead of in the canal itself; a cast-iron supply pipe laid on the bed of the Russulpore river, through which the supply for Range II will be drawn from Range III of the Orissa Coast canal, instead of being taken from the silt-laden water of the Russulpore; the construction of a new lock at Kalinagar to replace the old one, which is too small and in a badly chosen situation; and other works of a minor character, designed to assist in scouring and clearing silt from the lock entrances and navigation channels. The construction of the new lock at Kalinagar and of the iron supply pipe across the Russulpore has been postponed, pending the settlement of the difficulties regarding the deterioration of the Russulpore river, which has of late years been rapidly silting up. The deterioration now appears to have ceased, and during the year under review the depth of the river has even slightly increased, owing to the scour caused by the daily flow of the tide into and out of the lately constructed drainage cut at Balliaghye, which is also used as a navigation canal. The other works comprised in the remodelling scheme have been completed, the time occupied in carrying them out having been, on Range I, 12 months and 21 days, and on Range II, 6 months and 18 days.

INTEREST ACCOUNT.

2.—INTEREST ACCOUNT.

	Rs.
Interest charges to end of 1890-91	14,80,445
Ditto for 1891-92	84,610
Total ...	15,65,055

REVENUE ACCOUNT.

3.—REVENUE ACCOUNT (Actuals).

Particulars.	Expenditure—		Particulars.	Receipts—	
	During 1890-91.	During 1891-92.		During 1890-91.	During 1891-92.
1	2	3	4	5	6
Direct Charges.	Rs.	Rs.		Rs.	Rs.
I.—Works, maintenance, and repairs.					
Works (extensions and improvements) ..	...	...			
Maintenance and repairs	27,012	32,588	Water-rates ...	...	...
Establishment, including direction and accounts	8,636	11,433	Navigation ...	27,145	36,348
Tools and plant ...	13,487	1,693	Miscellaneous ...	899	567
Total ...	49,135	45,714			
II.—Revenue management.					
Navigation establishment	2,833	2,955	Total ...	28,044	36,915
Total Direct Charges ...	51,968	48,669	*Less*—Refunds of revenue ...	...	...
Indirect Charges.			Net Total receipts..	28,044	36,915
Capitalized abatement of land revenue ...	...	...			
Leave and pension allowances	1,606	2,014			
Total Indirect Charges ...	1,606	2,014			
Total working expenses	53,574	50,683			
Net revenue ...	—25,530	—13,768			
Total ...	28,044	36,915			

FINANCIAL RESULTS.

66. The following statement shows the receipts on revenue account and working expenses for the last ten years:—

PARTICULARS.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6	7	8	9	10	11
RECEIPTS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Navigation	43,694	62,317	41,382	52,143	51,904	40,406	53,921	40,338	27,145	36,348
Miscellaneous	1,338	1,273	2,125	312	2,500	1,452	11,249	1,614	899	567
Total ...	45,032	63,590	43,507	52,455	54,404	41,858	55,170	41,952	28,044	36,915
Less—Refunds of revenue ...	......	......	......	......	910	......	73	......	......	......
Total Receipts ...	45,032	63,590	43,507	52,455	53,494	41,858	55,097	41,952	28,044	36,915
WORKING EXPENSES.										
DIRECT CHARGES.										
I.—Works, maintenance, and repairs.										
Works	...	...	...	...	...	...	1,718	...	...	...
Repairs	29,460	32,994	26,862	34,099	11,988	47,928	50,920	16,713	27,012	32,588
Establishment, including direction and accounts ...	6,775	7,588	6,178	7,843	2,756	11,855	16,572	4,157	8,696	11,433
Tools and plant	1,362	2,784	292	3,524	4,155	2,105	2,868	1,806	13,487	1,693
Total ...	37,597	43,366	33,332	45,466	18,899	61,888	72,078	22,676	49,135	45,714
II.—Revenue management.										
Navigation establishment ...	2,973	3,215	3,554	3,143	3,026	3,007	3,195	3,039	2,833	2,955
Total Direct Charges ...	40,570	46,581	36,886	48,609	21,925	64,895	75,273	25,715	51,968	48,669
INDIRECT CHARGES	1,327	1,512	1,362	1,538	810	2,081	2,767	1,007	1,606	2,014
Total working expenses ...	41,897	48,093	38,248	50,147	22,735	66,976	78,040	26,722	53,574	50,683
Net revenue ...	3,135	15,497	5,259	2,308	30,756	(—)25,118	(—)22,943	15,230	(—)25,530	(—)13,768

The cost of maintenance, though slightly less than last year, still exceeds the average cost, which for the last eleven years amounts to Rs. 46,189, by Rs. 4,494. This is due to extensive repairs which had to be carried out on the lock gates, and to some alterations in the lock valves consequent on the remodelling scheme above alluded to. The Superintending Engineer writes:—

"The very high maintenance rate on this canal is due to the heavy influx of silt owing to the primitive feeding arrangements originally adopted, and to the mistake of having iron gates for the locks, which in the salt water have given trouble from the first and give increasing trouble as they get older."

It is hoped that, on the completion of the remodelling scheme, the working expenses will begin to decrease, but until the pipe across the Russulpore river is fixed, or some other equally effective method of supplying a comparatively pure supply, heavy expenditure on silt clearing on Range II will from time to time be necessary.

RAINFALL.

67. The rainfall at Contai station was 49·97 inches against 75·32 inches in 1890-91.

FLOODS.

68. During the year there were no floods of any consequence in any of the rivers crossed by the Hidgellee Tidal Canal. The highest gauge readings of the rivers Hooghly, Haldi, and Russulpore are shown in the following statement:—

NAME OF RIVER.	Locality.	1890-91.		1891-92.		Highest recorded reading.		REMARKS.
		Date.	Reading.	Date.	Reading.	Date.	Reading.	
1	2	3	4	5	6	7	8	9
Hooghly ...	Gewankhali ..	29th Sept. 1890	115·90	19th Sept. 1891	115·90	Date of record not obtainable from records.	116·90	Height recorded on plans of maximum floods, but dates not given.
Haldi	Etamagra ...	20th " "	116·40	19th " "	116·40	Ditto ...	120·22	
Russulpore ...	Kalinagar ...	29th " "	114·90	18th " "	114·70	Ditto ...	118·50	

NAVIGATION.

69. The usual particulars regarding the traffic on the Hidgellee Tidal Canal carried in vessels during the last ten years are given in the following

statement. The figures include those relating to the steamers belonging to the Calcutta Steam Navigation Company:—

PARTICULARS.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90	1890-91.	1891-92.
1	2	3	4	5	6	7	8	9	10	11
Miles open ... ... No.	29	29	29	29	29	29	29	29	29	29
Toll collections ... Rs.	43,694	62,317	41,382	52,143	(a)51,904	(a)40,406	(a)53,910	(a)40,341	(a)27,145	(a)36,342
Rate of toll per mile ,,	1,510	2,148	1,427	1,798	1,734	1,338	1,700	1,200	821	1,128
Number of boats, including empty boats No.	17,445	22,728	17,660	19,316	17,542	13,503	16,481	13,785	10,215	15,332
Tonnage of boats ... Tons.	132,884	196,764	145,124	163,335	149,747	124,903	165,635	124,605	91,114	133,575
Passengers carried ... No.	3,310	...	...	...	8,569	11,951	34,032	(b)30,222	(b)22,420	(b)21,209
Estimated value of cargo, including rafts ... . Rs.	23,83,244	36,42,029	30,06,852	32,74,961	31,48,826	26,13,351	33,01,123	27,29,720	20,78,972	34,97,725

(a) Inclusive of tolls, Rs. 1,603, Rs. 1,592, Rs. 4,590, Rs. 5,523, Rs. 3,346, Rs. 3,634, paid by the Calcutta Steam Navigation Company.
(b) Inclusive of passengers, 23,243, 17,554, and 21,209, carried by the Company's steamers.

The toll collections, which in 1890-91 were low owing to a seven months' closure of the canal, have recovered somewhat during the year under review, when the closure only lasted for four months. It may be remarked that the tollage receipts on this canal have not increased in proportion with those on the Orissa Coast canal. This may be due to the frequent closures of the last few years, but it is also largely owing to the use of a very superior class of decked boat which has lately been introduced, and which can take the route *viâ* the Russulpore and Hooghly Rivers in calm weather.

MISCELLANEOUS RECEIPTS.

70. The miscellaneous receipts for the last five years are shown in the following statement:—

DETAILS.		1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1		2	3	4	5	6
		Rs.	Rs.	Rs.	Rs.	Rs.
Sales of water		...	...	...	...	...
Plantations		70	64	62	68	27
Other canal produce		1,085	...	...	5	...
Water-power		...	...	...	...	...
Rent of buildings		245	226	181	244	266
Fines		...	...	...	...	...
Miscellaneous	Rent of lands ...	...	...	18	56	39
	,, of fisheries ...	52	955	1,198	5 14	202
	Cost of process ...	...	...	...	..	...
	Sales of old materials ...	...	4	144	4	5
	Other items ...	...	...	11	8	28
Total ..		1,452	1,249	1,614	899	567

The receipts during the year show a decline of Rs. 332, mainly in item fisheries, which is due to the closures of the canal during the last two years.

DREDGING.

71. There was no dredging work, as the silt was removed by hand-labour during the closure of the canal.

PLANTATIONS.

72. The state of the plantations for the last two years is shown in the following statement:—

YEAR.	Trees over 12 feet in height.	Saplings between 4 and 12 feet.	Seedlings under 4 feet.	TOTAL.
1	2	3	4	5
	No.	No.	No.	No.
1890-91	1,883	2,845	1,776	6,504
1891-92	2,000	3,116	1,041	6,157

The falling off in the number of trees during the last two years has been caused by the silt clearing operations during the closures, necessitating the deposition of earth on the banks and encampments of coolies. The expenditure during the year was Rs. 273 against Rs. 383, and the revenue was Rs. 27 against Rs. 68.

SONE CANALS.

The figures in all statements showing totals of receipts or expenditure are those of the Examiner of Accounts. In dealing with details the figures of the Commissioner or of the Superintending Engineer are used. CAPITAL ACCOUNT.

73. The Capital Interest, and Revenue Accounts of these canals are given below:—

1.—CAPITAL ACCOUNT.

HEADS OF ACCOUNT.	Outlay during 1891-92.	Outlay to end of 1891-92.
1	2	3
DIRECT CHARGES.	Rs.	Rs.
I.—Works	1,70,412	1,85,88,237
II.—Establishment	37,083	51,67,039
III.—Tools and plant	(—) 1,352	21,27,215
IV.—Suspense accounts	(—) 1,715	1,69,649
Loss by exchange	......	52,240
Total ...	2,04,428	2,61,04,380
V.—*Less*—Receipts on capital account	330	3,72,286
Net total direct charges	2,04,098	2,57,32,094
INDIRECT CHARGES.		
Capitalization of abatement of land revenue	......	37,911
Leave and pension allowances	5,191	8,72,640
Total indirect charges	5,191	9,10,551

The Sone Canals are practically complete and in full work, and the outlay on capital is now only on subsidiary works, such as outlets and culverts for village channels where they cross district roads. A report on the canals as constructed, compared with the estimate the currency of which has expired, has been sent to the Government of India, and the capital account will shortly be closed, the expenditure being meanwhile confined to the completion of works sanctioned before 31st March 1891. The outlay charged to the capital account of the Sone canals during the year 1891-92, compared with that of the previous year, is shown in detail in the following statement:—

	1891-92.	1890-91.
I.—Works—		
(1) Head-works	2,035	5,249
(2) Main canal and branches ...	31,337	23,475
(3) Distributaries	79,312	38,947
(4) Drainage and protective works ...	57,728	65,028
Total works ...	1,70,412	1,32,699
II.—Establishment	37,083	19,850
III.—Tools and plant	(—) 1,352	6,411
IV.—Suspense accounts	(—) 1,715	14,716
GRAND TOTAL ...	2,04,428	1,73,676
V.—*Less*—Receipts on capital account ...	330	2,315
Net total	2,04,098	1,71,361

The work done during the year under review is as follows:—

Head works.—The plantations established on the spare lands belonging to Government at Dehri were proceeded with, and will probably be completed during 1892-93.

Eastern Main Canal.—The escape for the Manora distributary was completed. The protective embankment to save Kharati village from the flood of

the Poonpoon was proceeded with, as were permanent outlets and road crossings for village channels on the Manora distributary.

Patna Canal.—The addition to the second weir on this canal was completed before the rains. Three drainage culverts and one hundred and thirty-three permanent outlets were completed during the year, and a rest-house, on the Khojhassa distributary and the Bharatpur distributary escape, were proceeded with.

Main western canal series.—Permanent outlets, cattle bridges, crossings for village channels, and syphon culverts for drainage and drainage cuts were under construction in most of the canals, branch canals, and distributaries under the main western canal series. On the Arrah Canal eight small regulators in distributaries, and on the Buxar Canal some inlets for drainage were built. The alteration of three bridges on the Behea branch canal, and quay walls at Nokha and Buxar were in progress. Escapes from the Rajpur and Nagpur distributaries were in progress, as also were a rest-house on the Sianwank distributary, a toll office at Nokha, and zilladar's quarters at Sikraol. The Kujee drainage cut, which is an important work, the estimated cost being Rs. 37,947, was proceeded with, and was nearly completed at the end of the year. The extension of the Basudhar distributary was nearly completed, as were some additional lengths of parallel channels.

Interest Account.

2.—INTEREST ACCOUNT.

	Rs.
Interest charges to end of 1890-91	1,55,62,825
Ditto for 1891-92	10,25,202
Total ...	1,65,88,027

Revenue Account.

3—REVENUE ACCOUNT (ACTUALS).

Particulars.	Expenditure— During 1890-91.	Expenditure— During 1891-92.	Particulars.	Receipts— During 1890-91.	Receipts— During 1891-92.
1	2	3	4	5	6
Direct Charges.	Rs.	Rs.		Rs.	Rs.
I.— Works, Maintenance and Repairs.					
Works (extensions and improvements).	3,263	3,812	Water-rates ...	6,44,718	8,11,750
Maintenance and repairs	2,72,663	2,59,804	Navigation ...	65,629	66,517
Compensation ...	168	28	Miscellaneous ...	26,128	31,827
Establishment, including direction and accounts.	1,88,895	1,89,196	Total ...	7,36,475	9,10,094
Tools and plant ...	28,527	28,843	*Less*—Refunds of revenue.	7,305	4,020
Total ...	4,93,516	4,81,683			
II.—Revenue management.					
Irrigation establishment.	1,45,528	1,52,113			
Navigation ditto ...	14,242	14,264			
Total ..	1,59,770	1,66,377			
Total Direct Charges	6,53,286	6,48,060			
Indirect Charges.					
Capitalized abatement of land revenue.	...	...			
Leave and pension allowances.	48,813	49,780			
Total Indirect Charges	48,813	49,780			
Total Working Expenses.	7,02,099	6,97,840			
Profit	27,071	2,08,234			
Total ...	7,29,170	9,06,074	Total Receipts ...	7,29,170	9,06,074

74. The net result, calculated on the earnings as opposed to collections, and actual outlay is shown below :— EARNINGS.

	1890-91.		1891-92.
	Rs.		Rs.
Earnings—			
Irrigation ...	5,92,847		9,82,032
Navigation ...	65,629		66,517
Miscellaneous ...	26,128		31,827
Total ...	6,84,604		10,80,376
Deduct refunds of revenue	7,305		4,020
Net earnings	6,77,299		10,76,356
Outlay	7,02,099		6,97,840
Loss ...	24,800	Profit ...	3,78,516

The figures given as net earnings include the actual realizations of navigation and miscellaneous revenue with the assessed revenue on the area actually irrigated during the year, less refunds.

The irrigation earnings are given in greater detail in the following table, which includes the assessments on the area irrigated during the year, whether forwarded for collection before or after the 31st March. The figures therefore differ from the assessments of the year which are referred to further on :—

Year in which the irrigation occurred.	Year in which the assessments were received by Deputy Collector.	Year in which the amount fell due.	Total demand for 1891-92.	Current demand for 1891-92.	Total assessments submitted during 1891-92.	Total earnings of 1891-92, less refunds of revenue.
1	2	3	4	5	6	7
			Rs.	Rs.	Rs.	Rs.
1890-91 ...	1890-91 ...	1891-92 ...	35,946	...	......	......
1890-91 ..	1891-92 ...	1891-92 ...	4,484	4,484	4,484	......
1891-92 ...	1891-92 ...	1891-92 ...	6,84,008	6,84,008	6,84,008	6,84,008
1891-92 ...	1891-92 ...	1892-93 ...	......	......	87,567	87,567
1891-92 ...	1892-93 ...	1892-93 ...	......	... ..	......	2,01,244
		Total ...	7,24,438	6,88,492	7,76,059	9,72,819
Add—Surplus and excess recoveries by Deputy Collector			5,193	5,193	5,193	5,193
		GRAND TOTAL ...	7,29,631	6,93,685	7,81,252	9,78,012

The earnings less refunds during 1890-91 were Rs. 5,85,542. They have not until the current year materially differed from the assessments.

75. The receipts for the last two years have been increased by the collection of outstanding arrears. The balance of such has now been much reduced. FINANCIAL RESULTS.

The receipts on revenue account and working expenses of the canals for the year 1891-92 and the nine preceding years are shown in the statement below :—

	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
RECEIPTS.										
Water-rates	5,66,455	4,84,209	7,70,359	9,78,323	8,26,461	5,10,586	7,59,556	8,16,394	6,44,718	8,11,750
Navigation	71,205	85,193	51,761	46,243	54,254	55,904	57,829	57,759	65,629	66,517
Miscellaneous	47,007	34,405	40,354	38,080	37,714	28,459	26,504	23,342	26,128	31,827
Total ...	6,84,677	6,03,807	8,62,474	10,62,646	9,18,429	6,03,949	8,43,889	8,97,495	7,36,475	9,10,094
Less—Refunds of revenue	1,237	5,429	7,455	10,657	15,737	15,331	12,611	16,520	7,305	4,020
Total Receipts ...	6,83,440	5,98,378	8,55,019	10,51,989	9,02,692	5,88,618	8,31,278	8,80,975	7,29,170	9,06,074

	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6	7	8	9	10	11
WORKING EXPENSES.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
DIRECT CHARGES.										
I.—Works, Maintenance and Repairs.										
Works (extensions and improvements) ...	...	...	...	...	...	5,532	10,426	4,712	3,263	3,812
Repairs, including compensation	3,17,901	2,76,335	3,44,838	2,83,315	3,08,765	3,08,448	3,28,182	2,92,992	2,72,831	2,59,832
Establishment, including direction and accounts	73,042	63,477	79,300	65,163	71,066	* 2,10,227	1,97,677	1,82,667	1,88,895	1,59,196
Tools and plant	11,898	34,983	26,175	32,451	27,698	28,221	33,920	33,460	28,527	28,843
Total ...	4,02,841	3,74,795	4,50,313	3,80,929	4,07,529	5,52,428	5,70,205	5,13,831	4,93,516	4,81,683
II.—Revenue Management.										
Irrigation establishment	1,05,883	1,14,005	1,29,308	1,46,028	1,43,660	1,35,243	1,58,249	1,52,823	1,45,528	1,52,113
Navigation ditto ..	19,880	20,248	16,885	14,756	14,535	14,308	14,165	14,305	14,24[illegible]	14,264
Total ...	1,25,763	1,34,253	1,46,193	1,60,784	1,58,195	1,49,551	1,72,414	1,67,128	1,59,770	1,66,377
Total Direct Charges ...	5,28,604	5,09,048	5,96,506	5,41,713	5,65,724	7,01,979	7,42,619	6,80,959	6,53,286	6,48,060
INDIRECT CHARGES.										
Capitalization of abatement of land revenue .	...	...	...	...	...	...	...	...	...	...
Leave and pension allowances	19,933	27,682	31,569	31,632	32,097	50,369	51,813	48,971	48,813	49,780
Total Indirect Charges ...	19,933	27,682	31,569	31,632	32,097	50,369	51,813	48,971	48,813	49,780
Total Working expenses	5,48,537	5,36,730	6,28,075	5,73,345	5,97,821	7,52,348	7,94,432	7,29,930	7,02,099	6,97,840
Net revenue ...	1,34,903	61,648	2,26,944	4,78,644	3,04,871	(—)1,63,730	36,846	1,51,045	27,071	2,08,234

* NOTE.—The method of charging the cost of establishment was altered from 1887-88.

Compared with 1890-91 the receipts (less refunds) have increased from Rs. 7,29,170 to Rs. 9,06,074, that is, by Rs. 1,76,904. The working expenses (direct charges) have been reduced from Rs. 6,53,286 to Rs. 6,48,060, or by Rs. 5,226. Including indirect charges, the net revenue has increased from Rs. 27,071 to Rs. 2,08,234.

This favourable result was due mainly to extensive recoveries of arrears in the Patna district, and in a lesser degree to the abnormal area of rabi irrigated in the Buxar Division, the collections on account of which will mostly be made in 1892-93. A reduction of Rs. 16,203 on the charges for maintenance and repairs was effected in the Arrah Division.

The principal works carried out were a drainage sluice in the Kao river embankment at Dumraon, the alteration of the bridges on the Gurra Chowbey branch canal from wooden tops to arches, and the construction of a few small culverts. The eastern main series of canals were closed for repairs from 6th April to 29th May 1891, and from 28th March 1892 to the end of the year. There was no closure of the western main series in 1891-92. These canals were closed in March 1891, and not again till May 1892

LENGTHS OF CANALS AND DISTRIBUTARIES.

76. The lengths of canals and distributaries in operation, and the areas commanded, provided with distributaries, and irrigated at the close of the last two years are shown below:—

Name of Canal.	1891-92. Navigable canals.	Canals for irrigation only.	Distributaries.	Area protected from flood.	Area under command.	Area provided with distributaries.	Area irrigated.	Percentage of area irrigated to area provided with distributaries.	1890-91. Navigable canals.	Canals for irrigation only.	Distributaries.	Area protected from flood.	Area under command.	Area provided with distributaries.	Area irrigated.	Percentage of area irrigated to area provided with distributaries.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Miles.	Miles.	Miles.	Acres.	Acres.	Acres.	Acres.		Miles.	Miles	Miles.	Acres.	Acres.	Acres	Acres.	
Eastern Sone Division. Eastern Main	7½	..	9	...	15,462	15,462	2,969	19	7½	...	9		15,462	15,462	1,616	10
Eastern Sone Division. Patna	79	...	341¼	...	390,693	379,737	91,121	24	79	...	349	.	390,693	385,537	59,656	15
	86½	...	350¼	..	406,155	395,199	94,090	23	86½		358	...	406,155	400,999	61,392	15
Arrah Division. Arrah	65½	...	208	...	229,433	229,433	72,679	31	65½		208	..	229,433	229,433	57,048	25
Arrah Division. Dumraon Branch ...	...	40¼	149	...	209,817	209,817	55,330	26	...	40¼	149	.	209,817	209,817	40,685	19
Arrah Division. Behea Branch .. .	...	31	112	...	179,104	179,104	53,114	29	...	31	110½	...	179,104	179,104	42,074	23
	65½	71¼	469	..	618,354	618,354	18,123	29	65½	71¼	467½	..	618,354	618,354	139,807	22
Dehri Workshops Division—Western Main	9	...	.	...	...	...	...	...	9	...	...	...	...	...	...	
Buxar Division. Western Main ...	12½		45¾	...	89,480	89,480	62,550	30	12½		43	.	84,480	84,480	18,682	9
Buxar Division. Gurra Chowbey Branch		38	56	...	173,410	114,522				38	56	...	173,410	114,522		
Buxar Division. Buxar	45¼		181¼	...	233,600	209,569	136,954	39	45¼		181	..	233,600	208,709	61,223	17
Buxar Division. Chowsa Branch ...	...	39¼	105	.	212,480	133,384			.	39¼	105	...	212,480	132,884		
	57½	77¼	388	..	709,000	546,955	199,510	36	57½	77¼	385	.	704,000	540,655	79,905	15
Sone Canals ...	218½	148½	1,207¼	...	1,733,509	1,560,508	471,723	30	218½	148½	1,210½	...	1,728,509	1,560,008	281,014	18

The figures in column 4 include 1,192½ miles of distributaries and 14¾ miles of Government village channels in the Buxar Division.

VILLAGE CHANNELS AND OUTLETS.

77. The length of village channels and the number of outlets constructed are given in the following table:—

Division.	Total length of village channels completed.	Total number of temporary and permanent outlets.	Number of permanent outlets.
1	2	3	4
	Miles.	No.	No.
Eastern Sone	361¼	1,878	468
Arrah	823¼	2,114	1,188
Buxar	802½	1,951	700
Total, 1891-92 ..	1,987	5,943	2,356
Total, 1890-91 ...	1,623¾	4,580	1,728

During the year $1\frac{1}{4}$ miles in the Arrah and 3 miles in the Buxar Division were added, while $7\frac{3}{4}$ miles were abandoned in the Eastern Sone Division, the net result being a decrease of $3\frac{1}{2}$ miles.

One thousand three hundred and sixty-three outlets, of which 628 are permanent, and $363\frac{3}{4}$ miles of village channel have been added during the year. The Superintending Engineer remarks:—

"There is a satisfactory increase in the number of the permanent outlets, and the greater part of the kharif irrigation is now effected through such outlets, the size of which have been made to suit the areas to be irrigated. The increase in the number of temporary outlets is due to the large rabi irrigation. Many of these will be removed, as it is not likely that they will be required again for some time."

Many of the channels also were only temporarily constructed for rabi irrigation, and will probably disappear again.

AINFALL.

78. The table following shows the rainfall during the last five years over 22 rainfall stations on, or in the neighbourhood of, the Sone Canals:—

		Average of 22 Stations.				
		1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1		2	3	4	5	6
		Inches.	Inches.	Inches.	Inches.	Inches.
Kharif season	August ...	9·48	18·49	12·01	14·47	9·11
	September...	5·24	7·35	5·90	6·58	4·09
	October ...	4·18	0·18	0·79	0·99	1·17
	Total ...	18·90	26·02	18·70	22·04	14·37
Rabi season ...	November ..	......	0·46	0·48	......	......
	December ...	......	......	......	0·01	......
	January ...	1·09	1·22	......	1·69	0·13
	February ...	......	1·30	0·01	0·39	1·03
	Total ...	1·09	2·98	0·49	2·09	1·16
	Whole year ...	40·31	47·34	39·27	52·86	29·12

The average rainfall for twenty years is 40·47 inches.

The rainfall of the year was very scanty, being much below the normal and scarcely more than half that of the previous year.

FLOODS.

79. There were no floods in the rivers Sone and Ganges during the year. The figures below show the highest gauge readings compared with the highest

recorded flood levels. The reduced level of the crest of the Sone Weir is 334 00:—

RIVER SONE.

Locality.	1891-92—9th August 1891.		1890-91—16th August 1890.		Highest known, 1876-77—7th July 1876.	
	Above weir.	Below weir.	Above weir	Below weir.	Above weir.	Below weir.
1	2	3	4	5	6	7
	R. L.	R. L.	R. L.	R. L.	R. L.	R. L.
Dehree ...	335·70	333·30	336·30	333·40	342·10	341·00
Baroon ...	337·50	335·40	337·70	335·50	343·50	342·70

The head sluices of the Western Main Canal were not closed at all during the year on account of flood; those of the Eastern Main were closed for 46 hours in all on three occasions in August and September.

RIVER GANGES.

Locality.	Date.	Reading.	Highest known since 1875.	
			Date.	Reading.
1	2	3	4	5
		R. L.		R. L.
Buxar	12th September 1891 ...	198·05	6th August 1875 ...	200·71
Deegah	11th September 1891 ...	164·73	14th August 1879 ...	169 20
Hajipore, confluence of rivers Ganges and Gunduk ...	12th September 1891 ...	162·50	August 1879 ...	166·20

80. The irrigation for ten years together with the rainfall over 16 stations actually situated on the canal irrigated area is shown below:— IRRIGATION.

Year.	Kharif.	Rabi and hot weather.	Perennial.	Total.	Rainfall.
1	2	3	4	5	6
	Acres.	Acres.	Acres.	Acres.	Inches.
1882-83 ...	125,159	25,935	22,730	173,824	34·47
1883-84 ...	215,790	117,960	16,864	350,614	32·91
1884-85 ...	246,740	100,239	23,682	370,661	31·37
1885-86 ...	217,072	87,936	27,562	332,570	44·52
1886-87 ...	177,510	60,639	30,055	268,204	58·84
1887-88 ...	220,428	69,945	25,007	315,380	40·18
1888-89 ...	238,895	100,142	16,872	355,909	45·43
1889-90 ...	230,741	55,613	18,928	305,282	49·65
1890-91 ...	211,726	51,318	17,970	281,014	52·23
1891-92 ...	248,819	210,907	14,997	474,723	26·82

The rainfall in the autumn of 1891 was very scanty, and this led to a great demand for water both for kharif and rabi. As regards the latter, the increased demand is most noticeable in the Buxar Division, where the area irrigated under this head has risen from 17,034 acres in 1890-91 to 127,390 acres in 1891-92. The largest area of rabi irrigated in any previous year was in the whole Circle 124,812 acres in 1877-78. In no other year has the area risen above 90,304, of which 48,961 acres were in the Buxar Division. This occurred in 1883-84.

The Superintending Engineer remarks on the irrigation of the year as follows:—

"Compared with the previous year, there is an increase of 193,709 acres, and the total is greater by more than 100,000 acres than that of any year since these canals have been at work. The main increase was in the rabi irrigation, and chiefly in the Buxar Division, where there are large areas of land cultivated with rabi crops, but which very seldom require irrigation. There is a satisfactory increase in the area under long leases of 11,351 acres, and it is probable that there will be a further increase in this class. We cannot expect to have a rabi irrigation like that of 1891-92 often, and it will probably be many years before the total of this year is exceeded."

During the year under review water was for the first time sold by volume during the kharif season in cases where leases had not been taken before the 1st September. The area thus irrigated was approximately 3,622 acres. This area, as well as 3,369 acres irrigated without permit, is, in the table in the following paragraph, included in the figures for "annual leases."

81. The statement below gives details of the areas of each crop irrigated during the last four years, distinguishing between annual and five-year leases.

Crop.		1888-89.	1889-90.	1890-91.	1891-92.
1		2	3	4	5
		Acres.	Acres.	Acres.	Acres.
Kharif ...	Five-year leases...	154,825	174,780	189,227	200,716
	Annual leases ...	69,628	41,917	22,499	48,103
	Total ...	224,453	216,697	211,726	248,819
Rabi ...	Five-year leases...	27,408	31,128	20,761	20,274
	Annual leases ...	69,817	20,336	20,632	177,308
	Total ...	97,225	51,464	41,393	197,582
Sugarcane	Five-year leases...	17,869	18,360	13,568	13,801
	Annual leases ...	4,600	5,004	4,402	1,196
	Total ...	22,469	23,364	17,970	14,997
Hot-weather ...	...	11,762	13,757	9,925	13,325
	Grand Total ...	355,909	305,282	281,014	474,723
Total five-year leases ...		200,102	224,268	223,556	234,791
" annual leases ...		155,807	81,014	57,458	239,932

The proportionate areas of the various crops in the areas under long lease in 1891-92 are based on actual measurements of the crops cultivated when the leases were executed. In some subdivisions this information is wanting for years before 1890-91, and the percentages obtained for that and the succeeding year have been adopted for previous years.

The proportionate areas thus determined are given below:—

Division.	Rice.	Sugarcane.	Rabi.	Total.
1	2	3	4	5
Arrah	85·2	7·2	7·6	100·0
Buxar	79·7	5·9	14·4	100·0
Eastern Sone ...	93·7	2·9	3·4	100·0

Using the percentages obtained above for the area under five-year leases in the year 1891-92, the area of each crop included in those leases compared with that of the two previous years was as under:—

1891-92.			1890-91.			1889-90.		
Kharif.	Rabi.	Sugarcane.	Kharif.	Rabi.	Sugarcane.	Kharif.	Rabi.	Sugarcane.
1	2	3	4	5	6	7	8	9
200,716	20,274	13,801	189,227	20,761	13,568	188.824	21,620	13,924

82. The areas irrigated in each division during the last five years are shown by crops below:—

Year.	Eastern Sone Division.				Arrah Division.				Buxar Division.				Total for all Divisions			
	Annual leases.		Five-year leases.	Total.	Annual leases.		Five-year leases.	Total.	Annual leases.		Five-year leases.	Total.	Annual leases.		Five-year leases.	Total.
	Kharif and rabi.	Sugarcane and hot-weather.			Kharif and rabi.	Sugarcane and hot-weather.			Kharif and rabi.	Sugarcane and hot-weather.			Kharif and rabi.	Sugarcane and hot-weather.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1887-88	20,390	679	40,123	61,201	25,982	13,079	102,423	141.484	38,715	6,362	67,618	112,695	85,096	20,120	210,164	315,380
1888-89	29,470	408	37,117	66,995	52,260	11,59[illegible]	101,489	165,349	57,706	4,363	61,496	123.565	139,445	16,362	200.102	355,909
1889-90	18,829	295	40,917	60,041	24,265	13,416	108,057	145,738	19,159	5,050	75,294	99,503	62,253	18,761	224.268	305,28[illegible]
1890-91	14,682	504	46,116	61,302	20,423	10,385	108,[illegible]	139,807	8,026	3,438	68,441	79,905	43,131	14,327	223,556	281,01[illegible]
1891-92	40,622	205	53,263	94,090	60,692	11,227	109,204	181,123	124,097	3,089	72,324	199,510	225,411	14,521	234,791	474,72[illegible]

The area measured during 1891-92 was 112·08 per cent. of the area for which permits were issued. For kharif and long leases the figure sare practically identical, but the applications for leases in the rabi season show only the approximate area to be irrigated, the assessment being based on the area irrigated, as found by measurement when the irrigation season is over. The proportion of flow to lift irrigation was 93·6 to 6·4.

83. The following statement shows the duty obtained in the year under review and in the years 1890-91 and 1889-90:— Duty of water.

Particulars.				Eastern Main Canal Series.	Arrah Canal System.	Buxar Canal System.	Western Main Canal Series.	Total Sone Canals.
1				2	3	4	5	6
1889-90 ...	Kharif ...	Acres ...		54,875	115,888	78,906	194.794	249,669
		Duty on gross supply ...		48·34	79·81	86·04	81·94	71·09
	Rabi ...	Acres		6,801	30,867	23,116	53,983	60,784
		Duty on discharge utilized		21·33	45·52	52·77	48·37	42·36
1890-91 ...	Kharif ...	Acres		56,600	112,584	60,512	173,096	229,696
		Duty on gross supply ...		55·22	86·87	79·20	83·66	74·24
	Rabi ...	Acres		6,735	30,492	22,186	52,628	59,363
		Duty on discharge utilized		20·72	57·75	55·48	56·77	47·41
1891-92 ...	Kharif ...	Acres		75,037	119,304	69,465	188,779	263.816
		Duty on gross supply ...		57·59	61·25	55·13	57·94	57·84
	Rabi ...	Acres		20,851	60·115	131,613	191,728	212,579
		Duty on discharge utilized		48·60	70·39	130·82	103·02	92·83

The duties shown in the foregoing table are calculated from the average discharges for the whole kharif and rabi seasons respectively. During the kharif season, however, the supply varies greatly, scarcely any water being, at times, used, so that these results afford no reliable indication as to the area

which can be irrigated from the canals when there is a pressure of irrigation. More reliable results are obtained by using as a basis of calculation the average discharge during the time of greatest demand only, which in the kharif season of the year under review was for about 12 days in October 1891. The results are, for the Eastern Main Series, an average discharge of 1,556 c. feet per second from 11th to 23rd October, giving a duty of 48·2 acres per c. foot per second, and for the Western Main Series an average discharge of 3,750 c. feet per second from 8th to 20th October, with a duty of 50·3 acres per c. foot per second.

The Superintending Engineer remarks:—

"The duty obtained from the Eastern Main Series is considerably better than in previous years: that of the Western Main Series is much the same, and it may be taken as established that we cannot expect a much higher duty than 50 acres per cubic foot per second on the maximum discharge we can maintain at the head of the canals"

"The result of most importance is the duty on the Buxar Canal system during the rabi season, which was 130 acres per cubic foot per second utilised. This is the first year in which there has been a demand for rabi irrigation from which any useful information as to the duty which could be realised was obtainable."

CROP EXPERIMENTS.

84. The results of experiments made during the year to determine the yield of rice crops irrigated from the canals were, for crops of average outturn, a yield of 23 maunds 10 seers of grain and 56 maunds 24 seers of straw on the mean of 71 experiments, and for specially selected crops a yield of 36 maunds 14 seers of grain and 87 maunds 15 seers of straw on the mean of 161 experiments.

The results, classified according to the soils on which the crops were grown, are remarkably uniform, even for the more barren classes of land. The Superintending Engineer remarks:—

"With thorough irrigation, and in the absence of too much rain at times, when it is not wanted, a good crop of rice can be grown on almost any soil."

The results of a number of experiments made in the rabi season on the yield of canal-irrigated wheat are tabulated below:—

Division.	Staple.	Irrigated with canal water. Number of experiments.	Average yield per acre. Grain. Maunds.	Grain. Seers.	Straw. Maunds.	Straw. Seers.
1	2	3	4	5	6	7
Eastern Sone ..	Wheat ...	24	23	21	37	12
Arrah	„ ...	41	17	20	28	21
Buxar	„ ...	41	19	12	33	19
Sone Circle average ...	„ ...	106	19	22	32	17
Eastern Sone ...	Gram ...	8	10	33	13	17

DEMANDS, COLLECTIONS, AND BALANCES.

85. The demands, collections, and balances of water-rates for the last five years are shown below:—

Year.	Amount outstanding at commencement of year.	Amount falling due for recovery during the year.	Total for recovery.	Cash realization.	Remitted or written off.	Balance at the end of the year.
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs
1887-88 ...	2,31,682	7,25,810	9,57,392	5,19,586	26,525	4,11,281
1888-89 ...	4,11,281	7,53,217	11,64,498	7,59,556	24,329	3,80,613
1889-90 ...	3,80,613	7,52,788	11,33,401	8,16,394	35,225	2,81,782
1890-91 ...	2,81,782	6,29,178	9,10,960	6,44,718	21,460	2,08,782
1891-92 ...	2,08,782	7,29,631	9,38,413	8,11,750	15,220	1,11,443

The balance outstanding at the end of the year 1890-91 was shown in the revenue report for that year as Rs. 2,44,728. It now appears, however, that this figure included a moiety of Rs. 35,946 on account of rabi irrigated during 1890-91, which, as noted by Superintending Engineer in paragraph 7 of his report for 1890-91, was made due on 1st April instead of 31st March.

Details of the figures are given in the table in paragraph 74 above.

The amounts included in the current demand for the last three years as assessments for the unauthorised use of water or for wastage of water are reported by the Superintending Engineer to be—

	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.
For unauthorized use of water ...	913	4,240	11,168
For wastage of water ...	224	256	234

86. In the following statement the Deputy Collector shows the extent to which the arrears as well as current demand have been worked off:— ARREARS.

	Demand of 1891-92 consisting of	Collected or remitted in 1891-92.	Percentage of demand adjusted.	Unadjusted balance at close of year.
1	2	3	4	5
	Rs.	Rs.		Rs.
Arrears previous to 1889-90	27,827	19,190	68·9	8,637
Arrears of 1889-90	30,838	27,850	90·3	2,988
" " 1890-91	1,50,116	1,45,635	97·0	4,481
Total arrears outstanding on 1st April 1891 ...	2,08,781	1,92,675	92·5	16,106
Current demand for 1891-92	7,24,438	6,29,101	86·8	95,337
Total ...	9,33,219	8,21,776	88·0	1,11,443

There is on the whole a reduction on the outstanding balance of Rs. 1,33,285, but the rabi assessments which formerly became due on the 31st March, and are now due on the 1st April, no longer form a part of the balance.

The following statement gives the collections in each district:—

District.	Demand.			Adjustments.				Balance on 31st March 1892.	Percentage, column 8 on column 4.
	Arrears on 31st March 1891.	Current demand for 1891-92.	Total.	Collection.	Remission made by canal officers.	Written off as irrecoverable.	Total.		
1	2	3	4	5	6	7	8	9	10
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
Shahabad	83,076	5,47,965	6,31,041	5,65,707	1,913	6,743	5,74,363	56,678	91·0
Patna	93,744	92,441	1,86,185	1,51,651	1,104	4,277	1,57,032	29,153	84·3
Gaya	31,961	84,032	1,15,993	89,197	693	491	90,381	25,612	77·9
Total ...	2,08,781	7,24,438	9,33,219	8,06,555	3,710	11,511	8,21,776	1,11,443	88·0

As regards the progress made in the Patna district the Commissioner remarks:—

"The total demand for the year 1891-92 up to the end of February last amounted to Rs. 1,62,521, against Rs. 1,49,690 and Rs. 1,54,680 respectively in the corresponding period of the two preceding years. The total collections for the same period amounted to Rs. 1,31,187 against Rs. 48,782 and Rs. 53,759. The percentage of collection on demand was therefore 80 7 against 32·5 and 34·7 respectively. The balance outstanding at the close of February last was Rs. 26,119, which includes a sum of about Rs. 10,500 embezzled by the tahsildars against whom proceedings have been taken. So the actual balance on that date, excluding the amount embezzled, was only approximately Rs. 15,619 against Rs. 95,565 and Rs. 96,341 of the previous two years. This outturn of work is very satisfactory, and reflects credit on the Deputy Collector, Babu Shiva Sankar Singh, who was temporarily deputed to the work."

87. The percentage of the total demand collected in each district is given in the table below:—

District.	Arrears due for irrigation effected in previous years.				Demands for irrigation effected in 1891-92.			
	Percentage of total demand.				Percentage of total demand.			
	Demand.	Collections.	Remissions.	Outstanding at end of year.	Demand.	Collections.	Remissions.	Outstanding at end of year.
1	2	3	4	5	6	7	8	9
Shahabad—								
1890-91 ...	100·0	79·8	8·8	11·2	100·0	85·1	0·2	14·5
1891-92 ...	100·0	87·6	9·9	2·5	100·0	90·0	0·1	9·9
Patna—								
1890-91 ...	100·0	50·3	6·6	43·1	100·0	12·4	0·07	87·5
1891-92 ...	100·0	81·9	5·4	12·7	100·0	81·0	0·3	18·7
Gaya—								
1890-91 ...	100·0	91·3	0·2	8·4	100·0	58·6	1·1	40·1
1891-92 ...	100·0	91·7	1·6	6·7	100·0	71·2	0·8	28·0
Average—								
1890-91 ...	100·0	72·3	6·8	20·8	100·0	74·0	0·3	25·6
1891-92 ...	100·0	85·7	6·6	7·7	100·0	86·7	0·2	13·1

Besides the collections shown above, a further sum of Rs. 9,336 was credited to water-rate accounts as follows:—

Particulars.	Shahabad.	Patna.	Gaya.	Total.
1	2	3	4	5
	Rs.	Rs.	Rs.	Rs.
Process fees in certificate cases ...	2,462	1,303	4	3,769
Surplus and excess recoveries ...	3,922	226	1,074	5,222
Miscellaneous	326	137	—118	345
Total ...	6,710	1,666	960	9,336

Remissions.

88. In the return submitted by the Examiner of Accounts the sums remitted during the year under review and the preceding year are shown as below:—

	1890-91.	1891-92.
	Rs.	Rs.
By canal officers ...	5,324	2,555
By civil „ ...	16,136	12,665
	21,460	15,220

According to the figures supplied by the Superintending Engineer the remissions are—

	Rs.
Written off by civil officers as irrecoverable ...	11,510
Remissions granted by Executive Engineers	3,304
Extraordinary remissions by Superintending Engineer ...	1,248
Remitted on revised and cancelled khatianies	1,365
	17,427

As regards the remissions by Executive Engineers, the difference between Rs. 3,304 shown by the Superintending Engineer, and Rs. 2,555 shown by the Examiner, viz. Rs. 749, was paid as a refund.

The ordinary remissions by the Executive Engineer are classified in the following table:—

Class.	Causes.	Eastern Sone Division.	Arrah Division	Buxar Division.	Total, 1891-92.	Total, 1890-91.
1	2	3	4	5	6	7
		Rs.	Rs.	Rs.	Rs.	Rs.
a	Charged by mistake for land cultivated by others	...	...	23	23	...
b	Excess measurement or errors in calculation	130	269	18	417	...
c	Lift charged as flow	39	14	8	61	...
d	Irrigation not denied, but remitted as not chargeable under the Act ...	563	4	140	707	...
e	Land not having been irrigated at all	488	146	57	691	...
f	Injury to crop due to insufficient supply	472	103	119	694	...
g	Land thrown temporarily out of cultivation	...	...	...	...	...
h	(Applicable to long leases only) Failure of crop originally sown, rule 82	...	279	27	306	...
i	Land appropriated for other purposes than cultivation	...	38	4	42	...
j	Double assessment, as when land assessed or a season lease is subsequently included in a long lease in the same year	...	271	92	363	..
	Total ...	1,692	1,124	488	3,304	6,555

Extraordinary remissions to the amount of Rs. 1,248 were granted by the Superintending Engineer for damage done to crops by unseasonable weather, and the sum of Rs. 1,365 remitted on revised and cancelled demand statements was in reality a modification of the demand, and cannot properly be classed as a remission.

The remissions implying errors in assessments, excluding revised and cancelled demand statements, for the last seven years were as follows:—

1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
67,554	21,055	13,036	11,284	9,886	6,579	3,304

There has been a steady improvement in the accuracy of the assessments, which is satisfactory.

The Superintending Engineer writes:—

"The most serious items are those classed as *d*, *e*, and *f*. The Eastern Sone Division shows the worst record, especially when the small area assessed in that Division is considered."

The amount written off by civil officers as irrecoverable (Rs. 11,510) compares favourably with Rs. 16,128 in 1890-91 and Rs. 17,324 in 1889-90, though it is still rather high. The large sum written off in the Patna district was due to the arrears which had been allowed to accumulate there, and which were taken in hand and recovered in the year under review.

The following table compiled from the detailed statement given by the Deputy Collector shows the amounts written off in each district from the assessments of the several years :—

Written off from assessments of	Patna district.	Gaya district.	Shahabad district.	Total.
1	2	3	4	5
	Rs.	Rs.	Rs	Rs.
1883-84 ...	1,748	5	...	1,753
1884-85 ...	950	16	...	966
1885-86 ...	522	88	...	610
1886-87 ...	491	93	...	584
1887-88 ...	407	151	...	558
1888-89 ...	131	68	661	860
1889-90 ...	27	45	4,310	4,382
1890-91 ...	...	25	1,555	1,580
1891-92 ...	...	...	217	217
Total ...	4,276	491	6,743	11,510

The percentage on the gross demand of remissions by canal officers is as follows :—

	Percentage of remissions to gross demand.	
	1890-91.	1891-92.
Eastern Sone Division ...	0·88	0·63
Arrah " ...	0·43	0·31
Buxar " ...	0·99	0·22

REVENUE ESTABLISHMENT.

89. The expenditure on the revenue establishments employed during the year under review and the four previous years is shown below :—

PARTICULARS.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6
Establishment under Collector.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Permanent establishment, including travelling allowances.	25,448	29,427	30,589	31,253	40,997
2. Temporary establishment ...	2,573	1,011	710	687	4,752
3. Contingencies	2,445	2,878	2,522	2,398	2,784
4. Fees to tahsildars or establishment employed in lieu thereof.	27,629	28,362	28,603	24,499	16,868
Fees to patwaris. Rule 40	3,279	4,128	3,763	3,988	2,205
Establishment under Executive Engineer.					
Permanent and temporary establishment, including travelling allowances.	48,253	48,717	51,635	48,105	50,228
Contingencies	2,667	3,338	3,695	3,500	5,443
Water-regulation establishment ...	2,334	2,270	2,299	2,235	2,286
Headmen's fees	20,615	38,118	29,007	28,861	26,550
Total ...	1,35,243	1,58,249	1,52,823	1,45,528	1,52,113
Collections of water-rates and miscellaneous revenue by the Canal Revenue Department.	5,22,79	7,63,376	8,19,762	6,47,839	8,15,858
Percentage	25·8	20·7	18·6	22·3	18·66

During the year the three revenue circles of Shahabad, Patna, and Gaya were amalgamated and formed from the 1st of March 1892 into the Sone Canals Revenue Division, in charge of the Special Deputy Collector, who had previously supervised the collections in the Shahabad district only. The new Division is under the administrative control of the Superintending Engineer, Sone Circle.

An alteration has also been made in the establishment. Until the 1st of October the field establishment was charged to an allowance of half an anna in the rupee allowed under rule 53 for tahsildars or establishment employed in lieu thereof. From the date mentioned a salaried collecting establishment, partly permanent and partly temporary, on a scale sanctioned by Government, was employed. The system was further developed from the 1st of March, when the establishment was revised. The item "tahsildar's fees" will disappear from the accounts of future years, but a part of the headmen's fees now entirely disbursed by the Executive Engineers will be paid by the Deputy Collector for assistance rendered in collections.

COST OF MEASUREMENT &C., PER ACRE.

90. In the table below the approximate cost of measuring lands brought under assessment during the year under review and of preparing demand statements are shown:—

NAME OF DIVISION.	Areas measured.	COST OF MEASURING CROPS.		Areas assessed.	COST OF PREPARING DEMAND STATEMENTS.	
		Total.	Per acre.		Total.	Per acre.
1	2	3	4	5	6	7
	Acres.	Rs.	Pies.	Acres.	Rs.	Pies.
Eastern Sone	60,410	1,474	4·68	57,749	1,697	5·64
Arrah	101,156	3,852	7·31	94,253	2,114	4·30
Buxar	116,414	4,162	6 86	93,618	2,666	5 46
Total, 1891-92 ..	277,980*	9,488	6 55	245,620†	6,477	5·06
Total, 1890-91 ...	91,698	4,790	10·03	91,698	3,391	6·91
Total, 1889-90 ...	150,315	6,581	8·4)	150,315	5,184	6·62

* These figures are the areas actually measured to end of March 1892 as shown in irrigation notes.
† These figures are the areas assessed by 31st March 1892 as nearly as can be estimated

91. The cost per acre of assessments, including permanent and temporary establishments and headmen's fees, is given in the statement below:—

DIVISION.	Area assessed during the year.	CHARGE PER ACRE.			TOTAL.	
		Permanent establishment.	Temporary establishment.	Headmen's fees, liabilities on account of 1891-92.	1891-92.	1890-91.
1	2	3	4	5	6	7
	Acres.	Rs. A. P.	Rs. A. P	Rs. A. P.	Rs. A. P.	Rs. A. P.
Eastern Sone ...	57,749	0 2 5	0 0 9	0 2 0	0 5 2	0 11 5
Arrah ...	94,253	0 2 8	0 0 8	0 2 4	0 5 8	0 10 7
Buxar ...	93,618	0 2 0	0 0 7	0 2 0	0 4 7	1 3 0
Total ...	245,620	0 2 4	0 0 8	0 2 2	0 5 2	0 12 6
Total, 1890-91 ...	91,698	0 6 2	0 1 6	0 4 9	...	...

COMPLAINTS. 92. Below is a statement showing the progress made in disposing of "complaints" properly so defined, *i.e.*, objections to assessments actually made or petitions alleging that damage has been sustained through the canals:—

Division.	(I)—Ordinary remission.				(II to V)—Other complaints.			Total complaints received during year, excluding those pending from previous year.	Pending.
	Received during the year and pending from previous year.	Disposed of.		Pending.	Received during the year and pending from last year.	Disposed of.	Pending.		
		Remission allowed.	Remission refused.						
1	2	3	4	5	6	7	8	9	10
	No.	No.	No.	No.	No.	No.	No.	No.	No.
Eastern Sone ...	1,794	552	1,089	153	21	20	1	1,785	164
Arrah	2,265	479	1,592	194	149	105	44	2,333	238
Buxar	666	243	293	130	73	66	7	737	137
Total, 1891-92 ...	4,725	1,274	2,974	477	243	191	52	4,855	629
Total, 1890-91 ..	3,703	1,598	1,996	109	194	190	4	3,151	113

The Superintending Engineer writes:—

"The number of complaints has increased considerably in all three divisions over the previous year. This is due to the largely extended irrigation, and does not indicate any falling off in the administration of the canals. The largest number of complaints had reference to alleged excess measurement, non-irrigation, deficient supply of water, and mistakes in entering the name of the person liable for the rate.

The complaint was admitted in the cases dealt with as under:—

Excess measurement ...	37	per cent. admitted.
Non-irrigation ...	14	" " "
Deficient supply of water...	17	" " "
Mistake in name ...	43	" " "

Taking all the complaints asking for remission, 30 per cent. were admitted and 70 per cent. rejected.

Of the 2,974 complaints which were rejected, it is probable that a very considerable number were of such a frivolous nature that they need not have been entertained at all. It is no doubt safer to continue the existing practice, by which all petitions are accepted and registered, whatever their nature may be, but it is necessary to bear this in mind as explaining to some extent the large numbers of complaints shown in the returns."

Details by divisions are given below of the "applications"—in which term are included petitions for leases and outlets, for change of names in five-year leases, or for the post of headman—received during the year in addition to the complaints noted above, of which 1,867 were granted and 2,412 refused out of 5,025 received, the number pending at the close of the year being 746:—

Division.	Received during the year and pending from last year.	Granted.	Refused.	Pending at the close of the year.
1	2	3	4	5
	No.	No.	No.	No.
Eastern Sone ...	1,511	730	495	286
Arrah ...	2,625	648	1,592	385
Buxar ...	889	489	325	75
Total ...	5,025	1,867	2,412	746
Total, 1890-91	4,335	2,312	1,557	466

The following remarks on the subject are quoted from the Superintending Engineer's report :—

"Four thousand two hundred and seventy-nine cases were disposed of in the year as compared with 3,869 in 1890-91. The balance pending on 31st March was large, but has been considerably reduced since. The most important cases which are dealt with are those relating to the ownership and rights of use of village channels. Altogether 1,052 cases in this class were disposed of during the year."

93. Thirty-two appeals were preferred to Collectors against the orders passed by canal officers on complaints, of which 18 were dismissed, and 2 were allowed and 12 were still pending at the close of the year. APPEALS.

Ten cases were decided by engineers vested with magisterial powers under the Bengal Irrigation Act. Twenty-one persons accused of offences under the Act were convicted, and two discharged. The amount of fines imposed was Rs. 235.

94. The certificates required in realising water-rates continue to be dealt with by the Special Deputy Collector in charge of the collections, as was the case last year. CERTIFICATE PROCEDURE.

The amount of certificate work done in each district during the year under review, as compared with that of the previous year, is shown in the following statement:—

	SHAHABAD.				PATNA.				GAYA.				TOTAL.			
	1890-91.		1891-92.		1890-91.		1891-92.		1890-91.		1891-92.		1890-91.		1891-92.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.	Number.	Amount.
1	2	3	4	5	6	7	8		10	11	12	13	14	15	16	17
		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.		Rs.
Cases for disposal—																
1. Cases pending at the close of the preceding year.	573	6,757	245	6,202	1,328	15,596	1,312	16,325	105	6,722	29	2,757	2,006	29,075	1,586	25,284
2. Cases instituted during the year ...	3,336	34,524	3,152	27,853	1,405	7,447	8	2,152	150	5,003	18	1,171	4,891	46.974	3,178	31,176
Total ...	3,909	41,281	3,397	34,055	2,733	23,043	1,320	18,477	255	11,725	47	3,928	6,897	76,049	4,764	56,460
Cases disposed of—																
1. By being struck off owing to the demand having been remitted ...	428	4,503	208	2,490	748	5,012	55	9,925	40	6,614	17	3,467	1,216	16,129	280	15,882
2. By being wholly satisfied ...	3,236	30,576	3,033	29,537	673	1,706	1,198	1,664	186	2,354	19	184	4,095	34,636	4,250	31,385
Total ...	3,664	35,079	3,241	32,027	1,421	6,718	1,253	11,589	226	8,968	36	3,651	5,311	50,765	4.530	47,267
Balance outstanding at the close of the year.	245	6,202	156	2,028	1,312	16,325	67	6,888	29	2,757	11	277	1,586	25,234	234	9,193

The number for disposal was 4,764, inclusive of the outstanding balance from last year, covering a sum of Rs. 56,460 as compared with Rs. 6,897 and Rs. 76,049 in the previous year. The demand adjusted was Rs. 47,267 as against Rs. 50,765, the remissions being Rs. 15,882 compared with Rs. 16,129.

The Commissioner remarks that the decrease in the number of certificates filed during the year, which is specially noticeably in the districts of Gaya and Patna, is satisfactory as proving that the collecting establishment is now more mindful of its duties, instead of throwing a large share of the work upon the Certificate Department, as was formerly the practice. He adds:—

"On the whole the Deputy Collector in charge of the Sone Canal and his staff have worked creditably in reducing the arrears and in making good collections with the least possible recourse to the certificate procedure."

95. The sum for which demand statements were submitted during the year, including five-year leases, unauthorised irrigation, and wastage of water was Rs. 7,76,059. The degree of punctuality observed in submission is shown in the following statement, the figures in which include Rs. 4,484 on account of irrigation which occurred in 1890-91, and exclude the sum of Rs. 2,01,244 for

which assessments were not submitted until after 31st March 1892, and which did not fall due during 1891-92:—

ASSESSMENTS WHEN SUBMITTED.	Hot weather.	Long leases.	Kharif and bhadoi.	Water supplied by volume.	Rabi.	Wastage of water.	Sugar-cane.	Total.
1	2	3	4	5	6	7	8	9
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Before the demand fell due	8,598	4,49,185	71,664	1,174	1,01,146	15,468	4,508	6,31,743
Within a month after the demand fell due	24,340	19,429	50,468	...	5,572	...	874	1,00,683
More than a month after the demand fell due.	19,189	924	3,316	...	184	...	20	23,633
Total ...	52,127	4,69,538	1,25,448	1,174	1,06,902	15,468	5,402	7,76,059

NAVIGATION.

96. The receipts from navigation revenue and tollage for the last five years are shown in the following statements:—

NAVIGATION RECEIPTS.

YEAR.	EASTERN MAIN SERIES.			WESTERN MAIN SERIES.			Total.	Total tollage only.
	Number of miles open.	Tollage receipts.	Transport service receipts.	Number of miles open.	Tollage receipts.	Transport service receipts.		
1	2	3	4	5	6	7	8	9
	No.	Rs.	Rs.	No.	Rs.	Rs.	Rs.	Rs.
1887-88	86¼	27,622	95*	132¼	23,362	4,825*	55,904	50,984
1888-89	86¼	24,876	60*	132¼	27,286	5,607*	57,829	54,162
1889-90	86¼	25,189	...	132¼	26,000	6,570*	57,759	51,189
1890-91	86¼	28,465	...	132¼	28,128	9,036*	65,629	56,593
1891-92	86¼	25,602	...	132¼	31,737	9,178*	66,517	57,339

* There is no longer any Government transport service. These receipts are on account of hire of steamers, boats and sundries.

TOLLAGE.

TOLLAGE (ASSESSED).

YEAR.	Patna Canal system, Eastern Main Canal series.	Arrah Canal system.	Buxar Canal system.	Total.
1	2	3	4	5
	Rs.	Rs.	Rs.	Rs.
1887-88	28,206	15,306	8,030	51,542
1888-89	25,165	18,121	8,826	52,412
1889-90	24,271	18,565	7,479	50,315
1890-91	28,526	18,180	9,998	56,704
1891-92	25,455	21,048	10,789	57,292

TRAFFIC.

COMPARISON OF TRAFFIC.

PARTICULARS.		1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1		2	3	4	5	6
Number of miles open ...	No.	218½	218½	218½	218½	218½
Toll collections	Rs.	51,542	5,2412	50,315	56,704	57,292
Collections per mile ...	„	236	240	230	259	262
Boats, including empties ...	No.	8,116	8,096	8,058	8,644	8,645
Tonnage of boats	Tons.	95,082	106,788	104,390	114,996	129,147
Estimated value of cargo, including rafts	Rs.	56,80,508	58,04,029	49,36,564	65,25,714	70,06,595

97. Messrs. Hodges and Radford, whose contract was renewed for a further period of two years from 1st December 1892, continue the working of the transport service. The charges, Rs. 600 per month for steamer hire, and Rs. 500 for compounded tolls, are the same as in past years, the ordinary repairs of the steamers being executed by the lessees. TRANSPORTS SERVICE.

The extent of the traffic in connection with the steamers is shown below:—

PARTICULARS.		Arrah Canal.	Buxar Canal.	Patna Canal.	Total.
1		2	3	4	5
Passengers carried	Up ... No.	13,129	8,123	3,366	24,618
	Down „	13,086	8,048	3,353	24,487
Cargo carried	Up ... Tons.	613	311	839	1,763
	Down ... „	264	864	740	2,107

On the Arrah and Buxar Canals the steamers make two trips each way in every week. On the Patna Canal the steamer makes only one trip each way in a week.

There are in addition to the steamers four cargo boats, the property of Government, for the hire of which Rs. 1,442 was received during the year, besides which Rs. 535 was recovered by way of fees for the use of the accommodation boat.

98. The following table shows the details of the miscellaneous receipts for the last five years:— MISCELLANEOUS RECEIPTS.

PARTICULARS.		1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1		2	3	4	5	6
		Rs.	Rs.	Rs.	Rs.	Rs.
Sale of water		370	387	514	393	1,056
Plantations		394	383	279	365	995
Other canal produce		2,145	1,816	1,642	1,815	742
Water-power		708	835	769	1,158	1,049
Rent of buildings		7,197	8,247	8,313	8,164	8,397
Fines		317	224	28	40	5
Miscellaneous	Rent of lands ...	10,997	7,995	6,939	8,114	9,920
	Fisheries ...	502	734	697	431	489
	Cost of process ...	2,474	3,739	3,244	2,937	3,769
	Sale of old materials	60	102	17	121	82
	Other items ...	3,295	2,042	1,100	2,610	5,323
Total ...		28,459	26,504	23,342	26,128	31,827

99. The expenditure on works and maintenance will now be briefly reviewed. MAINTENANCE CHARGES.

The principal works executed under "extensions and improvements," on which Rs. 3,812 were spent, were the substitution of brick arches for wooden tops on bridges on the Gurrah Chowbey branch canal, in addition to which the road along the Koelwar distributary was improved, and other minor works carried out. EXTENSIONS AND IMPROVEMENTS.

100. The expenditure on repairs, which was last year reduced by Rs. 20,161, shows a still further reduction of Rs. 13,027, due to economies REPAIRS.

effected in the Arrah Division on silt clearing and repairs to masonry works. The distribution by subheads is as follows:—

PARTICULARS.	1889-90.	1890-91.	1891-92.
1	2	3	4
	Rs.	Rs.	Rs.
Head works	32,787	20,353	20,922
Main canal, including branches	1,89,296	1,78,593	1,75,837
Distributaries	60,767	67,616	58,248
Drainage and protective works ..	8,502	61,01	3,622
Cost of working transport service	779	...	1,155
Compensation	861	168	28
Total ...	2,92,992	2,72,831	2,59,832

REPAIRS TO HEAD WORKS.

101. The figures below give the cost of repairs to head works during the last three years:—

	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.
Weir on Sone River ...	21,133	11,151	11,617
Other works ...	11,030	8,743	8,773
Total ...	32,163	19,894	20,390

MAINTENANCE OF MAIN CANALS AND DISTRIBUTARIES.

102. Details of the expenditure on maintenance and repairs on the main canals and distributaries in each division during the last three years are given in the following statement:—

	Arrah Division.			Buxar Division.			Eastern Sone Division.			Total.		
	1889-90.	1890-91.	1891-92.	1889-90.	1890-91.	1891-92.	1889-90.	1890-91.	1891-92.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6	7	8	9	10	11	12	13
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Western Main Canal ...	48,430	44,777	47,077	15,423	16,167	12,002	..	...	...	63,853	60,944	59,079
Eastern ditto ...	...	...	...	..	...	...	32,267	29,398	32.423	32,267	29,398	32,423
Canals	26,854	25,110	22,944	10,543	15,896	13,822	25,077	25,566	28,513	62,474	66,572	65,279
Branch Canals	15,179	12,540	10,798	13,269	7,514	9,367	...	..	..	28,448	20,054	20,165
Distributaries	29,682	33,706	24,943	17,106	17 747	16,927	13,979	16,161	16,377	60,767	67,614	58,247
Drainage and protective works	5,285	4,332	1,841	168	.	140	3,048	1,768	1,605	8,501	6,100	3,586
Total ...	1,25,430	1,20,465	1,07,603	56,509	57,324	52,258	74,371	72,893	78,918	2,56,310	2,50,682	2,38,779

The charge for maintaining the Telegraph line from Arrah to Dehri, which has been included in paragraph 100 under head "Main Canal with Branches," is excluded from the figures given above.

A reduction of Rs. 11,903 has been effected in the total expenditure during the year, as compared with 1890-91.

The charges for silt clearing are higher than last year in the Eastern Sone Division and lower in the Arrah and Buxar Divisions, while on the Main Western Canal the cost of this item remained the same as in 1890-91, and cannot be expected to fall much below Rs. 50,000 in any year. The total charges under the head "Earthwork" in the first five miles of the Western Main Canal rose from Rs. 43,430 last year to Rs. 46,179 in 1891-92, out of which Rs. 42,026 was for silt clearing, against Rs. 40,942 in 1890-91. It may be remarked that this year all the silt clearing in this reach was done by dredging, the sum of Rs. 921 shown as expenditure on silt clearing by hand representing payments made in April 1891 for work done during March.

103. The following table shows the quantity of silt dredged from the Eastern and Western Main and Buxar Canals, and the rate at which the work was done during the last three years:— SILT-CLEARING AND DREDGING.

Canals.	1889-90.			1890-91.			1891-92.		
	Quantity dredged.	Cost, including removal over spoil bank, or discharge into river.	Rate per 1,000 cubic feet.	Quantity dredged.	Cost, including removal over spoil bank, or discharge into river.	Rate per 1,000 cubic feet.	Quantity dredged.	Cost, including removal over spoil bank, or discharge into river.	Rate per 1,000 cubic feet.
1	2	3		5	6	7	8	9	10
	C. ft.	Rs.	Rs. A. P.	C. ft.	Rs.	Rs. A. P.	C. ft.	Rs.	Rs. A. P.
Eastern Main and Patna ...	2,369,143	13,867	5 13 7	2,235,724	11,747	5 4 0	1,706,541	10,905	6 6 2
Western Main	6,410,767	40,033	6 3 10	7,833,182	45,498	5 12 11	6,749,057	43,040	6 6 0
Buxar Canal	...	...	...	720,117	2,970	4 1 11	187,000	1,123	6 0 0
River Sone	1,563,222	3,285	2 1 7	1,502,555	2,148	1 6 10	1,921,530	3,990	2 1 2
Head Lock	35,620	210	5 14 3	66,224	281	4 3 10	64,124	313	4 14 1
Total ...	10,378,752	57,395	5 8 5	12,357,802	62,644	5 1 1	10,628,252	59,371	5 9 3

The rates shown in the above table include the cost of lifting the silt into barges and of carrying it either over the spoil banks or into the river. The rates necessarily vary much under the latter head owing to different heights of spoil-bank and of different lengths of lead to the river.

The cost of lifting the silt on to the barges or dredging proper was as shown below:—

	1889-90.			1890-91.			1891-92.		
	Quantity dredged.	Cost of dredging.	Rate per 1,000 cubic feet.	Quantity dredged.	Cost of dredging.	Rate per 1,000 cubic feet.	Quantity dredged.	Cost of dredging.	Rate per 1,000 cubic feet.
1	2	3	4	5	6	7	8	9	10
	C. ft.	Rs.	Rs. A. P.	C. ft.	Rs	Rs. A. P.	C. ft.	Rs.	Rs. A. P.
Eastern Main and Patna ...	2,369,143	3,750	1 9 3	2,235,724	3,674	1 10 3	1,706,541	3,186	1 13 10
Western Main	6,410,767	12,707	1 15 8	7,833,182	15,276	1 15 2	6,749,057	12,734	1 14 2
Buxar	...	...	...	720.117	1,385	1 14 9	187,000	874	2 0 0
River Sone	1,563,222	2,835	1 13 0	1,502 555	1,928	1 4 6	1,921,530	3,571	1 13 7
Head Lock	35,620	135	3 12 7	66,224	208	3 2 3	64,124	177	2 12 1
Total ...	10,378,752	19,427	1 13 11	12,357,802	22,471	1 13 1	10,628,252	20,042	1 14 2

The rate in the Eastern Sone Division, which in 1889-90 was reduced from Rs. 2-2-4 to Rs. 1-9-3, has risen to Rs. 1-13-10, due mainly to the economy in rope and belting, which was effected in 1889-90, not having been maintained.

The rate per 1,000 cubic feet in the river Sone has risen to the figure at which it stood in 1889-90.

104. The statement below compares the expenditure on repairs to dredgers during the year under review with that of the two previous years:—

	1889-90.	1890-91.	1891-92.
1	2	3	4
	Rs.	Rs.	Rs.
12 Fouracres' dredgers	6,675	6,857	7,004
2 Bruce's ditto	374	436	750
2 English ditto	3,439	3,552	3,170
Mud punts ...	3,178	4,790	3,009
Total ...	13,666	15,635	13,933

105. The cost of lifting the silt on to barges, for each class of dredger used, including interest on capital cost and expenditure on repairs, is compared by the Superintending Engineer as follows:—

	Average cost in 1891-92 of lifting per 1,000 cubic feet.	Interest on capital cost per 1,000 cubic feet lifted.	Cost of repairs per 1,000 cubic feet lifted.	Total.
1	2	3	4	5
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs A. P.
Fouracres' dredgers ...	1 14 1	0 8 0	0 14 3	3 4 4
Bruce's dredger ...	1 11 8	0 13 6	0 7 8	3 0 10
English ladder dredgers	2 0 10	3 1 0	2 0 0	7 1 10

The charges for interest and repairs of mud punts amounting to Re. 1-1-9 for each class of dredger, are not included in the above figures. The results show that the Bruce's dredgers are the most economical.

106. The table below shows the quantity of silt cleared by hand from main canals in the Eastern Sone Division and the cost, compared with the figures for the two previous years:—

	1889-90.			1890-91.			1891-92.		
	Quantity cleared by hand.	Cost.	Rate.	Quantity cleared by hand.	Cost.	Rate.	Quantity cleared by hand.	Cost.	Rate.
1	2	3	4	5	6	7	8	9	10
	C. feet.	Rs.	Rs. A. P.	C. feet.	Rs.	Rs. A. P.	C. feet.	Rs.	Rs. A. P.
Eastern Main and Patna Canals...	2,491,847	13,067	5 3 10	4,282,127	19,021	4 7 0	6,283,004	24,798	3 15 2

The Western Main Canal was not closed during the year, and there was therefore no silt clearance by hand.

WEED CLEARING.

107. The following figures give the cost of weed-clearing for the last five years:—

Division.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
Eastern Sone ...	558	217	9	396	277
Arrah	2,691	1,053	715	1,299	2,470
Dehri Workshops ...	782	899	911	1,350	1,060
Buxar	884	869	726	1,505	2,206
Total ...	4,915	3,038	2,361	4,550	6,013

The Superintending Engineer remarks:—

"There has again been an increase in the cost of this item in the Arrah and Buxar Divisions. In Arrah Canal the worst place is the reach between Lock V (Danwar) and Lock VI (Hurpur), where owing to the reduction in velocity there is a considerable deposit of silt which encourages the growth of weeds. This reach has been cleared of silt in the past hot weather, which should cause temporary relief. On the Buxar Canal it was necessary to clear weeds to a greater extent than usual on account of the large supply of water required for rabi irrigation in November, December, and January, when the weeds are at their worst."

108. The cost per mile of repairs to main canals and distributaries are shown below:— **MILEAGE RATES OF REPAIRS OF CANALS AND DISTRIBUTARIES.**

Canal.	Division.	1889-90. Number of miles.	1889-90. Cost per mile.	1890-91. Number of miles.	1890-91. Cost per mile.	1891-92. Number of miles	1891-92. Cost per mile.
1	2	3	4	5	6	7	8
		No.	Rs.	No	Rs.	No.	Rs.
Eastern Main Canal ...	Eastern Sone ...	7¼	4,483	7¼	4,054	7¼	4,472
Western ditto ...	Dehri Workshop ...	9	6,702	9	6,266	9	6,194
	Buxar	12½	282	12½	364	12½	267
Buxar Canal	Do.	45½	233	45½	351	45½	305
Patna do.	Eastern Sone	79	317	79	323	79	361
Arrah do.	Arrah	65½	411	65½	383	65½	350
Doomraon Branch ...	Do.	40½	193	40½	163	40½	144
Behea ditto ..	Do.	31	239	31	193	31	162
Chowsa ditto ...	Buxar	39½	245	39½	117	39½	166
Gurrah Chowbey Branch	Do	38	93	38	76	38	74
Distributaries ...	Arrah	467¾	63	467¾	72	469	53
	Buxar	354¾	48	370½	48	373¼	45
	Eastern Sone	358	39	358	46	350½	47

109. The charge for establishment not specially shown under the head "Revenue establishment" was Rs. 1,89,196 in 1891-92, against Rs. 1,88,895 in 1890-91. The Superintending Engineer gives the following explanation showing the total expenditure on construction establishment in the canal divisions and the manner in which it is debited. The difference between the sum debited to the canals and the amount, Rs 1,89,196, mentioned above is the charge for direction and accounts.

"There is a slight increase in the charges for establishment (Construction, Direction, and Accounts). As the charges for construction establishment will become a heavier item in the working expenses when expenditure on the capital account ceases, I think it is of some interest to see what the the total charges are and how they are distributed.

The following table compiled from figures by the Executive Engineer will show this:—"

	Rs.
Total charge for Construction establishment	2,09,312
Charged to capital Outlay, Sone Canals	37,083
Charged to Civil Buildings—	
Imperial	3,252
Provincial	26,205
Charged to Agricultural Work	680
Charged to Takavi	110
Charged to Contribution (village channels)	167
Total ...	67,897
Balance charged to Working Expenses, Sone Canal ...	1,41,415

110. Below is a statement showing the number of trees, classified according to size, in the plantations in each division:— **PLANTATIONS.**

Division.	1891-92. Trees over 12 feet in height.	1891-92. Saplings between 4 and 12 feet.	1891-92. Seedlings under 4 feet.	1891-92. Total.	1890-91. Trees over 12 feet in height.	1890-91. Saplings between 4 and 12 feet.	1890-91. Seedlings under 4 feet.	1890-91. Total.	Increase.	Decrease.
1	2	3	4	5	6	7	8	9	10	11
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Eastern Sone	81,317	29,422	57,704	168,443	85,430	30,571	62,040	178,041	...	9,598
Arrah	50,755	27,738	39,900	118,393	37,016	22,569	59,048	118,633	...	240
Dehri Workshop	6,658	46,089	5,564	58,311	5,558	32,164	19,156	56,878	1,433	..
Buxar	20,149	8,185	14,798	43,132	19,873	12,066	14,959	46,898	...	3,766
Total ...	158,879	111,434	177,966	388,279	147,877	97,370	155,203	400,450	1,433	13,604

Net decrease ... ... 12,171.

The decrease in the Eastern Sone Division is due to inaccurate counting in previous years.

CALCUTTA AND EASTERN CANALS.

111. The Capital and Revenue Accounts of these canals are given below :—

CAPITAL ACCOUNT.

1.—CAPITAL ACCOUNT.

HEADS OF ACCOUNT.	Outlay during 1891-92.	Outlay to end of 1891-92.
1	2	3
DIRECT CHARGES.	Rs.	Rs.
Old outlay prior to the year 1861-62	...	24,91,012
I.—Works	53	20,36,808
II.—Establishment	18	3,84,988
III.—Tools and plant	...	3,51,663
IV.—Profit and loss	...	847
V.—Suspense accounts	(—) 387	11,692
Total ...	(—) 316	52,77,010
Less—Receipts on capital account	10,013	54,467
Total direct charges ...	(—) 10,329	52,22,543
INDIRECT CHARGES.		
Leave and pension allowances	2	61,027

No works of any importance chargeable to the Capital Account of the canals were carried out during the year.

REVENUE ACCOUNT.

2.—REVENUE ACCOUNT—(Actuals).

PARTICULARS.	EXPENDITURE—		PARTICULARS.	RECEIPTS—	
	During 1890-91.	During 1891-92.		During 1890-91.	During 1891-92.
1	2	3	4	5	6
DIRECT CHARGES.	Rs.	Rs.		Rs.	Rs.
I.—Works, Maintenance and repairs.					
Works (extensions and improvements).	36,676	36,289	Navigation ...	5,19,263	5,15,125
			Miscellaneous ...	5,883	10,218
Repairs ...	1,49,872	1,72,457			
Establishment, including direction and accounts.	64,041	65,757	Total ...	5,25,146	5,25,343
			Less—Refunds of revenue.	61	124
Tools and plant ...	20,691	12,541			
Total ...	2,71,280	2,87,044			
II.—Revenue Management.					
Navigation establishment.	38,343	41,359			
Total direct charges	3,09,623	3,28,403			
INDIRECT CHARGES.					
Capitalized abatement of land revenue ...	...	...			
Leave and pension allowances.	14,334	14,996			
Total indirect charges	14,334	14,996			
Total working expenses.	3,23,957	3,43,399			
Profit ...	2,01,128	1,81,820			
Total ...	5,25,085	5,25,219	Net total receipts...	5,25,085	5,25,219

112. The receipts on Revenue Account and working expenses for the last ten years are shown in the following statement:— FINANCIAL RESULTS

	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6	7	8	9	10	11
RECEIPTS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Navigation	5,55,103	5,51,713	5,20,495	5,01,141	4,77,199	5,74,766	5,69,920	4,88,309	5,19,263	5,15,125
Miscellaneous	9,091	12,388	49,231	(—)21,657	6,455	5,168	5,224	7,312	5,883	10,218
Total ...	5,64,194	5,64,101	5,69,726	4,79,484	4,83,654	5,79,934	5,75,144	4,95,621	5,25,146	5,25,343
Less—Refunds of revenue ...	...	...	...	...	...	...	19	78	61	124
Net total receipts ...	5,64,194	5,64,101	5,69,726	4,79,484	4,83,654	5,79,934	5,75,125	4,95,543	5,25,085	5,25,219
WORKING EXPENSES.										
Direct charges.										
Works (extensions and improvements)	...	27,897	78,575	32,277	5,092	1,478	4.578	1,244	36,676	36,289
Maintenance and repairs ...	2,27,678	1,02,316	99,262	67.942	1,02,480	1,04,527	1,63,656	1,65,315	1,49,872	1,72,457
Establishment	92,587	81,478	93,013	67,584	66,969	88,168	84,665	86,899	1,02,384	1,07,116
Tools and plant	...	8,933	7,342	18,944	8,347	18,130	29,054	13,510	20,691	12,541
Total direct charges ...	3,20,265	2,20,624	2,78,192	1,86,747	1,82,888	2,12,312	2,81,948	2,66,968	3,09,623	3,28,403
Indirect charges.										
Capitalization of abatement of land revenue	...	...	...	...	...	...	...	...	...	...
Leave and pension allowances	6,632	11,407	13,022	9,462	9,376	12,344	11,853	12,165	14,334	14,996
Total indirect charges ...	6,632	11,407	13,022	9,462	9,376	12,344	11,853	12,165	14,334	14,996
Total working expenses ...	3,26,897	2,32,031	2,91.214	1,96,209	1,92,264	2,24,656	2,93,801	2,79,133	3,23,957	3,43,399
Net revenue ...	2,37,297	3,32,070	2,78,512	2,83,275	2,91,390	3,55,278	2,81,324	2,16,410	2,01,128	1,81,820

The profits in the working of the canals were Rs. 1,81,820, or 3·4 per cent. on the capital outlay. Results for ten years are given below:—

YEAR.	CAPITAL OUTLAY (DIRECT AND INDIRECT)—		RECEIPTS AND WORKING EXPENSES.			Percentage of net revenue to capital outlay to end of year.
	During the year.	To end of the year.	Gross revenue.	Charges (direct or indirect).	Net revenue.	
1	2	3	4	5	6	7
	Rs.	Rs.	Rs.	Rs.	Rs.	
1882-83	3,21,351	50,96,000	5,64,194	3,56,897	2,37,297	4·6
1883-84	1,55,534	52,51,534	5,64,101	2,32,031	3,32,070	6·3
1884-85	9,013	52,60,547	(*a*) 5,69,726	2,91,214	2,78,512	5·2
1885-86	(—)42,566	52,17,981	(*b*) 4,79,484	1,96,209	2,83,275	5·4
1886-87	5,293	52,23.274	4,83,654	1,92,264	2,91,390	5·5
1887-88	15,842	52,39,116	5,79,934	2,24,656	3,55.278	6·7
1888-89	49,369	52,88,485	5,75,125	2,93,801	2,81,324	5·3
1889-90	(—)281	52,88,204	4.95,543	2,79,133	2,16,410	4·1
1890-91	5,693	52,93,897	5,25,085	3,23,957	2,01,128	3·8
1891-92	(—)10,327	52,83,570	5,25,219	3,43,399	1,81,820	3·4

(*a*) Is Rs. 35,185 larger than it should be by reason of error of account.
(*b*) Is Rs. 35,185 smaller than ditto ditto ditto.

These figures show that the percentage of net revenue to capital outlay, which in the year 1887-88 was 6·7 per cent., has since then decreased steadily to 3·4 per cent. in the year under review.

The receipts from navigation during the ten years previous to 1891-92 have averaged Rs. 5,23,059. The yearly fluctuations are considerable, but the falling off since 1889-90 is marked, and is due mainly to the competition of the Central Bengal Railway from Khulna to Calcutta, and of the Steam Navigation Companies. The Superintending Engineer writes:—

"The aggregate collections of the year from boats, steamers, and rafts, including demurrage, was Rs. 5,09,182, against Rs. 5,14,745 of the previous year, thus showing a decrease of

Rs. 5,618 for the year under review. Taking into consideration railway traffic from Khulna, and that the greater portion of the jute from Sirajganj is now brought by rail and flats, instead of by country-boats as before, the above result is satisfactory. The closure of the Dhappa locks for one month and six days, from 15th April 1891, also partially accounts for the short collections. The jute crop was bad, especially at Madáripur, consequently the traffic under this head fell off considerably. The loss by the traffic in jute was made up to a considerable extent by that in rice, which in the previous year was very short. The increase under this head for 1891-92 amounted to 17,89,678 maunds and Rs. 35 076 in collections. A portion of the rice traffic from Magura has been diverted to the railway. There was an increase in other items, such as spices, salt, kerosine oil, and empty boats, while there was a decrease (besides jute) in firewood, passenger boats, fish, lime and coal. The Supervisor of the Calcutta Canals reports—'Our canal traffic will, I think, suffer considerably at Chitpur, as the Oriental Gas Company have connected their works at Sealdah with the Eastern Bengal State Railway, which will enable them to bring in all their coal direct by train; previously it was all brought by boats, averaging about five or six a day. The kerosine oil traffic is also being diverted to the new railway from Budge-Budge.'

"There was an increase in the item salt, although a very large quantity was, and is being, sent by train from Chitpur ghát. The India General Steam Navigation Company and River Steam Navigation Company carry large quantities of cargo which formerly was carried by country boats. The number of steamers and flats is increasing every year. One thousand and ninety-one steamers and flats paid tolls during the year, as compared with 1,058 steamers and flats, from which Rs. 5,425 was realized during the previous year. When it is considered what an immense quantity of cargo these flats carry, and that railways have extended and tap the canal traffic at many places, the results appear very satisfactory."

But the principal cause of the diminution of the net revenue is to be found in the working expenses and maintenance of the Canals, which were higher in 1891-92 than in any of the ten preceding years. The reason for this is the yearly increasing cost of silt clearance, and it will be found that in years such as 1889-90, when the working expenses were abnormally low, the expenditure on this item was considerably below the average. The fact is that the canals independently of, and possibly partly in consequence of, the construction of the locks at Chitpur and Dhappa, are now maintained in a far more efficient state than they were formerly. The construction of these locks, enabling what was the worst part of the journey to be performed with ease and rapidity, has rendered it necessary to keep up the remainder of the canals to a higher level of efficiency. The items of expenditure are dealt with in paragraph 120 below.

NAVIGATION. 113. The amounts received during the last two years by the Collector of the canals and by the Executive Engineer are shown in the following statement:—

CANALS.	Number of boats and rafts.	COLLECTIONS BY COLLECTOR AND SUPERVISOR.						COLLECTIONS BY EXECUTIVE ENGINEER.	GRAND TOTAL, GROSS REVENUE.
		Tolls from boats and rafts.	Demurrage.	Ferry tolls.	Tolls from steamers and flats.	Rents of buildings, lands, and other miscellaneous receipts.	Total.	Rents of buildings, lands, and other miscellaneous receipts.	
1	2	3	4	5	6	7	8	9	10
	No.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Calcutta and Eastern ...	83,813	3,85,657	5,549	3,870	5,455	7,747	4,08,278	} 3,085	5,25,343
Tolly's Nala	65,935	1,11,323	1,198	1,220	...	239	1,13,980		
Total 1891-92 ...	149,748	4,96,980	6,747	5,090	5,455	7,986	5,22,258	3,085	5,25,343
Total 1890-91 ...	157,575	5,02,628	6,692	4,320	5,425	3,909	5,22,974	2,172	5,25,146

The tolls collected from boats and rafts, which are the chief source of revenue, amounted to Rs. 4,96,980 compared with Rs. 5,02,628 in the previous year, showing a decrease of Rs. 5,648.

In Resolution No. 1027I., Public Works Department, dated 23rd August 1892, certain modifications, to have effect from 1st April 1893, were introduced into the system of measurement and rates of tolls in force. With the object

of causing the tonnage on which toll is levied to approximate more nearly to the weight of cargo actually carried, the maundage of the boat, as calculated by the rules now in force, will be reduced by one-half, all the rates of toll being at the same time doubled, to avoid loss of revenue; reductions of toll will be made on rice, lime, and firewood, which will be compensated for by the imposition of tolls on boats making return trips. It is not expected that these orders will materially affect the financial position of the canals.

114. The particulars regarding the boats which used the canals during the last two years are given below:— BOATS.

Canal.	Year.	Number and Class of Boats.					
		Up to 100 maunds.	Between 100 and 1,000 maunds.	Between 1,000 and 2,500 maunds.	Between 2,500 and 5,000 maunds.	Over 5,000 maunds.	Total.
1	2	3	4	5	6	7	8
Calcutta and Eastern Canals.	1890-91	38,753	24,643	18,102	2,375	166	84,038
Tolly's Nala	1890-91	17,076	21,109	6,491	70	...	44,736
Total ...	1890-91	55,829	45,751	24,583	2,445	166	128,774
Calcutta and Eastern Canals.	1891-92	36,117	24,552	20,178	2,802	98	83,747
Tolly's Nala	1891-92	17.331	19,100	6,104	73	...	42,608
Total ...	1891-92	53,448	43,652	26,282	2,875	98	126,355

The falling off in the number of boats below 1,000 maunds was due to a decrease in the jute traffic, and the greater number of boats from 1,000 to 5,000 maunds to the increased traffic in rice.

Besides the boats enumerated above, a number of small boats and *dinghies* enter Tolly's Nala from the Kourapukhur khal, paying toll at Russa. These boats are not classified. Their number was 23,244 against 28,680 in 1890-91.

115. The figures showing the tonnage of the boats by canal measurement and the estimated weight and value of the cargoes are shown below separately for the Calcutta Canals and Tolly's Nala, and compared with the returns of the preceding year:— TRAFFIC.

	Number of boats.	Tonnage of boats by canal measurement.	Weight of cargo carried.	Value of cargo carried.	Tollage including demurrage.	Percentage of toll on value of cargo.
1	2	3	4	5	6	7
	No.	Tons.	Tons.	Rs.	Rs.	
1890-91 ... Calcutta Canals	84.038	1,818,350	635,796	4,57.67,347	3,94.474	
1890-91 ... Tolly's Nala ...	73,416	792,550	258,639	1,61,59,157	1,20,271	
Total ...	157,454	2.610,900	894,435	6,19,26,504	5,14,745	0·83
1891-92 ... Calcutta Canals	83.717	1,872,508	639,822	5,57,69,888	3,96,613	
1891-92 ... Tolly's Nala ...	65,852	692,744	212,011	1,56,91,127	1,12,240	
Total ...	149,599	2,565,252	851,833	7,14,61,015	5,08,853	0·71

It may be remarked that although the total weight of cargo carried is less by 42,602 tons than during 1890-91, the higher rates prevailing, especially in rice and jute, have swelled the total value by Rs. 95,34,511. The average value per ton was Rs. 83, against Rs. 69 in the previous year.

116. The improvement in the toll system, shown by the reduction of the number of missing tickets, was maintained during the year under review. The following are the figures for the last ten years:— MISSING TICKETS.

Year.	No.	Year.	No.
1882-83	5,459	1887-88	677
1883-84	3,086	1888-89	329
1884-85	1,404	1889-90	238
1885-86	653	1890-91	212
1886-87	542	1891-92	210

REVENUE ESTABLISHMENT.

117. The cost of the revenue establishment employed on toll collections for the last five years is shown below:—

PARTICULARS.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
Salary and commission of Supervisor ...	12.651	12,972	11,053	11,475	11,863
Salary of Canal Inspector	5,435	4,034	3,900	5.172	5,016
Supervisor's office establishment ...	5,414	5,183	5.142	5,155	5,424
Canal police	2,022	2,060	2,050	2,061	2,049
Supervisor's steam-launch establishment ...	942	944	735	98	...
Inspector's and chálán boat establishment ...	1,123	1,112	1,138	1,049	1,036
Dhappa water establishment	180	180	173	168	168
Dafadar	40*	...	...	271	480
Travelling allowance	65	11	39	22	71
Contingencies	1,338	1,401	1,627	1,261	3,125
Toll-station es ablishment	9,710†	9,787†	10,424†	11,478†	12,127†
Total cost of establishment ...	38,920	37,684	36,281	38,210	41,359

* Canal dues.
† Includes salary of daroghas, clerks, cashiers, kootnavises, koyals, toll peons, and dinghies with crew.

The cost of the establishment exceeded that of 1890-91 by Rs. 3,149. The greatest increase was under contingencies, owing to the payment of law charges in the Balliaghatta godown case, and smaller increases occurred in office and toll station establishments on account of increments of salary falling due within the year, and in dafadars, owing to these men having been employed for the whole year, instead of only half, as in 1890-91.

MISCELLANEOUS RECEIPTS.

118. The following is a detailed statement of miscellaneous receipts realized by the Executive Engineer and the Supervisor of the Calcutta Canals during the year as compared with those of the previous year:—

	1890-91.	1891-92.
	Rs.	Rs.
Plantations	35	...
Other canal produce	202	155
Rents of buildings	1,597	5,618
,, of land	711	843
Miscellaneous other receipts* ...	3,338	3,602
Total ...	5,883	10,218

* Includes fishery rent and sale proceeds of canal silt.

The increase of Rs. 4,335 was due to arrears of rent having been realized from Mr. Cohen for the Balliaghatta godowns.

EXTENSIONS AND IMPROVEMENTS.

119. Under extensions and improvements Rs. 35,386 was spent on the erection of the new iron girder bridge over Tolly's Nala, which was completed during the year under review. As stated in last year's report, the total estimated cost of this work was Rs. 85,560, of which Rs. 30,000 has been contributed by the Corporation of Calcutta.

MAINTENANCE AND REPAIRS.

120. The cost of maintenance of the canal by sub-heads as compared with that of the previous year is given below:—

CANALS.	Locks.	Masonry bridge.	Roads.	Buildings.	Plantations.	Dredging.	Channel and banks.	Towpath.	Rustic bridges.	Steam-launches.	Miscellaneous.	Drainage.	TOTAL.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Calcutta Canals, 1891-92 ...	12,039	4,116	16,264	2,194	513	16,869	367	1,114	369	3,703	14,963	1,297	73,808
Ditto, 1890-91 ...	11,562	4,079	15,851	936	526	12,260	820	1,321	360	5,999	9,828	284	63,326
Tolly's Nala, 1891-92 .	...	4,712	218	621	...	...	1,620	375	179	...	226	...	7 951
Ditto, 1890-91 ...	...	3,645	400	...	...	...	498	394	198	...	210	...	5,345
Steamer route, 1891-92 ...	...	...	...	...	...	...	...	...	...	...	1,920	...	1,920
Ditto, 1890-91 ...	...	...	...	...	...	...	...	...	...	...	2,269	...	2,269
Eastern Canals, 1891-92 ..	...	...	..	2,779	736	7,249	37,986	15,754	20,072	...	4,202	...	88,778
Ditto, 1890-91 ...	...	...	...	2,604	4,532	...	24,712	21,033	20,536	...	5,515	...	78,932
Total, 1891-92 ...	12,039	8,828	16,482	5,594	1,249	24,118	39,973	17,243	20,620	3,703	21,311	1,297	1,72,457
Total 1890-91 ...	11,562	7,724	16,251	3,540	5,058	12,260	25,530	22,748	21,094	5,999	17,822	284	1,49,872

The expenditure exceeded that of the previous year by Rs. 22,585, which is accounted for by the increased cost of dredging incurred in the Calcutta Canal and the Eastern Canal, and of repairs to "Channel and banks" due to the removal of a char at Russa on Tolly's Nala, and to the clearing of silt from the Assasuni khal and levelling the spoil bank of the Bhangor khal on the Eastern Canal. A more detailed explanation is given below:—

Calcutta Canals.—Extraordinary expenditure was incurred under "locks" on the work, begun last year, of dewatering, examining, and repairing the lock gates at Chitpur and Dhappa and clearing the lock basins of silt. More work was done on "roads" than in the previous year, and the large increase on "buildings" was caused by the raising of municipal taxes, owing to the amalgamation of the Suburbs with the Calcutta Municipality.

The increased cost of dredging was caused by working the dredgers for a longer period than in the preceding year. Under "miscellaneous" and "drainage" expenditure was augmented by the construction of a latrine for use of the floating population of the canals, and special repairs to the inlet sluice at Chitpur.

Tolly's Nala.—Petty repairs to bridges, over and above those customary, and the removal of a char at Russa, account for the increased expenditure on this portion of the canals.

Eastern Canal.—The expenditure on plantations was, in 1890-91, abnormal, owing to the institution of a new plantation, whereas this year only maintenance charges were incurred. The work done in dredging the Eastern Canal route was this year shown separately in the accounts, instead of, as heretofore, being charged against the Calcutta Canals. The increase under this head is, therefore, so far as the Eastern Canal is concerned, only apparent. Clearing silt from the Assasuni khal and levelling the spoil bank on the Bhangor khal raised the charges under "channel and banks." The Superintending Engineer remarks:—

"The necessity for the removal of the silt taken from the bed in the Eastern channels and deposited on the banks is a yearly increasing charge which cannot be avoided, on account of the large accumulation, and will be further increased by the cost of land which it will be necessary to acquire for its deposit."

121. The following statement shows the quantity of silt dredged, and the expenditure incurred, and the rate per 1,000 cubic feet during the year, including the cost of delivering the mud:— DREDGING AND SILT CLEARANCE.

	Quantity dredged.	Cost.	Rate per 1,000 cubic feet.
1	2	3	4
	C. feet.	Rs.	Rs. A. P.
Steam dredger *Victoria* ...	1,514,700	13,659	9 0 3
Fouracres' dredger ...	269,900	2,691	9 15 6
Marchant's dredger ...	330,600	3,235	9 12 6
Hydraulic dredger *Clinker* ...	588,000	2,854	4 13 7

Omitting the cost of delivering the mud, the rates of dredging proper, exclusive of the cost of repairs and of interest on original cost, were per 1,000 cubic feet—

	Rs. A. P.
Steam dredger *Victoria*	3 9 6
Fouracres' dredger	4 6 5
Marchant's dredger	0 9 9
Hydraulic dredger *Clinker*	1 15 2

The rates of working were in every case lower than last year.

The Superintending Engineer remarks:—

"The necessity for dredging operations is more marked every year, and constant clearance of bars is required as well as silt clearance by hand of such channels as the Bhangor khal."

PLANTATIONS.

122. The state of the plantations for the last two years is shown below:—

YEAR.	Trees over 12 feet.	Saplings from 4 to 12 feet.	Seedlings below 4 feet.	Total.
1	2	3	4	5
	No.	No.	No.	No.
1890-91 ...	2,208	1,382	1,314	4,904
1891-92 ...	2,307	1,381	1,308	4,996

The cost incurred during the year was Rs. 1,249 against Rs. 5,058 in 1889-90.

FLOODS.

123. *Floods.*—There were no floods during the year in any of the rivers crossed by the Calcutta and Eastern Canals. The highest gauge readings of the river Hooghly at Chitpur, Salt-Water Lake at Dhappa, and river Echamutty at Teetulia are shown in the following statement:—

River.	Locality.	1891-92.		1890-91.		HIGHEST RECORDED.	
		Date.	Reading.	Date.	Reading.	Date.	Reading.
1		3	4	5	6	7	8
Hooghly	Chitpore	21st August 1891 ...	17·07	31st August 1890 ...	18·40	(a) 31st August 1890 ...	18·40
Salt-water lake or lake-channel	Dhappa	20th ditto ...	7·73	1st September 1890 ...	7·73	(b) 1st September 1890...	7·73
Ichamati (Bali Bhil) ...	Titulia (river gauge) ...	22nd ditto ...	8·00	8th ditto ...	16·40	(c) 19th September 1885	16·43
Ditto ditto ...	Do. (bhil gauge) ...	27th September 1891 ...	6·75	Ditto ...	14·15	(c) 8th September 189 ...	14·15

(a) Highest since 1883. | (b) Highest since 1882.
(c) Highest since 1885.

ORISSA COAST CANAL.

CAPITAL ACCOUNT.

124. The Capital and Revenue Accounts of this canal are given below:—

1.—CAPITAL ACCOUNT.

HEADS OF ACCOUNT.	Outlay during 1891-92.	Outlay to end of 1891-92.
1	2	3
DIRECT CHARGES.	Rs.	Rs.
I.—Works	(—)1,839	32,72,609
II.—Establishment	(—)467	7,30,377
III.—Tools and plant	...	2,02,474
IV.—Suspense accounts	6,246	36,832
Total ...	3,940	42,42,292
V.—*Less*—Receipts on capital account	...	3,293
Total direct charges ...	3,940	42,38,999
INDIRECT CHARGES.		
Capitalized abatement of land revenue	...	784
Leave and pension allowances	(—)65	1,02,169
Total indirect charges ...	(—)65	1,02,953

The following extract is taken from the Administration Report for the current year:—

"The canal was opened throughout its entire length of 97½ miles. The tank ghâts at the locks were finished, and Mr. Bond's house at Balasore, which was purchased last year for the Executive Engineer's office and residence, was thoroughly repaired. Additional accommodation has also been provided in a detached building, which, together with the cost of land and special repairs and alterations sanctioned in Bengal Government No. 534I., dated 26th March 1891, amounts to Rs. 9,426. The project for a new lock at Jamcunda, necessitated by changes in the Subarnarekha river, is under consideration."

REVENUE ACCOUNT.

2.—REVENUE ACCOUNT—(Actuals).

Particulars.	Expenditure—		Particulars.	Receipts—	
	During 1890-91.	During 1891-92.		During 1890-91.	During 1891-92.
1	2	3	4	5	6
	Rs.	Rs.		Rs.	Rs.
Direct charges.					
I.—Maintenance and Repairs.			Water-rates ...	...	...
			Navigation ...	64,220	60,051
Maintenance and repairs	42,312	48,598	Miscellaneous ...	1,410	2,072
Establishment, including direction and accounts.	15,452	17,100			
			Total ...	65,630	62,123
Tools and plant ...	9,794	3,464			
Total ...	67,558	69,162	*Less*—Refunds of revenue ...	44	66
II.—Revenue Management.					
Navigation establishment	6,208	6,134			
Total direct charges ...	73,766	75,296			
Indirect charges.					
Capitalized abatement of land revenue ...	...	...			
Leave and pension allowances	3,032	3,253			
Total indirect charges...	3,032	3,253			
Total working expenses	76,798	78,549			
Net revenue ...	(—)11,212	(—)16,492			
Total ...	65,586	62,057	Net total receipts	65,586	62,057

The receipts from this canal were injuriously affected by the long closure of the Hidgellee Tidal Canal and also by the opening of the Balliaghye drainage cut, which is in fact a navigable canal leading to the Russulpur river, enabling boats to pass into the river Hooghly without using the canal. The revenue was also possibly unfavourably affected by the grant of free return passes on ranges IVA, IVB, and V of the canal, which was adopted as an experimental measure to popularise the canal route.

FINANCIAL RESULTS.

125. The receipts on Revenue account and working expenses of the canal for the last six years are shown in the following statement :—

	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6	7	8
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
RECEIPTS.							
Water-rates ...	1	(—) 1	......	......	61	......	......
Navigation ...	13,663	28,587	52,828	65,047	63,724	64,220	60,051
Miscellaneous ...	54	902	1,026	1,381	1,563	1,410	2,072
Total ...	13,718	29,488	53,854	66,428	65,348	65,630	62,123
Less—Refunds of revenue	......	......	17	254	15	44	66
Net total receipts ...	13,718	29,488	53,837	66,174	65,333	65,586	62,057
WORKING EXPENSES.							
DIRECT CHARGES.							
I.—Maintenance and Repairs.							
Repairs	23,155	43,969	53,277	42,606	50,528	42,312	48,598
Establishment, including direction and accounts ...	5,326	10,120	14,289	11,377	926	15,452	17,100
Tools and plant ...	791	3,432	8,743	14,462	10,513	9,794	3,464
Total ...	29,272	57,521	76,309	68,445	61,967	67,558	69,162
II.—Revenue Management							
Navigation establishment	609	2,183	4,559	6,123	6,044	6,208	6,134
Total direct charges ...	29,881	59,704	80,868	74,568	68,011	73,760	75,296
INDIRECT CHARGES.							
Capitalized abatement of land revenue ...	......	......	......	......	......	......	......
Leave and pension allowances ...	831	1,722	2,639	2,450	975	3,032	3,253
Total indirect charges ..	831	1,722	2,639	2,450	975	3,032	3,253
Total working expenses	30,712	61,426	83,507	77,018	68,986	76,798	78,549
Net revenue ...	(—) 16,994	(—) 31,938	(—) 29,670	(—) 10,844	(—) 3,653	(—) 11,212	(—)16,492

The total direct charges were Rs. 1,536 higher than last year, and Rs. 7,285 in excess of those for 1889-90. The charges in 1889-90 were, however, abnormally low, owing to a very large share of the cost of establishment having been charged to the capital account of remodelling the Hidgellee Tidal Canal.

The cost of repairs is Rs. 6,286 higher than in 1890-91.

The Superintending Engineer writes :—

"The expenditure on works includes the employment of a dredger constantly at Bhaitghur and a gang of coolies working daily between tides at Jamounda buoying the channel, and in order to keep open a channel to the lock, &c."

126. The traffic on this canal has been prejudicially affected by the frequent closures that have lately occurred on the Hidgellee Tidal Canal, with which it is continuous, and no material increase can be expected until uninterrupted communication is afforded. NAVIGATION.

The receipts on each range of the canal are compared with those of the three previous years below:—

Ranges.	Miles of canal open.	Tollage receipts.			
		1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6
		Rs.	Rs.	Rs.	Rs.
Range III	36	45,575	37,743	37,731	38,231
Do. IVA	17	4,110	3,654	4,121	3,067
Do. IVB	6½	5,729	8,468	7,748	7,441
Do. V	38	9,596	13,859	14,620	11,312
Total ...	97½	65,010	63,724	64,220	60,051

The decrease in receipts has been explained in paragraph 124 above.

127. The traffic on the canal during the year 1891-92, compared with that of the previous year, is shown in the following statement :— TRAFFIC.

	Number of boats.		Tonnage of boats.		Value of cargo.		Tolls.	
	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.	1890-91.	1891-92.
1	2	3	4	5	6	7	8	9
	No.	No.	Tons.	Tons.	Rs.	Rs.	Rs.	Rs.
Orissa Coast Canal	13,645		120,527	110,687	27,05,654	22,27,281	64,220	60,051

The construction of feeder roads by the District Boards is in progress, and on their completion an increased amount of traffic will, it is expected, be brought to the southern portions of the canal.

MISCELLANEOUS RECEIPTS.

128. The miscellaneous receipts during the last three years are shown below:—

	1889-90.	1890-91.	1891-92.
	Rs.	Rs.	Rs.
Plantations	...	8	...
Rents of buildings	161	285	337
Rents of land	220	340	175
Miscellaneous	1,182	777	1,560
Total ...	1,563	1,410	2,072

Under "miscellaneous" Rs. 520 was realised from hire of the steam launch *Falcon*, while sales of fisheries and grass show an increase of Rs. 449 from last year.

DREDGING AND SILT CLEARANCE

129. Only one dredger, the *Comus*, was employed during the year under review, the work done being, as in 1890-91, the removal of silt accumulated above the Bhaitghar Lock. The quantity dredged, and the cost and rate per 1,000 cubic feet, compared with the year 1890-91, are shown in the following table:—

Year.	Names of dredgers.	Quantity dredged.	Cost of—			Rate.		
			Lifting by dredger.	Removing by mud-punts.	Total.	Lifting.	Removing.	Total.
1	2	3	4	5	6	7	8	9
1890-91 ...	*Clinker* and *Comus*.	295,399	2,346	746	3,072	7·87	2·52	10·39
1891-92 ...	*Comus* ...	395,950	2,138	1,406	3,544	5·4	3·5	8·9

Owing to the long distances which dredgers have to be taken for even petty repairs, and to the impossibility of taking them to Calcutta for two-thirds of the year, breakdowns and stoppages are of frequent occurrence, and the work goes on expensively and slowly.

PLANTATIONS.

130. The state of the plantations for the last two years is shown in the following statement:—

Year.	Trees over 12 feet in height.	Saplings between 4 and 12 feet.	Seedlings under 4 feet.	Total.
1	2	3	4	5
	No.	No.	No.	No.
1890-91 ...	326	905	2,255	3,486
1891-92 ...	495	1,110	2,357	3,962

131. There were no heavy floods in any of the rivers crossed by the Orissa Coast Canal and no appreciable damage done. The highest gauge-readings of the rivers are shown in the following statement:— FLOODS

NAME OF RIVER.	Locality.	1890-91.		1891-92.		HIGHEST RECORDED READING.		REMARKS.
		Date.	Reading.	Date.	Reading.	Date.	Reading.	
1	2	3	4	5	6	7	8	9
Subarnarekha	Bhograi ...	27th September 1890	113·80	14th August 1891 ...	116·00	Date of record not obtainable from records.	121·	Height recorded on plans of maximum flood, but dates not given.
Panchpara ...	Panchpara ...	27th " "	114·70	14th " " ...	112·80	Ditto ...	118·00	
Burrabullong ..	Nulcool ...	26th " "	116·80	24th September 1891	114·70	Ditto ...	118·00	
Mutia ...	Charbattia ...	28th " "	110·10	23rd " " "	110·30	Ditto ...	116·5	

SARAN CANALS.

132. The Capital and Revenue Accounts of these canals are given below:—

1.—CAPITAL ACCOUNT. CAPITAL ACCOUNT

HEADS OF ACCOUNT.	Outlay during 1891-92.	Outlay to end of 1891-92.
1	2	3
DIRECT CHARGES.	Rs.	Rs.
I.—Works	...	4,79,946
II.—Establishment	...	1,64,170
III.—Tools and plant	...	25,952
Total ...	...	6,70,068
V.—*Less*—Receipts on Capital Account ...	...	498
Total direct charges ...	...	6,69,570
INDIRECT CHARGES.		
Capitalized abatement of land revenue	...	97
Leave and pension allowances	...	27,086
Total indirect charges ...	...	27,183

The Capital Account has been closed.

2.—REVENUE ACCOUNT—(Actuals). REVENUE ACCOUNT

PARTICULARS.	EXPENDITURE— During 1890-91.	EXPENDITURE— During 1891-92.	PARTICULARS.	RECEIPTS— During 1890-91.	RECEIPTS— During 1891-92.
1	2	3	4	5	6
DIRECT CHARGES.	Rs.	Rs.		Rs.	Rs.
Maintenance and repairs.	26,454	9,021	Water-rates ...	36,823	15,785
			Navigation ...	...	...
Establishment ...	10,560	3,710	Miscellaneous ...	160	46
Tools and plant ...	389	(—)193			
Total direct charges ...	37,403	12,538	Total ...	36,983	15,831
INDIRECT CHARGES.			*Less*—Refunds of revenue.	...	...
Capitalized abatement of land revenue.	...	...			
Leave and pension allowances.	1,478	519			
Total indirect charges	1,478	519			
Total working expenses	38,881	13,057			
Net revenue ...	(—) 1,898	2,774			
Total ...	36,983	15,831	Net total receipts	36,983	15,831

FINANCIAL RESULTS.

133. The receipts on Revenue Account and working expenses of the Saran Canals for the last ten years are shown in the following statement:—

	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6	7	8	9	10	11
RECEIPTS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Water-rates	16,268	22,057	8,397	39,737	11,072	21,070	20,415	22,990	36,823	15,785
Navigation	19	13	1	...	...		...	...	...	...
Miscellaneous	1,740	971	943	1,406	1,355	(—) 405	399	123	160	46
Total .	18,027	23,041	9,341	41,143	12,427	20,665	20,814	23,113	36,983	15,831
Less—Refunds of revenue ...	...	...	...	...	...	...	...	...	...	...
Net total receipts ...	18,027	23,041	9,341	41,143	12,427	20,665	20,814	23,113	36,983	15,831
WORKING EXPENSES										
Direct charges.										
Maintenance and repairs	29,828	20,639	19,983	18,014	23,481	18,601	23,976	24,900	26,454	9,021
Establishment	6,860	4,751	4,596	4,144	5,400	9,119	10,248	12,422	10,560	3,710
Tools and plant	(—) 3,086	(—) 2,009	371	593	(—) 978	400	673	991	389	(—) 198
Total direct charges ...	33,602	23,401	24,950	22,751	27,903	28,120	34,897	38,313	37,403	12,538
Indirect charges.										
Capitalization of abatement of land revenue	...	...	...	...	...	...	...	...	...	...
Leave and pension allowances ...	1,346	665	643	580	756	1,277	1,435	1,739	1,478	519
Total indirect charges ...	1,346	665	643	580	756	1,277	1,435	1,739	1,478	519
Total working expenses ...	34,948	24,066	25,593	23,331	28,659	29,397	36,332	40,052	38,881	13,057
Net revenue ...	(—) 16,921	(—) 1,025	(—) 16,252	17,812	(—) 16,232	(—) 8,732	(—) 15,518	(—) 16,939	(—) 1,898	2,774

LENGTH OF CANALS OPEN AND AREAS COMMANDED AND IRRIGATED.

134. The lengths of canal and distributaries in operation at the close of the year 1891-92, compared with 1890-91, are given in the following table:—

NAME OF CANAL.	1891-92.								1890-91.							
	Navigable canals.	Canals for irrigation only.	Distributaries and village channels.	Area protected from flood.	Area under command.	Area provided with distributaries.	Area irrigated.	Percentage of area irrigated to area provided with distributaries.	Navigable canals.	Canals for irrigation only.	Distributaries and village channels.	Area protected from flood.	Area under command.	Area provided with distributaries.	Area irrigated.	Percentage of area irrigated to area provided with distributaries.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Saran Canals.		Miles.			Acres.		Acres.			Miles.			Acres.		Acres.	
Main canal or head cut		6·34								6·34						
Branch Canals.																
I.—Daha feeder ...		3·34	...	...	64,000		5,965	...	...	3·34	...	...	64·000	...	2,226	...
II.—Gandaki ...		1·57								1·57						
III.—Dhanai		1·00								1·00						
IV.—Gangri		6·57								6·57						
In addition to the above, the following are maintained:—																
I.—Thakraha Sota ...		1·50	...	...	...	...	...	..	...	1 50	...	...	...	...	...	...
II.—Roopan Chap Sota		27·00	...	...	...	...	...	...	...	27·00	...	...	...	...	...	...

The lengths are the same as last year. There are no distributaries or village channels maintained by Government, but an aggregate length of about 33 miles of cuts and channels have been constructed and maintained by the Manager of the Moniára estate.

Fifteen permanent dams and regulators exist in the branch canals, and seven bunds were constructed during the year to regulate the supply of water to the several canals.

RAINFALL.

135 The average rainfall on the area under command is shown by seasons in the table below for the last three years:—

	1889-90.	1890-91.	1891-92.
	Inches.	Inches.	Inches.
Kharif season*	19 47	24·60	11·52
Rabi	1·20	1·43	0·61
Year	45·09	58·63	35 05

* August, September, and October.

The Superintending Engineer writes:—

"In the early portion of the year the rainfall was excessive, but towards the latter end of the rains was very scanty. There was consequently a large demand for water for irrigation all over the district."

136. There were no high floods in the river Gandak during the year under review, but the river remained from June to August at a higher level than usual. FLOODS.

137. The areas irrigated, as obtained from the Canal Manager's reports during the past ten years, together with the rainfall, are given in the table below:—

YEAR.	Kharif.	Rabi.	Perennial.	Total.	Rainfall.
1	2	3	4	5	6
	Acres.	Acres.	Acres.	Acres.	Inches.
1881-82 ...	Not known	Not known	...	666	43·50
1882-83 ..	Not known	Not known	...	1,747	40·89
1883-84 ...	Not known	Not known	...	21,122	26 32
1884-85 ...	1,917	5,306	...	7,223	35·42
1885-86 ...	888	3,677	..	4,565	39·27
1886-87 ...	566	1,580	...	2,146	60·96
1887-88 ...	1,699	2,519	...	4,218	39·63
1888-89 ...	3,897	3,316	...	7,213	42·39
1889-90 ...	2,684	1,531	...	4,215	45·09
1890-91 ...	990	1,236	...	2,226	58·63
1891-92 ...	3,425	2,540	...	5,965	35·05

138. The duty of water cannot be calculated, as there is no regular irrigation, and the canals are drainage as well as irrigation channels. DUTY OF WATER.

These canals were originally constructed for the purpose of supplying water for indigo manufacture on a guarantee given by the indigo concerns interested of a revenue amounting to Rs. 21,500 per annum. The guarantee was for ten years, and expired on the 1st of April 1891. The working expenses materially exceeding the revenue, and the proprietors interested being unable to come to an agreement to increase the guarantee, it was proposed as the only practical alternative to close the canals. The proprietors of the Moniára and Suddowa concerns, who had expended large amounts on village channels and other works, represented the hardship this course would cause to them, and offered to maintain the inner channels themselves and to pay the cost of maintaining the head works up to a limit of Rs. 11,000 year, Government as their share of keeping up the canals, which would be of use in case of famine, paying establishment charges. The offer was accepted as a year-to-year agreement, and it is on this basis the canals are now being worked.

139. The following comparative statement shows the balances, assessments, and recoveries of water-rates for the last ten years:— ASSESSMENTS, COLLECTIONS AND BALANCE.

YEAR.	Amount outstanding at commencement of year.	Amount falling due during the year.	Total for recovery.	Cash realization.	Remitted or written off.	Balance at the end of the year.
1	2	3	4	5	6	7
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1881-82	330 6 9	23,000 0 0	22,669 9 3	5,874 12 0	...	16,794 13 3
1882-83	16,794 13 3	21,750 0 0	38,514 13 3	16,506 0 6	...	22,038 12 9
1883-84	22,038 12 9	21,750 0 0	43,788 12 9	22,959 10 3	...	20,829 2 6
1884-85	20,829 2 6	21,750 0 0	42,579 2 6	8,976 11 3	...	33,602 7 3
1885-86	33,602 7 3	21,750 0 0	55,352 7 3	39,718 9 3	2,770 13 4	12,863 0 8
1886-87	12,863 0 8	21,750 0 0	34,613 0 8	11,072 10 5	...	23,540 6 3
1887-88	23,540 6 3	21,850 0 0	45,390 6 3	21,069 9 0	...	24,320 13 3
1888-89	24,320 13 3	21,850 0 0	46,170 13 3	20,415 0 0	...	25,755 13 3
1889-90	25,755 13 3	21,850 0 0	47,605 13 3	22,990 0 3	1,250 0 0	23,365 13 0
1890-91	23,365 13 0	21,850 0 0	45,215 13 0	37,036 2 9	...	8,179 10 3
1891-92	8,179 10 3	11,000 0 0	19,179 10 3	15,785 8 4	231 4 6	3,162 13 5
Total ...	...	2,39,900 0 0	4,50,860 5 8	2,32,485 0 9	4,252 1 10	3,162 13 5

The outstanding balance has considerably decreased, and there now only remains a sum of Rs. 3,163 to be recovered.

MAINTENANCE AND REPAIRS.

140. The following table shows the expenditure on maintenance during the past three years:—

	Miles.	1889-90.	1890-91.	1891-92.
1	2	3	4	5
		Rs.	Rs.	Rs.
Repairs to head cut and river protective works	6·34	10,026	7,445	4,304
Repairs to Daha feeder ...	3·34	909	1,290	357
" to Gandaki feeder ...	1·57	1,118	1,735	221
" to Dhanai feeder ...	1·00	722	592	65
" to Gangri feeder ...	6·57	768	2,777	129
" to dams and channels for irrigation purposes	...	11,357	12,615	3,945
Total ...	...	24,900	26,454	9,021
Establishment	...	12,422	10,560	3,710
Tools and plant (actual) ...	...	991	389	(—)193
GRAND TOTAL ...	...	38,313	37,403	12,538

The marked reduction in the cost of maintenance is mainly due to the fact that under the new agreement with Mr. Reid of the Moniára concern, Government only maintains the head cut and Daha feeder and that portion of the Rupan Chap Sota above Siswa. Economies were also effected by not repairing many spurs not now required, by reducing the width of bunds, and by reducing excessive rates for work.

DREDGING AND SILT CLEARANCE.

141. There are no dredgers on the canals, and the silt is removed by hand only.

The following statement shows the total quantity of silt removed from the canals and the cost during the year as compared with those in the two previous years:—

	1889-90.		1890-91.		1891-92.	
1	2	3	4	5	6	7
	C. ft.	Rs.	C. ft.	Rs.	C. ft.	Rs.
Head cut or main canal...	102,121	612	342,745	1,740	44,465	244
Feeders or branch canals	448,006	1,650	1,339,675	4,080	24,755	95
Thakaraha Sota mouth ...	525,474	2,149	549,781	2,077	594,957	1,785
Total ...	1,075,601	4,411	2,232,201	7,897	664,177	2,124

142. The state of the plantations for the last two years is shown below:— PLANTATIONS

YEAR.		Trees over 12 feet	Saplings between 4 and 12 feet.	Seedlings under 4 feet.	Total.
1		2	3	4	5
		No.	No.	No.	No.
1890-91	...	5,475	2,837	3,695	12,007
1891-92	...	2,642	2,979	3,993	9,614

NADIA RIVERS.

143. The approximate length of the channels comprising the Nadia rivers' system is 477 miles. No capital account of expenditure is kept. The revenue account for the last two years is given below:— REVENUE ACCOUNT.

PARTICULARS.	EXPENDITURE. During 1890-91.	EXPENDITURE. During 1891-92.	PARTICULARS.	RECEIPTS. During 1890-91.	RECEIPTS. During 1891-92.
1	2	3	4	5	6
	Rs.	Rs.		Rs.	Rs.
DIRECT CHARGES.					
I.—Maintenance and Repairs.					
Maintenance and Repairs ...	52,482	62,704			
Establishment, including direction and accounts	21,780	22,704	Navigation ...	2,00,508	1,92,718
			Miscellaneous ...	136	247
Tools and plant ...	2,476	1,330	Total ...	2,00,644	1,92,965
Suspense accounts ...	3,169	(−) 3,015			
Total ...	79,907	83,723	*Less*—Refunds of revenue ...	162	228
II.—Revenue Management.					
Navigation establishment	23,630	23,134			
Total direct charges ...	1,03,537	1,06,857			
INDIRECT CHARGES.					
Leave and pension allowances ...	6,357	6,417			
Total indirect charges...	6,357	6,417			
Total working expenses	1,09,894	1,13,274			
Profit ...	90,588	79,463			
Total ...	2,00,482	1,92,737	Net total receipts	2,00,482	1,92,737

FINANCIAL RESULTS.

144. The receipts on revenue account and working expenses for the last ten years are shown below:—

	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6	7	8	9	10	11	12
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
RECEIPTS.											
Navigation	2,10,040	1,82,351	2,00,908	1,94,981	1,83,382	2,02,707	1,98,318	1,91,791	1,95,983	2,00,508	1,92,718
Miscellaneous	1,179	616	1,926	476	399	543	357	97	60	136	247
Total ...	2,11,219	1,82,967	2,02,834	1,95,457	1,83,781	2,03,250	1,98,675	1,91,888	1,86,043	2,00,644	1,92,965
Less—Refunds of revenue ...	...	...	...	...	...	...	...	...	220	162	228
Total receipts ...	2,11,219	1,82,967	2,02,834	1,95,457	1,83,781	2,03,250	1,98,675	1,91,888	1,85,823	2,00,482	1,92,737
WORKING EXPENSES.											
Direct Charges.											
Works (extensions and improvements)	10,339	5,663	1,031	30	...	...	...	...	...	...	...
Maintenance and repairs ...	74,863	56,159	82,513	60,790	43,084	29,061	48,201	88,933	47,843	52,482	62,704
Establishment	53,320	32,910	40,336	34,766	31,563	29,293	41,925	43,395	38,537	45,410	45,838
Tools and plant	1,32,198	23,499	(—)1,502	1,749	1,759	1,409	3,593	2,380	2,250	2,476	1,330
Suspense accounts	(—)3,412	(—)1,557	2,897	(—)1,559	1,262	450	(—) 1,697	(—) 14	(—) 1,036	3,169	(—)3,015
Total direct charges ...	2,67,308	1,16,674	1,25,275	95,776	77,668	60,213	92,022	1,34,694	87,594	1,03,537	1,06,857
Indirect Charges.											
Leave and pension allowances	7,465	4,607	5,647	4,867	4,419	4,101	5,870	6,075	5,395	6,357	6,417
Total indirect charges ...	7,465	4,607	5,647	4,867	4,419	4,101	5,870	6,075	5,395	6,357	6,417
Total working expenses ...	2,74,773	1,21,281	1,30,922	1,00,643	82,087	64,314	97,892	1,40,769	92,989	1,09,894	1,13,274
Net revenue ...	(—)63,554	61,686	71,912	94,814	1,01,694	1,38,936	1,00,783	51,119	92,834	90,588	79,463

The decrease in receipts amounting to Rs. 7,745 was a consequence mainly of the low level of the river Ganges, which caused the heads of the rivers to silt up. The Bhagirathi was impassable in the upper reaches, steamers were unable to ply on the Matabhanga, and the other rivers were also affected. Not only were the receipts thus affected, but the expenditure incurred on training works was increased, the net result for the year being a decrease of Rs. 11,125 in the net profit. The traffic was also, to some extent, prejudicially affected by the general dulness of trade and bad harvests.

The expenditure on the Nadia Rivers is mainly on training works, to keep open the navigation channels and entrances of the rivers, so that the cost of maintenance depends to a large extent on the condition of the channels. For instance, the expenditure was abnormally low in 1889-90, because it was found impracticable to keep open the lower intake of the Bhagirathi, and hence no training works were constructed in the upper portions of that river.

RAINFALL AND FLOODS.

145. No rainfall register is kept up for these rivers. There were no floods during the year, and the river Ganges was exceptionally low even in the flood season. The gauge readings at Gheria and Berhampore for the last three years are given below:—

		GHERIA.		BERHAMPORE.
1889	...	34′00″	...	30′4½″
1890	...	34′70″	...	30′11¾″
1891	...	29′30″	...	26′7″

A statement showing the highest gauge readings of the Nadia rivers is given below as compared with those of the previous year:—

River.	Locality.	1891-92.		1890-91.		Highest known.	
		Date.	Reading.	Date.	Reading.	Date.	Reading.
1	2	3	4	5	6	7	8
Bhagirathi ...	Berhampore	29th Aug. 1891	60·33	15th Aug. 1890	61·73	15th Aug. 1890	64 73
Jellinghee ...	Surupganj	25th „ „	29·38	29th „ „	34·88	29th „ „	34·88
Matabhanga ...	Hanskhali	30th „ „	31·85	3rd Sept. „	39·93	3rd Sept. „	39·93

146. The number of boats of each class and toll collections by the Collectors are shown below:— NAVIGATION.

NAME OF RIVER.	NUMBER AND CLASS OF BOATS.						COLLECTIONS BY TOLL COLLECTORS.					
	Up to 100 maunds.	Between 100 and 1,000 maunds.	Between 1,000 and 2,500 maunds.	Between 2,500 and 5,000 maunds.	Over 5,000 maunds.	Total.	Tolls from boats.	Tolls from rafts.	Tolls from steamers and flats.	Total tolls.	Miscellaneous receipts.	Total collections.
1	2	3	4	5	6	7	8	9	10	11	12	13
	No.	No.	No.	No.	No.	No.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bhagirathi	6,416	4,371	987	300	6	12,080	34,078	4,652	253	38,983		
Ditto and Bhyrub-Jellinghee	13,241	18,314	2,716	94	...	34,365	1,07,416	15,233	1,261	1,23,910	247	1,92,965
Matabhanga	5,540	6,588	518	51	1	12,698	29,728	13	84	29,825		
Total, 1891-92 ...	25,197	29,273	4,221	445	7	59,143	1,71,222	19,898	1,598	1,92,718	247	1,92,965
Total, 1890-91 ...	35,880	23,624	3,983	468	11	63,936	1,79,402	19,336	1,770	2,00,508	136	2,00,644

147. The following statement shows the number of boats, tonnage, weight, and value of cargo and toll collections:— TRAFFIC.

NADIA RIVERS.	Number of boats, inclusive of steamers, flats and rafts.	Tonnage of boats.	Weight of cargo.	Value of cargo.	Toll collection.	Percentage of toll on value of cargo.
1	2	3	4	5	6	7
	No.	Tons.	Tons.	Rs.	Rs.	
Bhagirathi	12,269	193,471	93,087	65,67,755	38,983	...
Ditto and Bhyrub-Jellinghee	35,140	491,472	209,941	2,67,68,405	1,23,910	...
Matabhanga	12,758	119,680	49,716	42,69,061	29,825	...
Total, 1891-92 ...	60,167	804,623	352,744	3,76,05,221	1,92,718	0·53
Total, 1890-91 ...	64,888	899,210	380,033	3,99,33,210	2,00,508	0·50

148. The cost of the revenue establishment for the last five years is shown below:— REVENUE ESTABLISHMENT.

	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
1	2	3	4	5	6
	Rs.	Rs.	Rs.	Rs.	Rs.
Salary and commission of Collectors	12,217	12,671	11,943	13,224	13,210
Accounts and office establishment	9,030	9,397	8,986	9,223	8,942
Travelling allowance ...	479	463	390	711	530
Contingencies	450	475	441	472	452
Total ...	22,176	23,006	21,760	23,630	23,134

The slight decrease compared with the previous year results from the smaller commission earned by toll-collectors, owing to diminished revenue.

MAINTENANCE AND REPAIRS. 149. The charges for maintenance and repairs for the last two years are detailed below:—

PARTICULARS.	1890-91.	1891-92.
1	2	3
	Rs.	Rs.
Re-opening lower entrance channel, Bhagirathi river	1,422	1,290
Inspection shed, upper entrance... ...	...	496
Training works in river Bhagirathi ...	31,438	40,413
" " Bhyrub ...	2,313	2,593
" " Jellinghee ...	1,695	1,960
" " Matabhanga ...	1,641	1,415
Sounding Nadia Rivers	5,921	6,015
Maintaining and working divisional boats ...	2,862	3,102
Petty and other charges	5,190	5,420
Total ...	52,482	62,704

The total expenditure during the year shows an increase of Rs. 10,222 caused by extra expenditure on training works to keep open the river entrances and channels, as explained in paragraph 144 above.

MISCELLANEOUS RECEIPTS. 150. The miscellaneous receipts during the year amounted to Rs. 247, against Rs. 136 in the previous year.

DREDGING AND SILT CLEARANCE. 151. There was no expenditure under this head during the year.

PLANTATIONS. 152. There are no plantations on the banks of the rivers. Bamboos were planted on the berm of the Bhagirathi embankment in 1890-91, but the result was not very successful. Another trial will be made in 1892-93. The number of trees existing during the year was 17,004.

EDEN CANAL.

REVENUE ACCOUNT. 153. The purpose for which this canal was originally constructed was, as stated in the last year's report, mainly to supply drinking-water. The receipts and expenditure for the last two years are given below:—

RECEIPTS.	1890-91.	1891-92.	EXPENDITURE.	1890-91.	1891-92.
1	2	3	4	5	6
	Rs.	Rs.		Rs.	Rs.
Water-rates ...	2,795	9,430	Works	584	4
Miscellaneous ...	802	728	Maintenance and repairs	24,612	18,623
			Establishment ...	8,915	6,541
Total ...	3,597	10,158	Tools and plant .	684	495
Less—Refunds of revenue	...	39	Total expenditure ...	34,795	25,663
Net total receipts ...	3,597	10,119	Balance, deficit ...	31,198	15,544

The receipts from water-rates were Rs. 6,635 greater than last year, and Rs. 927 in excess of those of 1889-90, owing to the extensive irrigation resulting from the failure of the rainfall in October, while the expenditure was Rs. 9,132 less than that of the previous year, the decrease taking place in all items. The net result of the year was a reduction in the deficit balance from Rs. 31,198 to Rs. 15,544.

The works carried out consisted of the construction of a sand dam across the Damodar at Júgúti, to keep up the cold weather supply of the canal, and the excavation of silt from the various channels connected with the canal.

The supply of water to the Burdwan water-works was efficiently maintained.

154. The canal was not originally intended for irrigation purposes, but it has through the force of circumstances been used to supply water to save crops, and, the benefits received being appreciated, water is now regularly supplied. Under the system in force payment is made in advance at the rate of four annas a bigha for the approximate area of rice in a village. At the end of the season the area actually irrigated is measured, and any excess payment returned to the villagers or left to their credit for the next year. For areas irrigated in excess of payments, demand notices are issued. The area irrigated during the past three years has been as follows:— IRRIGATION.

Nature of leases.	1889-90.	1890-91.	1891-92.
1	2	3	4
	Acres.	Acres.	Acres.
Annual	9,693	1,330	1,478
Five year ...	...	...	12,707
Total ...	9,693	1,330	14,185

This increase in five-year leases will be noticed with satisfaction.

The Superintending Engineer writes:—

"The bulk of the irrigation was carried out from October to the middle of November 1891, when there was no rainfall. Had the cultivators come forward a little earlier, the result of the year's operations would have been much more satisfactory and the irrigated area larger. A large number of applications for water had to be refused for want of sufficient supply in the canal."

The Superintending Engineer reports that the total demand for water-rates in the year under review was Rs. 10,738, of which Rs. 9,256 were actually realized during the year.

The outturn of crops on the irrigated area was exceedingly good, whereas the crops on the unirrigated lands failed.

155. The cost of establishment employed on irrigation was Rs. 967, against Rs. 147 in 1890-91, the increase being due to the larger area under irrigation. REVENUE ESTABLISHMENT.

MADHUBAN CANAL.

156. The expenditure on works and maintenance of this canal during the last three years is given below:— EXPENDITURE

PARTICULARS.	1889-90.	1890-91.	1891-92.
1	2	3	4
	Rs.	Rs.	Rs.
Works	2,957	6,236	...
Maintenance ...	3,257	2,011	7,300
Establishment ...	3,100	3,293	3,003
Tools and plant ...	23	287	203
Total ...	9,337	11,827	10,506

The floods of 1891 caused fresh damage to the apron of the Teur weir, necessitating another large estimate for its repair. This work has been a source of trouble ever since it was constructed, the floor being incapable of withstanding the sudden floods which are occasioned by the bursting of the irrigation embankments across the river in Nepal. The extra cost of repairs was due to repairs to the floor of the Teur weir.

157. No revenue is derived at present from irrigation in this canal, the raiyats being allowed to irrigate their lands free of cost.

The miscellaneous receipts during the year were Rs. 92, against Rs. 42 in 1891-92.

IRRIGATION. 158. At the latter end of the rains there were many demands for water for rice irrigation, and 2,539 acres of rice land were irrigated. The area irrigated for the last three years is shown by crops below:—

Nature of crop.	1889-90.	1890-91.	1891-92.
1	2	3	4
	Acres.	Acres.	Acres.
Bhadoi	640	...	...
Kharif	5,308	...	2,539
Rabi	240	2	495
Poppy	1,946	852	552
Total ...	9,134	854	3,586

GENERAL RESULTS.

NET REVENUE. 159. The net results of the year 1891-92, compared with those of the previous year, are shown below. The figures are exclusive of refunds of revenue:—

PARTICULARS.	Receipts from all sources (less refunds).	Working expenses (direct and indirect).	Profit or loss.
1	2	3	4
MAJOR IRRIGATION WORKS.	Rs.	Rs.	Rs.
1890-91	13,39,141	14,32,136	−92,995
1891-92	15,98,608	14,37,935	+1,60,673
MINOR WORKS AND NAVIGATION.			
For which Capital and Revenue accounts are kept.			
1890-91	6,27,654	4,39,636	+1,88,018
1891-92	6,03,107	4,35,005	+1,68,102
For which only Revenue accounts are kept.			
1890-91	2,00,482	1,09,894	+90,588
1891-92	1,92,737	1,13,274	+79,463
For which neither Capital nor Revenue accounts are kept.			
1890-91	3,639	46,622	−42,983
1891-92	10,211	36,169	−25,958
Total { 1890-91 ...	21,70,916	20,28,288	+1,42,628
Total { 1891-92 ...	24,04,663	20,22,383	+3,82,280

Compared with the figures accepted in the revised Budget Estimates, the actual receipts were more by Rs. 1,36,663 and the expenses less by Rs. 59,778.

160. The net result of the Major Irrigation Works reckoned on earnings, that is on the revenue calculated on the water rates due on the area actually irrigated during the year instead of on actual receipts, was, compared with 1890-91:— EARNINGS

	Earnings.	Working expenses.	Profit or loss.
	Rs.	Rs.	Rs.
1890-91 ...	13,54,379	14,32,136	— 77,757
1891-92 ...	18,14,485	14,37,935	+ 3,76,550

The expenditure was normal.

The revenue from Minor Works and Navigation is derived mainly from tollage receipts.

161. The progress in the recovery of water-rates during the year is summarised below:— ARREARS

CANALS	Outstanding on 1st April 1891.	Demand of 1891-92.	Collected or adjusted.	Outstanding on 1st April 1892.
1	2	3	4	5
	Rs.	Rs.	Rs.	Rs.
Orissa Canals ...	1,98,364	2,82,880	2,47,540	2,33,704
Midnapore Canal	64,967	1,29,822	1,35.817	58,972
Sone Canals	2,08,782	7,29,631	8,26,969	1,11,444
Total ..	4,72,113	11,42,333	12,10,326	4,04,120

162. The approximate value of crops irrigated by Major Irrigation Works during the last two years is shown in the following table:— VALUE OF CROPS.

CANALS.	1890-91.		1891-92.	
	Area irrigated.	Value of crops.	Area irrigated.	Value of crops.
1	2	3	4	5
	Acres.	Rs.	Acres.	Rs.
Orissa Canals	180,299	39,10,595	177,685	47,87,546
Midnapore Canal	82,002	18,86,046	83,973	20,99,325
Sone Canals	281,014	1,08,08,203	474,723	1,44,85,957
Total ...	543,315	1,66,04,844	736,381	2,13,72,828

The average value per acre of the various crops irrigated has decreased from Rs. 30·5 to Rs. 29·0.

Two tables are attached as appendices to this note, (I)—showing the number of days spent on tour by each officer of the Irrigation Department, (II) the dates of inspections of the divisional and subdivisional offices by each Superintending Engineer during he year 1891-92.

163. The date fixed for the submission of revenue reports to the office of the Chief Engineer is the 15th September. The dates when the different reports were received are shown below:—

		In 1891.	In 1892.
Orissa Circle ...	Commissioner's report ...	3rd September	27th September.
	Superintending Engineer's report	5th October ..	23rd ditto.
South-Western Circle ...	Commissioner's report ...	24th September	24th ditto.
	Superintending Engineer's report	17th ditto	17th ditto.
Sone Circle ...	Commissioner's report ...	7th October ...	26th ditto.
	Superintending Engineer's report	14th September	15th ditto.

The report from the Superintending Engineer, Sone Circle, was received on the date fixed, and the other reports were practically punctual. The finance and administrative accounts of the year 1891-92, due in the Chief Engineer's office on the 1st August, were received from the Examiner, Public Works Accounts, Bengal, on the 6th and 14th September 1892, respectively, and this is to a large extent the cause of delay in the preparation and submission of the report to the Government of India within the prescribed time, 15th November.

164. The results of the year's working of the canals in Bengal may, I think, be considered satisfactory. Taking major and minor works together there has been a profit of Rs. 3,82,280, against Rs. 1,42,628 in 1890-91, caused entirely by extra receipts, the expenditure continuing stationary, the canals having been kept up in a thoroughly efficient state. If the major works alone are considered and earnings be taken in place of actual receipts, by which the effect of arrear balances is eliminated, the profit for the year is Rs. 3,76,550, against a loss of Rs. 77,757 in that previous. The outstanding balance has been reduced by Rs. 67,993. The improvements indicated by these figures are the more gratifying from the fact that the accounts of the year now current promise even better results. The province has benefitted by crops covering 736,381 acres, the value of which is estimated at 213¾ lakhs of rupees, having in a year of scant rainfall been brought to maturity, when in the absence of the canals they would, for the most part, have failed or not have been sown.

165. The circumstances of the year entailed great pressure on the staff, which the facts and figures contained in this note show to have been adequately met. Allusion has been made to specially satisfactory features in the work carried out by Colonel A. D. McArthur, R.E., Superintending Engineer, in the South-Western Circle, by Mr. D. B. Horn, Executive Engineer, in the Brahmini-Baitarni Division, and by Mr. K. H. Stephen, Executive Engineer, in the Buxar Division, as also to the collections made by Babu Siva Sunker Singh in the Patna district, but the work of the Divisional and Subdivisional Canal Officers throughout Bengal and the collecting establishment in the Sone Circle was of a character to merit the commendation of Government.

C. W. ODLING,
Chief Engineer.

The 31*st December* 1892.

Appendix I.

Statement showing the number of days spent on duty and on tour by Superintending, Executive and Assistant Engineers and Upper Subordinates of the Irrigation Branch during the year 1891-92.

Name.	Circle or Division.	Number of days—		Remarks.
		On duty.	On tour.	
Superintending Engineers.				
Mr. C. W. Odling ...	Sone ...	206	100*	*Does not include 6 days spent in proceeding to Calcutta on duty and back. Officiated as Chief Engineer and Joint-Secretary for one month in April 1891. On deputation for May and June 1891. On special duty from 6th to 29th February 1892. Appointed Chief Engineer and Joint Secretary from 5th March 1892.
Lieut.-Col. A. D. McArthur, R.E.	South-Western ...	366	116	
„ W. A. Inglis ...	Arrah ...	160	73	Officiated as Superintending Engineer for 29 days in addition to his own duties, and tour of this period is shown under that head.
	Do. ...	56	13	On privilege leave from 6th August to 19th October 1891, after which joined Public Works Department Secretariat as Under-Secretary from 21st October 1892 to 29th January 1892. Rejoined Sone Circle on 1st February 1892.
„ W. Connan ...	Orissa ...	341	147	In charge from 24th April 1891.
Executive Engineers.				
Mr. J. P. Scotland ...	Cossye ...	366	160	
„ T. M. L. Thompson ...	Northern Drainage and Embankment	366	172	
„ C. E. Livesay ...	Nadia Rivers ...	305	182	Was on privilege leave for 61 days.
„ T H. Clowes ...	Buxar ...	6	...	In charge of subdivision. Privilege leave for 3 months from 7th April 1891.
	Nadia Rivers ..	73	45	Joined the Division on 25th July 1891.
	Balasore ...	177	92	Joined the Division on 20th October 1891.
„ G. J. R. Leeson ...	Circular and Eastern Canals.	366	212	
„ A. Hayes	Balasore ...	86	39	Was on furlough for 280 days.
„ A. Monies	Ditto ...	287	123	On leave for 9 days. On special duty from 13th January to 25th February 1892. Transferred to Madras.
„ M. J. J. P. Norman ...	Buxar ...	52	28	Returned from furlough and joined Division in December 1891. In charge of subdivision.
	Do. ...	61	26	In charge from 10th February 1892.
„ O. C. Lees	Gandak ...	366	159	
„ K. H. Stephen ...	Buxar ...	315	128	On privilege leave from 10th February 1892. Joined the Public Works Department Secretariat from 29th February 1892.
„ A. S. Thomson ...	Eastern Sone ...	366	178	
„ L. R. Fraser ..	Dehri Workshop ...	366	71	The greater part of the work of this division is at head-quarters.
„ M. H. Arnott ...	Buxar ...	13	10	Proceeded on 7 months' furlough on 14th April 1891.
	Brahmin-Byturni ...	119	84	Joined Division, 4th December 1891.
„ D. B Horn ...	Ditto ...	366	162	
„ J. R. Swinden ...	Puri ...	366	144	
„ T. Butler ...	Mahanuddy ...	366	142	
„ J. P. Coy ...	Acquapadda-Jajpur.	339	173	Died, 5th March 1892.
„ C. A. White ...	Brahmini-Byturni ...	366	276	In charge of subdivision.
Assistant Engineers.				
Mr. W. S. Bremner ...	South-Western ..	115	2	Attached to Superintending Engineer's office from 1st to 13th April and from 7th August to 30th November 1891.
	Cossye ..	116	46	Joined the Division on 7th December 1891, and employed at head-quarters till 6th January 1892.
	Nadia Rivers ...	111	24	
„ C. H. DeMello ...	Cossye ...	282	135	
	South-Western ...	13	10	Includes time spent during joining from Panchpara to Calcutta.
	Buxar ...	62	35	Joined subdivision on 30th January 1892.
Rai Bama Churn Paramanic Bahadur.	Northern Drainage and Embankment.	366	230	
Mr. J. W. Fox	Circular and Eastern Canals.	359	237	On leave for 7 days.

Appendix I.

Name.	Circle or Division.	Number of days— On duty.	On tour.	Remarks.
Rai Kirth Chunder Chowdry Sahib.	Balasore ...	132	67	Transferred from Balasore Division, and left on the afternoon of 10th August 1891. Joined 1st Calcutta Division, 8th February 1892.
Mr. H. E. Pellereau ...	Ditto ...	241	117	Transferred to the Punjab, and left on the afternoon of the 27th November 1891.
" J. S. L. Long ...	Gandak ...	366	199‡	‡ Including 16 days on which he attended the Divisional office.
" J. C. Hewitt ...	Buxar ...	328	202	On privilege leave for 23 days in April 1891.
" P. G. Jacobs ...	Eastern Sone ...	275	205	On leave for 91 days.
" A. H. C. MacCarthy ...	Arrah ..	366	207	
Rai Sahib Bani Madhub Mitra.	Buxar ...	355	249	Was in charge of subdivision from 1st April 1891 to 20th March 1892. Transferred to Arrah Division.
Mr. H. Barlow ...	Mahanuddy ...	366	296	In charge of subdivision.
Rai Sahib Cally Podo Sen ...	Acquapadda-Jajpur.	366	161	In charge of subdivision, and in charge of division from 6th March 1892.
" Annoda Prosad Sircar.	Brahmini-Byturni and Acquapadda-Jajpur Division.	366	185	In charge of subdivision.
" Nogendro Nath Mookerjee.	Brahmini-Byturni and Mahanuddy	366	282	On survey duty.
Mr. G. L. Searight ...	Mahanuddy ...	112	81	Went on leave on private affairs from 12th July 1891.
" H. L. Gearing ...	Ditto ...	356	24	On leave for 10 days. All works except those at Naraje are within 5 miles of head-quarters, on the inspection of which Mr. Gearing spent 204 days during the year.
Sub-Engineers.				
Babu Jodu Nath Bose ...	Cossye ...	366	123	
Rai Sahib Gopal Chunder Daw	Northern Drainage and Embankment.	366	211	
Mr. J. Bradshaw ...	Balasore ...	366	166	
" I. J. Atkinson ...	Ditto ...	356	34	Principal works lie at head-quarters. On leave for 10 days, being in charge of workshop.
" S. Street ...	Arrah ...	366	235	Subdivisional Canal Officer.
Rai Sahib Satcoury Chatterjee.	Eastern Sone ...	366	64	Principal works lie at head-quarters.
Condr. C. J. Clarke ...	Puri ...	275	127	In charge of subdivision. On furlough.
Rai Sahib Jodoonath Sen ..	Brahmini-Byturni ...	133	88	Retired from 12th August 1891.
" Prosonno Coomar Paul.	Acquapadda-Jajpur.	366	111	In charge of subdivisional works near head-quarters.
Mr. J. C. Coxe ...	Puri ...	366	290	In charge of subdivision.
Supervisors.				
Rai Sahib Rakhal Das Chatterjee.	Nadia Rivers ..	304	107	Was on 61 days' privilege leave.
Babu Loke Nath Mitter ...	Ditto ...	352	158	Was on 13 days' privilege leave.
" Nobin Chunder Roy ...	Circular and Eastern Canals.	366	230	
" Dukhina Runjun Mookerjee.	Ditto ...	323	168	Was on 27 days' privilege leave. Transferred to Madras.
" Ashootosh Mitter ...	Ditto ...	366	273	
Mr W. W. H. Leslie ...	Gandak ...	366	155	Including 43 days on which he attended the Divisional office.
" H. E. Williamson ...	Dehri Workshop ...	366	38	Principal works lie at head-quarters.
Babu Chunder Bhusan Dutt...	Eastern Sone ...	93	22	In charge of subdivision.
	Dehri Workshop ...	270	2[illegible]2	Ditto
Babu Gopal Chunder Ghose...	Ditto ...	366	67	In charge of subdivision. Principal works lie at head-quarters.
" Troylukho Nath Sircar	Gandak ...	366	47	Principal works lie at head-quarters.
" Rudro Prosonno Singh...	Ditto ...	305	131	On 61 days' privilege leave. Attended the Divisional office for 17 days and attended the Civil Court at Contai for 11 days.
" Gopal Chunder Mukerji	Eastern Sone ...	366	88	Principal works lie at head-quarters.
" Kanti Chunder Banerjee	Ditto ...	366	283	Subdivisional Canal Officer.
" Doorga Churn Chuckerbutty	Arrah	355	156	Subdivisional Canal Officer. On 11 days' leave.
" Mohendro Nath Sircar	Eastern Sone ...	94	67	Subdivisional Canal Officer.
" Mohendro Nath Sircar	Buxar	18	11	Ditto ditto.
" Bhuggobutty Churn Mookerjee ...	Puri	155	...	Works at head-quarters. Furlough from 2nd September 1891.
" Pran Kissen Sen ..	Brahmini-Byturni and Mahanuddy.	366	186	Eighty-one days in addition spent on inspection of work within 5 miles radius of head-quarters.

APPENDIX I.

NAME.	Circle or Division.	NUMBER OF DAYS—		REMARKS.
		On duty.	On tour.	
Overseers.				
Mr. P. Madge	Cossye	349	88	Transferred to Madras for famine relief works.
Babu Romanath Sircar ...	Ditto	366	228	
" Kirtybas Maity ...	Ditto	366	39	Most of his work lies at head-quarters.
" Jogendro Lall Chatterjee	Northern Drainage and Embankment	335	219	Transferred to Madras for famine works.
" Akhoy Krishna Bose ...	Nadia Rivers ...	343	233	Ditto ditto.
" Rajendra Nath Mookerjee ...	Ditto	366	129	
Mr. C. A. Marchant ...	Calcutta Canals ..	273	254	Transferred to Dehri Workshops from 30th December 1891.
" A. E. James ...	Toll Inspector, Dhappa, Calcutta Canals ..	93	93	Joined from Dehri Workshop Division on 30th December 1891.
Babu Suresh Chunder Ganguli	Balasore ...	366	174	
Mr. A. E. Hefferman ...	Ditto	366	209	
Babu Kenaram Bose ...	Arrah	248	6	Was on privilege leave for 62 days. In charge of Civil Buildings subdivision at head-quarters
	Eastern Sone ...	46	20	Was in charge of subdivision.
" Rajendra Lall Sircar ...	Buxar	257	200	Was in charge of Sikroul subdivision from 7th April to 19th December 1891.
" Surendro Nath Barat ...	Do.	37	20	In charge of Jamrour subdivision.
	Eastern Sone ...	153	32	In charge of subdivision from 3rd July to 2nd December 1891. Principal works at head-quarters.
	Arrah	118	5	In charge of civil buildings subdivision. Principal works at head-quarters.
" Krishna Dhone Banerjee	Brahmini-Byturni and Acquapadda Jajpur ...	366	202	Sectional charge.
" Chintomoney Mohanty	Brahmini-Byturni	62	65	On survey duty. Went on furlough from 2nd June 1891.
" Bunkim Behary Mookerjee	Brahmini-Byturni and Puri ...	301	224	Sectional and subdivisional charge. Joined Irrigation Branch, 16th December 1891.
" Suttya Churn Banerjee	Brahmini-Byturni ...	91	72	In charge of a section.
" Bunkim Kristo Ghose	Ditto ...	74	59	Ditto.
" Hari Churn Mookerjee	Mahanuddy ...	366	267	Ditto.
Mr. P. A. Wight ..	Ditto ...	327	5	Employed as Foreman of the Cuttack Workshop from 11th May 1891.
Babu Korally Churn Dey ...	Puri	366	32	Employed at head-quarters in preparing drawings of the surveys, &c., of the Gurjat roads, and in charge of the head-quarters subdivision.
" Hira Lall Sen ...	Darjeeling and Mahanuddy ...	366	84	In addition 232 days spent on inspection of works within 5 miles radius of head-quarters.
CALCUTTA CANALS.				
Supervisor.				
Mr. W. R Cooksey ...	Calcutta Canals ...	366	298	Daily inspections of few hours only.
Inspector.				
Babu J. N. Gupta ...	Ditto ...	273	263	On privilege leave for 3 months. Daily inspections of few hours only.
SONE CANALS.				
Deputy and Sub-Deputy Collectors.				
Babu Saroda Prosad Chatterjee	Sone Canals ...	366	104	
" Jagdam Sahai ...	Ditto	366	224	
" Siva Sankar Singh ...	Ditto	366	240	
" Jogesh Chunder Ghose	Ditto	310	187	Joined on 27th April 1891, and was relieved on 1st March 1892.

Appendix II.

Statements showing the dates of inspections of the divisional and subdivisional offices by the Superintending Engineers, Orissa, South-Western, and Sone Circles, during the year 1891-92.

Orissa Circle.

Divisions.				Subdivisions.					
				Puri Division.			Acquapada-Jajpur Division.		
Mahanadi.	Brahmini-Byturni.	Puri.	Acquapada-Jajpur.	No. 2 Cuttack.	No. 3 Pipli.	No. 4 Khurda.	No. 2 Acquapada.	No. 3 Jajpur.	No. 4 Janapur.
Not inspected	Not inspected	19th November 1891.	14th December 1891.	19th November 1891.	30th October 1891.	26th October 1891.	16th December 1891.	27th November 1891.	December 1891.

South-Western Circle.

Divisions.					Subdivisions.										Remarks.
					Cossye Division.		Northern Drainage and Embankment Division.		Circular and Eastern Canals Division.		Nadia Rivers Division.		Balasore Division.		
Cossye. Date of inspection.	Northern Drainage and Embankment. Date of inspection.	Circular and Eastern Canals. Date of inspection.	Nadia Rivers. Date of inspection.	Balasore. Date of inspection.	Name of subdivision.	Date of inspection.	Name of subdivision.	Date of inspection.	Name of subdivision.	Date of inspection.	Name of subdivision.	Date of inspection.	Name of subdivision.	Date of inspection.	
13th November 1891.	(a)	(b)	21st December 1891. 24th March 1892.	17th August 1891. 12th February 1892.	...	...	...	...	...	...	Jangipur toll office.	18th December 1891.	Gewankhali toll office. Terapakia toll office. Kalinagar toll office. (c) Contai office.	7th Aug. 1891. 8th Aug. 1891. 10th Aug. 1891. 13th Aug. 1891.	(a) Inspection intended in March, but Executive Engineer's office work too heavy at the time. (b) Inspection intended in March, but then recently inspected by Examiner of Public Works Accounts, Bengali. (c) To see if reduction could be made in establishment.

Sone Circle.

Divisions.					Subdivisions.									
					Arrah Division.		Buxar Division.		Eastern Sone Division.		Dehri Workshops Division.		Gandak Division.	
Arrah. Date of inspection.	Buxar. Date of inspection.	Eastern Sone. Date of inspection.	Gandak. Date of inspection.	Dehri Workshops. Date of inspection.	Name of subdivision.	Date of inspection.	Subdivision.	Date of inspection.	Subdivision.	Date of inspection.	Subdivision.	Date of inspection.	Subdivision.	Date of inspection.
29th and 30th January 1892.	21st to 23rd July 1891.	4th to 6th June 1891.	26th and 27th August 1891.	29th and 30th September 1891.	Ramnagar.	18th and 19th September 1891.	Monohurpur.	8th April 1891.	Daudnagar.	21st and 22nd April 1891.	Grand Trunk Road.	17th December 1891.	Siwan	22nd January 1892.
					Koath ...	4th and 25th November 1891.	Basawan	16th December 1891.	Bikram	19th January 1892.				

STATISTICAL TABLES.

IA.

PUBLIC WORKS DEPARTMENT.

STATEMENT OF CANALS IN THE PROVINCE OF BENGAL.

Particulars.	Orissa Canals. Mahanuddy Series.	Orissa Canals. Brahmini-Byturni Series.	Orissa Canals. Total.	Midnapore Canal.	Hidgellee Tidal Canal.	Sone Canals. Eastern Main Canal Series.	Sone Canals. Western Main Canal Series.	Sone Canals. Total.	Saran Canals.	Calcutta and Eastern Canals.	Orissa Coast Canal.
1	2	3	4	5	6	7	8	9	10	11	12
Source of supply of water ...	River Mahanuddy.	Rivers Brahmini and Byturni.		River Cossye.	Rivers Rupnarain and Russulpore.	River Sone.			River Gandak	River Hooghly and Soonderbund creeks.	Rivers Russulpore, Subarnarekha, Panchpara, Burrabolong and Metai.
Minimum discharge of river—cubic feet per second ... Kharif ...	Not taken	Not taken	......	700	Tidal canal for navigation only.	5,257, October 22nd, 1883			5,082, March 26th, 1884	Tidal canal for navigation only.	Tidal canal for navigation only.
Rabi ...	Ditto	Ditto	......	200		1,868, February 16th, 1884					
Hot weather	Ditto	Ditto	......	100		447, May 27th, 1879					
Maximum discharge of canal—cubic feet per second	3,902	2,156·00	6,058·00	1,400		1,613	4,342	5,955	1,084		
Average annual rainfall ... Inches	63·94	59·04	61·49	51·81		41·48	40·02	40·47	40·80		
Gross area commanded ... Acres	373,772	137,500	511,272	180,000		406,155	1,327,354	1,733,509*	64,000		
Culturable ditto ... "	439,951	137,500	577,451	173,160		317,307	1,036,995	1,354,302	50,000		
Area irrigable by complete project ... ... "	439,951	137,500	577,451	125,000		309,040	707,360	1,016,400	50,000		
Area irrigable at present ... "	264,212	44,647	308,851	125,000		309,040	707,360	1,016,400	30,000		
Sanctioned estimate—											
Direct charges ... Rs.	3,13,96,220		(a) 3,13,96,220	(b) 83,73,091	(c) 25,41,849	2,78,88,697		(a) 2,78,88,697	6,63,521	(d) ...	(e) 43,46,873
Indirect do. ... "	9,19,625		9,19,625	1,84,215	67,620	13,99,607		13,99,607	33,111	...	1,28,068
Interest during construction ... "	1,21,54,723		1,21,54,723	54,17,730	2,17,460	29,67,227		29,67,227	...	...	...
Total estimate "	4,44,70,568		4,44,70,568	1,39,75,036	28,26,929	3,22,55,531		3,22,55,531	6,96,632	...	44,74,941

Expenditure to end of 1891-92—												
Direct charges ...	Rs.	2,46,06,666		2,46,06,666	82,58,711	22,32,705	2,57,32,094		2,57,32,094	6,69,570	52,22,543	42,38,999
Indirect do. ...	"	5,54,230		5,54,230	1,84,133	56,508	9,10,551		9,10,551	27,183	61,027	1,02,953
Interest during construction ...	"	1,66,70,158		1,66,70,158	64,09,199	15,65,055	1,65,88,027		1,65,88,027	...	...	...
Total expenditure ...	"	4,18,31,054		4,18,31,054	1,48,52,043	38,54,268	4,32,30,672		4,32,30,672	6,96,753	52,83,570	43,41,952
Works as now sanctioned—												
Main canals, irrigation	Miles	141¾	31½	173¼	53	29	86¼	132¼	218½	6½	47(*g*)	102
Branch do. do. ...	"	107¾	6½	114¼	19	Nil	Nil	148¾	148¾	12½	Nil	Nil
Distributaries ...	"	1,763	384	2,147(*h*)	304·89	Nil	350¼	857½(*h*)	1,207¾	Nil	Nil	Nil
Of above—												
Navigable channels ...	Miles	202½	38	240½	72	29	86¼	132¼	218½	Nil	47	102
Works completed at end of 1891-92—												
Main canals, irrigation	Miles	141¾(*f*)	31½	173¼	53	29	86¼	132¼	218½	6⅓	47	102
Branch do. do. ...	"	100	6½	106½	19	Nil	Nil	148¾	148¾	12½	Nil	Nil
Distributaries ...	"	834	56	890½	283·19	Nil	350¼(*i*)	857(*j*)	1,207¼	Nil	Nil	Nil
Of above—												
Navigable channels ...	Miles	166¾	38	204¾	72	29	86¼	132¼	218½	Nil	47	102(*k*)

* The area (5,000 acres) commanded by the Sasaram distributary has been added.

(*a*) The currency of the estimates for the Orissa and Sone projects has expired, and the present outlay on these projects is held as irregular pending orders of the Government of India.
(*b*) and (*c*) The estimates for the Midnapore and Hidgellee Tidal canals, respectively, having been withdrawn and closed, the figures shown are the totals of the old and fresh sanctions.
(*d*) There is no general sanctioned estimate for this project.
(*e*) Includes Rs. 8,66,000 expended from famine relief funds.
(*f*) Includes 3 miles of the Gobri extension canal which form the feeder channel from Alba to Pattamundi fall and 24½ miles of Taldunda extension canal.
(*g*) Includes 20 miles of Kaorapukhur Khal.
(*h*) Includes village channels.
(*i*) The decrease of 7½ miles is due to the Futtehpur distributary having been abandoned beyond the 12th mile.
(*j*) The increase of 4½ miles is due to the Baroon distributary having been added. It includes 14½ miles of Government village channels.
(*k*) Includes 4½ miles of river crossings.

IB.

PUBLIC WORKS DEPARTMENT, BENGAL.

CAPITAL ACCOUNT OF IRRIGATION WORKS IN BENGAL FOR AND TO END OF 1891-92.

Irrigation Works.		Direct charges (net expenditure). Works.	Establishment.	Tools and plant.	Suspense accounts.	Losses by exchange.	Total.	Indirect charges, exclusive of interest.	Total capital, excluding interest.	Simple interest.
1		2	3	4	5	6	7	8	9	10
Major Irrigation Works.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Orissa project ...	To end of previous year	1,74,06,739	43,93,868	19,89,596	1,59,653	2,68,070	2,42,17,926	5,46,188	2,47,64,114	1,56,93,666
	During 1891-92 ...	3,24,372	57,375	2,855	4,138	......	3,88,740	8,042	3,96,782	9.76,492
Midnapore canal	To end of previous year	53,40,639	19,17,880	8,90,923	......	94,800	82,44,242	1,84,133	84,28,375	60,79,140
	During 1891-92 ...	...	......	14.469	......	...	14,469	...	14,469	3,30,059
Hidgellee Tidal canal.	To end of previous year	14,14,304	4,84 026	76,667	......	22,790	19,97,787	49,600	20,47,387	14,80,445
	During 1891-92 ...	1,44,102	49 346	41,470	......	...	2,34,918	6,908	2,41,826	84.610
Sone project ...	To end of previous year	1,82,12,220	50,97,245	19,94,927	1,71,364	52,240	2,55,27,996	9,05,360	2,64,33,356	1,55,62,825
	During 1891-92 ...	1,70,082	37,083	—1,352	—1,715	......	2,04,098	5,191	2,09,289	10,25,202
Total ...	To end of previous year	4,23,73,902	1,18,93,019	49,52,113	3,31,017	4,37,900	5,99,87,951	16.85,281	6,16,73,232	3,88,16,076
	During 1891-92 ...	6,38,556	1,43,804	57,442	2,423	......	8,42,225	20,141	8,62,366	24,16,363
Minor Works and Navigation.										
Tirhut project ...	To end of previous year	90,685	4,33,943	6,797	......	......	5,31,425	74,650	6,06,075	... ..
	During 1891-92 ...	......	......	......	......	......	...	......	......	......
Damudur " ..	To end of previous year	49,077	94,864	4,800	......	......	1,48,741	16,239	1,64,980	......
	During 1891-92 ...	—1,200	...	......	......	......	—1,200	......	—1,200	......
Saran " ...	To end of previous year	4,79,448	1,64,170	25,952	......	......	6,69,570	27,183	6,96,753	......
	During 1891-92	......	......	......	...	......	.. ...	...	......	......
Orissa Coast canal	To end of previous year	32,71,420	7,30,584	2,02,469	30,586	......	42,35,059	1,03,018	43,38,077	......
	During 1891-92 ...	—1,839	467	......	6,246	......	3,940	—65	3,875	......
Calcutta and Eastern canals.	To end of previous year	44,84,160	3,84,970	3,51,663	12,079	......	52,32,872	61,025	52.93,897	....
	During 1891-92 ...	—9,960	18	......	—387	......	—10,329	2	—10,327	......
Total ...	To end of previous year	83,74,790	18,08,531	5,91,681	42,665	......	1,08,17,667	2,82,115	1,10,99,782	......
	During 1891-92 ...	—12,999	—449	... ..	5,859	......	—7,589	—63	—7,652	......
Grand Total ...	To end of previous year	5,07,48,692	1,37,01,550	55,43,794	3,73,682	4,37,900	7,08,05,618	19,67,396	7,27,73,014	3,88,16,076
	During 1891-92 ...	6,25,557	1,43,355	57,442	8,282	......	8,34,636	20,078	8,54,714	24,16,363

NOTE.

Receipts on capital account deducted from the following heads.

		Works.	Establishment.	Tools.	Total.
		Rs.	Rs.	Rs.	Rs.
Orissa project ...	To end of previous year ...	44,451	13,300	28,280	86,031
	During 1891-92	69	...	...	69
Midnapore canal ...	To end of previous year ...	12,668	7,309	11,690	31,658
	During 1891-92	...	...	...	...
Hidgellee Tidal canal.	To end of previous year ...	...	...	915	915
	During 1891-92	10	...	...	10
Sone project ...	To end of previous year ...	2,05,605	32,711	1,33,640	3,71,956
	During 1891-92	330	...	...	330
Tirhut project ...	To end of previous year ...	45	74	39	158
	During 1891-92	...	...	...	...

		Works.	Establishment.	Tools.	Total.
		Rs.	Rs.	Rs.	Rs.
Damudur project ...	To end of previous year ...	41,549	...	2,300	43,849
	During 1891-92	1,200	...	...	1,200
Saran " ...	To end of previous year ...	498	...	...	498
	During 1891-92	...	...	...	...
Orissa Coast Canal	To end of previous year ...	3,028	260	5	3,293
	During 1891-92	...	...	...	...
Calcutta and Eastern canals.	To end of previous year ...	44,454	...	...	44,454
	During 1891-92	10,013	...	...	10,013

I

PUBLIC WORKS

STATEMENT SHOWING THE FINANCIAL RESULTS OF IRRIGATION

Realizations under main heads of

Irrigation Works.	Revenue (Actual Receipts). Irrigation. Water-rate directly paid.	Share of land revenue.	Total.	Navigation.	Plantations.	Water-power.	Miscellaneous.	Total.	Refunds of revenue.	Gross revenue (less refunds).	Revenue … Establish… Direction.	Executive.
1	2	3	4	5	6	7	8	9	10	11	12	13
MAJOR IRRIGATION WORKS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Orissa project	2,17,256	...	2,17,256	1,35,902	917	...	16,926	3,71,001	79	3,70,922	4,391	55,496
Midnapore canal	1,32,981	...	1,32,981	1,32,572	40	...	19,107	2,84,700	3	2,84,697	3,532	14,108
Hidgellee Tidal canal ...	...	...	......	36,348	27	...	540	36,915	...	36,915	815	4,902
Sone project	8,11,750	...	8,11,750	66,517	995	1,049	29,783	9,10,094	4,020	9,06,074	6,590	88,007
Total Major Irrigation Works.	11,61,987	...	11,61,987	3,71,339	1,979	1,049	66,356	16,02,710	4,102	15,98,608	15,328	1,62,513
MINOR WORKS AND NAVIGATION.												
Works for which capital and revenue accounts are kept.												
Saran project	15,785	...	15,785	...	28	...	18	15,831	...	15,831	226	1,629
Orissa Coast canal ...	...	...	...	60,051	...	...	2,072	62,123	66	62,057	1,215	7,335
Calcutta and Eastern canals	...	...	...	5,15,125	...	...	10,218	5,25,343	124	5,25,219	5,218	27,660
Total ...	15,785	...	15,785	5,75,176	28	...	12,308	6,03,297	190	6,03,107	6,659	36,624
Works for which only revenue accounts are kept.												
Nadia rivers	...	...	...	1,92,718	...	...	247	1,92,965	228	1,92,737	1,568	9,784
Works for which neither Capital nor revenue accounts are kept.												
Eden canal	9,430	...	9,430	...	...	...	728	10,158	39	10,119	...	...
Total Minor Works and Navigation.	25,215	...	25,215	7,67,894	28	...	13,283	8,06,420	457	8,05,963	8,227	46,408
GRAND TOTAL ...	11,87,202	...	11,87,202	11,39,233	2,007	1,049	79,639	24,09 130	4,559	24,04,571	23,555	2,08,921

(a) Irrigation revenue officers specially
(b) A temporary establishment costing

NOTE.—The charges for "Direction" and "Executive" establishment have been equally

C.

DEPARTMENT, BENGAL.

WORKS IN BENGAL FOR THE YEAR ENDING 31st MARCH 1892.

Revenue and Working Expenses.

WORKING EXPENSES.															
Management.			Maintenance of works.										Indirect charges.	Grand total working expenses.	Net revenue.
ment.		Total revenue management.	Establishment.				Works.	Repairs.	Sundries.	Tools and plant.	Plantations.	Total cost of maintenance.			
Navigation.	Civil officers (a).		Direction.	Executive.	Medical.	Total.									
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
16,506	57,074	1,33,467	4,391	55,497	...	59,888	5,001	1,70,214	...	27,023	423	2,62,549	27,070	4,23,086	—52,164
7,750	21,273	46,663	3,531	14,107	...	17,638	...	1,40,674	...	51,761	588	2,10,661	9,002	2,66,326	18,371
2,955	...	8,672	814	4,902	...	5,716	...	32,315	...	1,693	273	39,997	2,014	50,683	—18,768
14,264	1,52,113	2,60,974	6,591	88,008	...	94,599	3,812	2,52,968	28	28,843	6,836	3,87,086	49,780	6,97,840	2,08,234
41,475	2,30,460	4,49,776	15,327	1,62,514	...	1,77,841	8,813	5,96,171	28	1,09,320	8,120	9,00,293	87,866	14,37,935	1,60,673
...	...	1,855	225	1,630	...	1,855	...	8,964	...	—193	57	10,683	519	13,057	2,774
6,134	...	14,684	1,215	7,335	...	8,550	...	48,598	...	3,464	...	60,612	3,253	78,549	—16,492
41,359	...	74,237	5,219	27,660	...	32,879	36,289	1,71,208	...	12,541	1,249	2,54,166	14,996	3,43,309	1,81,820
47,493	...	90,776	6,659	36,625	...	43,284	36,289	2,28,770	...	15,812	1,306	3,25,461	18,768	4,35,005	1,66,102
23,134	...	34,486	1,567	9,785	...	11,352	...	62,704	—3,015	1,330	...	72,371	6,417	1,13,274	79,463
...	...(b)	...	...	6,541	...	6,541	4	18,623	...	495	...	25,663	...	25,663	(—)15,54
70,627	...	1,25,262	8,226	52,951	...	61,177	36,293	3,10,097	—3,015	17,637	1,306	4,23,495	25,185	5,73,942	2,32,021
1,12,102	2,30,460	5,75,038	23,553	2,15,465	...	2,39,018	45,106	9,06,268	—2,987	1,26,957	9,426	13,23,788	1,13,051	20,11,877	3,92,694

employed in collection of revenue.
Rs. 967, was entertained during the year for Eden Canal Irrigation.
approximately) apportioned under the heads "Revenue management" and "Maintenance."

IIC.

PUBLIC WORKS DEPARTMENT, BENGAL.

STATEMENT SHOWING THE FINANCIAL RESULTS OF IRRIGATION WORKS IN BENGAL FOR 1891-92, BASED ON ACTUAL RECEIPTS.

Principal results of operations for the year ended 31st March 1892.

Irrigation works.	Direct and indirect outlay to end of 1891-92.	Gross receipts, direct and indirect, from all sources (less refunds).	Working expenses, direct and indirect.	Net revenue (excluding charges for interest).	Percentage of net revenue on capital outlay to end of the year.	Interest at 4 per cent. on direct capital outlay at commencement of year and at 2 per cent. on outlay during the year.	Surplus revenue after paying interest on direct capital outlay. Amount.	Surplus revenue after paying interest on direct capital outlay. Percentage on total sum at charge.	Excess charges, including interest on direct capital outlay. Amount.	Excess charges, including interest on direct capital outlay. Percentage on total sum at charge.
1	2	3	4	5	6	7	8	9	10	11
Major Irrigation Works.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
In operation.										
Hidgellee Tidal canal ...	22,89,213	36,915	50,683	—13,768	—·60	84,610	...	...	98,378	4·29
In progress.										
Orissa Project	2,51,60,896	3,70,922	4,23,036	—52,161	—·20	9,76,492	...	...	10,28,656	4·09
Midnapore canal ...	84,42,814	2,84,697	2,66,326	18,371	·21	3,30,059	...	...	3,11,688	3·7
Sone Project	2,66,42,645	9,06,074	6,97,840	2,08,234	·78	10,25,202	...	...	8,16,968	3·07
Total ...	6,25,35,598	15,98,608	14,37,935	1,60,673	·25	24,16,363	...	...	22,55,690	3·60
Minor Works and Navigation.										
In operation.										
Saran Project	6,96,753	15,831	13,057	2,774	·39	...	...	...	...	...
Calcutta and Eastern canals	52,83,570	5,25,219	3,43,399	1,81,820	3·44	...	...	...	...	...
Nadia rivers	...	1,92,737	1,13,274	79,463	...	...	...	...	...	...
In progress.										
Orissa Coast canal ...	43,41,952	62,057	78,549	—16,492	·38	...	...	...	...	...
Abandoned or held in abeyance.										
Tirhut Project	6,06,075	...	...	...	...	...	...	...	...	...
Damudur Project ...	1,63,780	...	...	...	...	...	...	...	...	...
Total ...	1,10,92,130	7,95,844	5,48,279	2,47,565	2·23	...	...	...	...	...

IIIC.

PUBLIC WORKS DEPARTMENT, BENGAL.

DEMANDS AND REALIZATIONS DURING THE YEAR 1891-92.

Irrigation Works.	Balance of demand unrealized at commencement of year.	Demands of the year.	Total.	Deduct remissions not including cash refunds.	Net total.	Deduct amount unrealized at close of the year.	Actual receipts of the year.
1	2	3	4	5	6	7	8
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Major Irrigation Works.							
Orissa Project	1,98,364	4,36,625	6,34,989	30,284	6,04,705	2,33,704	3,71,001
Midnapore Canal ...	64,967	2,81,541	3,46,508	2,836	3,43,672	58,972	2,84,700
Hidgellee Tidal Canal ...	...	36,915	36,915	...	36,915	...	36,915
Sone Project	2,08,782	8,27,975	10,36,757	15,220	10,21,537	1,11,443	9,10,094
Total ...	4,72,113	15,83,056	20,55,169	48,340	20,06,829	4,04,119	16,02,710
Minor Works and Navigation.							
Saran Project	18,814	11,046	29,860	...	29,860	14,029	15,831
Orissa Coast Canal ...	...	62,123	62,123	...	62,123	...	62,123
Calcutta and Eastern Canals	...	5,25,343	5,25,343	...	5,25,343	...	5,25,343
Nadia Rivers	...	1,92,965	1,92,965	...	1,92,965	...	1,92,965
Total ...	18,814	7,91,477	8,10,291	...	8,10,291	14,029	7,96,262
Grand Total ...	4,90,927	23,74,533	28,65,460	48,340	28,17,120	4,18,148	23,98,972

Note.—Refunds of revenue have not been deducted from actual receipts of the year.

IV.

PUBLIC WORKS

STATEMENT SHOWING THE FINANCIAL RESULTS OF IRRIGATION WORKS IN

Principal results of operations for

Irrigation Works.	Capital outlay (direct and indirect) to end of the year.	Revenue Assessed — Direct Assessed: Occupier's rate (water-rates).	Owner's rate.	Plantations.	Water-power.	Navigation.
1	2	3	4	5	6	7
MAJOR IRRIGATION WORKS.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Orissa Project	2,51,60,896	2,66,587	......	917	......	1,35,902
Midnapore Canal	84,42,844	1,29,245	......	40	......	1,32,572
Hidgellee Tidal Canal ...	22,89,213	......	......	27	......	36,348
Sone Project	2,66,42,645	9,82,032	......	995	1,049	66,517
Total Major Irrigation Works ..	6,25,35,598	13,77,864	......	1,979	1,049	3,71,339
MINOR WORKS AND NAVIGATION.						
Works for which Capital and Revenue accounts are kept.						
Saran Project	6,96,753	11,000	......	28	......	......
Orissa Coast Canal ...	43,41,952	......	......	......	......	60,051
Calcutta and Eastern Canals ...	52,83,570	......	......	......	......	5,15,125
Total ...	1,03,22,275	11,000	......	28	......	5,75,176
Works for which only Revenue accounts are kept.						
Nadia Rivers	......	......	......	......	......	1,92,718
Total Minor Works and Navigation.	1,03,22,275	11,000	......	28	......	7,67,894

C.

DEPARTMENT, BENGAL.

BENGAL FOR THE YEAR ENDED 1891-92, BASED ON ASSESSMENTS OF THE YEAR.

the year ended 31*st March* 1892.

DURING THE YEAR.								
REVENUE.								
Miscellaneous.	Total.	Refunds of revenue.	Gross assessed revenue,—less refunds.	Indirect revenue.—Land revenue due to operations of canals.	Grand total.	Working expenses, direct and indirect.	Net assessed revenue of the year.	Percentage on capital outlay to end of the year.
8	9	10	11	12	13	14	15	16
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
16,926	4,20,332	79	4,20,253	......	4,20,253	4,23,086	(—)2,833	·01 deficit.
19,107	2,80,964	3	2,80,961	......	2,80,961	2,66,326	(+)14,635	·17 profit.
540	36,915	...	36,915	......	36,915	50,683	(—)13,768	·60 deficit.
29,783	10,80,376	4,020	10,76,356	......	10,76,356	6,97,840	(+)3,78,516	1·42 profit.
66,356	18,18,587	4,102	18,14,485	......	18,14,485	14,37,935	(+)3,76,550	·60 profit.
18	11,046	...	11,046	......	11,046	13,057	(—)2,011	·28 deficit.
2,072	62,123	66	62,057	......	62,057	78,549	(—)16,492	·38 deficit.
10,218	5,25,343	124	5,25,219	......	5,25,219	3,43,399	(+)1,81,820	3·44 profit.
12,308	5,98,512	190	5,98,322	......	5,98,322	4,35,005	1,63,317	1·58 profit.
247	1,92,965	228	1,92,737	......	1,92,737	1,13,274	79,463	....
12,555	7,91,477	418	7,91,059	......	7,91,059	5,48,279	2,42,780	......

ID.

PUBLIC WORKS DEPARTMENT.

STATEMENT OF TRAFFIC ON CANALS IN BENGAL DURING THE YEAR 1891-92.

PARTICULARS.		Orissa Canals.	Midnapore Canal.	Hidgellee Tidal Canal.	Sone Canals.	Calcutta and Eastern Canals.	Orissa Coast Canal.	Total.	Nadia Rivers.	Grand Total.
1		2	3	4	5	6	7	8	9	10
Length of canal open for navigation	Miles	204¾	72	29	218½	(a)47	(b)102	673¼	477	1,150¼
RECEIPTS.										
Tollage—Private boats ...	Rs.	1,12,262	1,29,850	36,169	41,088	5,08,853	59,361	8,87,683	1,91,120	10,78,803
" Government boats...	"	4,880	...	..	9,368	...	50	14,298	...	14,298
" Rafts ...	"	3,619	2,722	179	6,883	329	640	14,272	1,598	15,870
Carrying operations or transport services. } Government boats.	"	14,967	...	...	9,178	...	...	24,145	...	24,145
Fines and Sundries	"	3	3,005	...	...	5,943	520	9,471	...	9,471
Total receipts ..	"	1,35,731*	1,35,577	36,348	66,517	5,15,125	60,571	9,49,869	1,92,718	11,42,587
Maintenance charges, including special navigation establishment	"	38,179	34,538	50,683	29,497	3,43,523	78,615	5,75,035	1,13,502	6,88,537
Net revenue of year ...	"	97,552	1,01,039	(—)14,335	37,020	1,71,602	(—)18,044	3,74,834	79,216	4,54,050
Total number of boats plying cargo	No.	10,176	16,406	41,276	4,867	91,560	10,702	174,987	29,242	204,229
" " " passenger	"	2,770	13,313	1,056	512	11,352	1,841	30,844	19,797	50,641
Total ...		(c)12,946	29,719	42,332	(c)5,379	102,912	12,543	205,831	49,039	254,870
Total registered tonnage of boats by canal measurement, cargo	Tons.	180,575	249,026	123,702	100,388	2,540,885	87,945	3,282,521	(f)778,368	4,060,889
Total registered tonnage of boats by canal measurement, passenger	"	86,026¾	99,251	9,873	12,532	24,367	22,742	254,791¾	26,255	281,046¾
Total ...		(d)266,601¾	348,277	133,575	(e)112,920	2,565,252	1,10,687	3,537,312¾	804,623	4,341,935¾
Ton-mileage—Up ...	"	5,103,752	2,762,222	772,076	1,949,396	3,245,547	1,487,628	15,323,621	} Nil	{ ...
Down ...	"	6,197,758	4,997,750	1,403,286	3,600,252	19,019,983	1,917,906	37,136,935		...
Total ...		11,301,510	7,759,972	2,175,362	5,549,648	22,265,530	3,405,534	52,460,556	...	...
Estimated value of cargoes—Up ...	Rs.	31,77,308	52,19,687	12,42,257	22,43,358	97,45,815	11,09,230	2,27,37,655	2,04,78,042	4,32,15,697
Down ...	"	62,67,565	72,87,473	22,41,617	45,56,049	6,17,15,200	10,99,071	8,31,66,975	1,71,27,179	10,02,94,154
Total ...	"	94,44,873	1,25,07,160	34,83,874	67,99,407	7,14,61,015	22,08,301	10,59,04,630	3,76,05,221	14,35,09,851
Number of passengers—Total	No.	96,425½	163,836	27,320	51,696	64,701	53,723	457,701½	48,707	506,408½
Rafts, feet×feet×feet—Up...	c. ft.	180,591	3,786	21,541	5,025	11,403	7,268	229,614	8,069	237,683
" " " Down	"	591,298	2,15,243	4,679	2,537,714	52,928	30,498	3,432,360	164,820	3,597,180
Total ...	"	771,889	219,029	26,220	2,542,739	64,331	37,766	3,661,974	172,889	3,834,863
Estimated value of rafts—Total ...	Rs.	1,01,883	1,58,564	13,851	2,07,188	1,01,261	18,980	6,04,727	2,10,680	8,15,407
Tollage on boats per ton per mile ...	Pies	1·99	3·2	3·2	1·75	4·39	3·2	...	Nil.	...
Tollage on rafts per 100 cubic feet ...	Rs.	0·46	1·24	0·68	0·27	0·51	1·67	...	0·92	...

* Exclusive of Rs. 171 being receipts from steamer *Garnet*.
(a) This length is that of the Calcutta and new canals and Tolly's nullah, with 20 miles of Kaorapukur khall. The Eastern canals are 316 miles in length, of which the inner boat route is 189 miles, and the outer boat route 127 miles: the steamer route is 350 miles. Total length is 713 miles.
(b) Includes 4½ miles of river crossings.
(c) Exclusive of 8,796 and 3,206 empty boats.
(d) Exclusive of 35,820¼ tons of empty, cargo and passenger boats.
(e) Exclusive of 16,227 tons of empty boats.
(f) Includ[illegible] tonn[illegible] of empty boats.

PUBLIC WORKS DEPARTMENT, BENGAL.

DESCRIPTION AND QUANTITIES OF GOODS, &c., CARRIED ON CANALS IN BENGAL DURING THE YEAR 1891-92.

Description of Goods, &c.	Orissa Canals.						Midnapore Canal.						Hidgellee Tidal Canal.						Sone Canals.					
	Total.				Private.		Total.				Private.		Total.				Private.		Total.				Private.	
	Quantity—Tons.			Value.	Quantity.	Value.	Quantity—Tons.			Value.	Quantity.	Value.	Quantity—Tons.			Value.	Quantity.	Value.	Quantity—Tons.			Value.	Quantity.	Value.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
BOAT TRAFFIC.	Up.	Down.	Total.	Rs.	Tons.	Rs.	Up.	Down.	Total.	Rs.	Tons.	Rs.	Up.	Down.	Total.	Rs.	Tons.	Rs.	Up.	Down.	Total.	Rs.	Tons.	Rs.
Cotton, raw and manufactured.	1,894½	104½	1,998½	6,08,878	1,998½	6,08,873	1,247	75	1,322	21,66,134	1,322	21,66,184	246	...	246	1,69,300	246	1,69,300	555	61	616	8,20,224	616	8,20,224
Woollen goods, raw and manufactured.	...	...	...	...	...	...	31	...	31	70,000	31	70,000	...	...	...	...	...	...	5	164	169	1,69,350	169	1,69,350
Dyes and tans ...	11	...	11	600	11	600	...	969	969	1,82,238	969	1,82,238	...	...	...	...	...	...	...	...	...	...	...	...
Rice or wheat	11,520	37,482¼	49,002¼	43,07,442	49,002¼	43,07,442	408	38,757	39,165	36,29,125	39,165	26,29,125	41	34,010	34,145	19,79,450	34,145	19,79,450	454	2,487	2,941	2,16,927	2,941	2,16,927
Other food-grains ...	4,145½	2,497½	6,642¾	3,21,363	6,642¾	3,21,363	4,620	22,210	26,830	19,74,817	26,830	11,74,817	...	...	...	..	...	...	442	10,640	10,610	7,19,761	10,640	7,19,761
Hides and skins ...	7½	642	649½	8,44,310	649½	1,44,310	...	299	290	1,09,180	299	1,00,180	...	10	10	9,000	10	9,000	5	131	136	53,457	136	63,457
Liquors	...	...	...	...	...	...	12	...	12	19,070	12	19,170	...	...	...	...	...	...	19	...	19	18,310	19	18,310
Metals	125	15	140	24,811	140	24,811	469	128	597	2,99,888	597	2,99,888	37	10	47	9,170	47	9,170	187	24	211	4,78,757	211	4,78,757
Oils	1,780	33	1,813	2,59,094	1,813	2,59,094	2,427	6	2,433	2,72,578	2,483	2,72,578	883	...	883	1,18,764	883	1,18,764	35	1	36	4,330	36	4,330
Oil-seeds	1,122	7,115	8,237	11,16,473	8,237	11,16,413	1,134	3,151	4,285	4,47,876	4,215	3,47,876	...	...	...	..	...	...	89	15,737	15,826	15,24,031	15,826	15,24,031
Provisions	41	45½	86½	7,167	86½	7,167	895	1,146	2,041	1,53,880	2,041	1,53,830	90	59	849	7,133	149	7,133	5	2	7	1,400	7	1,400
Salt	574½	2,987½	3,562	8,21,462	3,562	3,31,462	10,412	3	10,415	9,44,021	10,415	9,44,021	2,540	...	2,540	2,77,905	2,540	2,77,905	4,703	113	4,816	4,96,988	4,816	4,96,988
Spices	6,133	130	6,263	11,15,880	6,263	11,15,889	831	5	836	1,81,601	836	1,81,602	5	...	5	1,700	5	1,700	67	2	69	8,823	69	8,823
Sugar	113½	1,986½	2,100	2,74,270	2,100	2,76,370	977	2,041	3,018	3,94,223	3,018	3,94,223	116	5	121	13,089	121	13,089	7	723	730	81,209	730	81,209
Tobacco	9	100	109	35,180	109	35,180	836	28	864	1,90,604	864	1,90,036	2,789	...	2,789	5,49,892	2,787	5,49,892	836	37	873	58,390	873	58,390
Building materials ...	1,348	1,872	3,220	49,461	3,220	49,461	430	2,336	2,766	21,820	2,768	21,820	755	102	857	7,306	857	7,306	681	4,768	5,449	29,394	1,791	14,094
Miscellaneous	2,199½	6,748½	8,947¾	6,08,549	8,947¾	6,08,549	3,656	2,788	6,444	8,36,122	6,444	8,36,122	509	4,281	4,790	1,85,898	4,790	1,85,894	3,512	8,065	11,577	18,37,658	11,290	18,28,187
Timber ... C. ft.	½	2,075	2,075½	1,44,183	2,075½	1,44,183																		
Timber ... Tons	88	3,821	3,909		3,909		...	...	...	...	...	...	40	8	48	1,558	48	1,558	231	52	213	15,971	105	4,071
Fire-wood	894	264	1,158	4,546	1,158	4,546	28	55	83	815	83	815	26	170	197	1,173	126	1,173	2	58	60	580	60	580
Bamboos	1	49	50	504	50	504	...	...	...	...	...	...	5	22	27	363	27	363	723	9	732	22,027	732	22,027
Coal and Coke	34	86	120	2,780	120	2,780	2,710	...	2,710	19,340	2,710	19,340	860	1	861	7,177	861	7,117	1,095	316	1,411	20,487	813	14,136
Jute	5½	922	927½	89,820	927½	89,820	15	1,210	1,225	1,44,177	1,225	1,40,177	...	1,433	1,433	1,45,060	1,433	1,45,060	...	...	...	18	...	18
Treasure	...	2	2	6,000	2	6,000	...	25	25	22,49,600	25	22,49,600	...	...	...	...	...	...	2	3	5	2,21,315	5	2,21,515
Total boat traffic ... Tons ...	32,045½	66,903½	98,949½	94,44,882	98,955½	94,44,882	31,138	75,232	106,370	1.25,07,160	106,370	1,25,07,160	8,945	40,202	49,147	34,83,874	49,147	34,83,874	13,655	42,951	56,906	67,99,407	51,885	67,56,385
Total boat traffic ... C.ft. ...	½	2,075	2,075½		2,075½																			
RAFT TRAFFIC.																								
Timber in logs ... C. ft.	170,916	233,133	404,040	73,660	4,01,049	73,660	3,063	33,737	36,800	45,138	36,800	45,138	8,066	4,029	12,095	11,996	12,095	11,996	1	6	7	373	7	373
Squared timber ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	227	224	2,860	224	2,860
Sleepers, broad gauge	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,128	1,128	10,330	1,128	10,388
Sleepers, metre gauge	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	5	90	5	90
Scantlings	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	115	115	1,300	115	1,302
Poles	...	...	...	...	...	...	33	142,353	142,386	1,10,184	142,356	1,10,184	...	...	...	...	...	...	...	7,088	7,088	58,742	7,088	58,740
Fire-wood	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Bamboos ... C. ft.	650	201,478	202,128	31,214	2,92,128	31,214	...	...	...	...	...	...	...	...	...	...	...	...	...	1,375	1,375	6,024	1,375	6,025
Bamboos ... No.	36,100	266,718	302,848		3,02,848		690	39,153	39,843	3,242	39,843	3,243	13,475	650	14,125	1,855	14,125	1,885	32	11,937	11,969	1,26,569	11,960	1,26,560
Reeds	...	...	.	...	...	..	...	...	...	...	...	..	...	...	..	...	...	...	...	...	.	...	...	...
Total raft traffic ... C. ft. ...	171,566	524,611	696,177	1,04,874	696,177	1,04,874	3,786	115,243	219 029	1,59,564	212,029	1,58,564	21,541	4,679	26,220	13,851	26,220	13,851	33	21,878	21,911	2,07,188	21,011	2,07,18
Total raft traffic ... No. ...	36,100	266,718	302,848		302,848																			
GRAND TOTAL Tons	32,045½	66,903½	98,949½	95,49,756	98,949½	95,49,756	31,138	75,232	10370	1,26,65,724	106,370	1,26,65,724	8,945	40,202	49,147	34,97,725	49,147	34,97,725	13,655	42,951	56,906	70,06,595	51,865	69,63,578
GRAND TOTAL C. ft.	171,566¼	524,686	698,252¼		698,252¼		3,786	215,243	21,029		219,029		21,541	4,679	26,220		26,220		33	21,878	21,911		21,911	
GRAND TOTAL No. ...	36,100	266,748	302,848		302,848		...	...	...		...		...	...	...		...		...	...	...			

IID—*concluded.*

PUBLIC WORKS DEPARTMENT, BENGAL.

DESCRIPTION AND QUANTITIES OF GOODS, &c., CARRIED ON CANALS IN BENGAL DURING THE YEAR 1891-92.

ORISSA COAST CANAL.

Description.	Total. Quantity—Tons.			Total. Value.	Private. Quantity.	Private. Value.
	26	27	28	29	30	31
Boat Traffic.	Up.	Down.	Total.	Rs.	Tons.	Rs.
Cotton, raw and manufactured	238	4	242	2,53,955	242	2,53,955
Woollen goods, raw and manufactured.	...	...	...	...	...	...
Dyes and tans	2	...	2	70	2	70
Rice	2,342	16,027	18,369	8,66,001	18,369	8,66,001
Other food-grains	143	3,133	3,276	1,26,418	3,276	1,26,418
Hides and skins	...	46	46	6,350	46	6,350
Liquors	...	...	...	...	...	...
Metals	22	1	23	5,490	23	5,490
Oils	2,192	5	2,197	2,32,191	2,197	2,32,191
Oilseeds	...	77	77	7,505	77	7,505
Provision	74	117	191	8,370	191	8,370
Salt	2,489	2	2,491	2,73,757	2,491	2,73,757
Spices	82	...	83	18,400	83	18,400
Sugar	307	1	308	35,895	308	35,895
Tobacco	718	12	730	1,43,435	730	1,43,435
Building materials	314	101	415	4,617	370	4,397
Miscellaneous goods	1,212	1,165	2,377	1,60,082	2,376	1,59,742
Timber	22	124	146	10,390	146	10,390
Firewood	388	172	560	2,306	560	2,306
Bamboos	1	3	4	50	4	50
Coal and coke	746	23	769	7,699	765	7,659
Jute	16	580	596	45,470	596	45,470
Treasure	...	...	...	...	...	...
Total Boat Traffic ...	11,308	21,593	32,901	22,08,301	32,851	22,07,851
Raft Traffic.						
Timber in logs C. ft.	683	17,718	18,401	17,300	18,401	17,380
Squared timber ... ... "	...	...	...	...	...	...
Sleepers, broad gauge "	...	...	...	...	...	...
Do. metre gauge "	...	...	...	...	...	...
Scantlings ... ... "	...	...	...	...	...	...
Poles ... ... "	...	...	...	...	...	...
Firewood ... ... "	...	...	...	...	...	...
Bamboos ... ... "	6,585	12,780	19,365	1,620	19,365	1,620
Reeds ... ... "	...	...	...	...	...	...
Total Raft Traffic ...	7,268	30,498	37,766	18,980	37,766	18,980
Grand Total ... Tons	11,308	21,593	32,901	22,27,281	32,851	22,26,831
Grand Total ... C. ft.	7,268	30,498	37,766		37,766	

CALCUTTA AND EASTERN CANALS.

Description.	Total. Quantity—Tons.			Total. Value.	Private. Quantity.	Private. Value.
	32	33	34	35	36	37
Boat Traffic.	Up.	Down.	Total.	Rs.	Tons.	Rs.
Cotton, raw and manufactured	...	393	393	1,93,575	393	1,93,575
Woollen goods, raw and manufactured.	...	...	...	...	...	...
Dyes and tans	...	...	...	...	...	...
Rice	54	302,447	302,501	3,27,50,069	302,501	3,27,50,069
Other food-grains	41	8,250	8,291	5,77,892	8,291	5,77,892
Hides and skins	...	334	334	84,982	334	84,982
Liquors	...	...	...	...	...	...
Metals	312	801	1,113	1,81,630	1,113	1,81,630
Oils	19,611	5,704	25,315	34,84,375	25,315	34,84,375
Oilseeds	200	16,294	16,494	17,21,010	16,494	17, 1,010
Provision	1,940	12,287	14,227	15,55,596	14,227	15,55,596
Salt	62,829	14,699	77,528	74,98,681	77,528	74,98,681
Spices	...	11,323	11,323	28,03,050	11,323	28,03,050
Sugar	22	303	325	85,045	325	85,045
Tobacco	228	1,844	2,072	4,14,735	2,072	4,14,735
Building materials	1,557	82,133	83,690	9,20,349	83,690	9,20,349
Miscellaneous goods	4,056	68,766	72,822	71,28,647	72,822	71,28,647
Timber	...	...	...	...	...	...
Firewood	41	115,397	115,438	8,12,070	115,438	8,12,070
Bamboos	...	...	...	...	...	...
Coal and coke	19,737	30,732	50,469	3,75,758	50,469	3,75,758
Jute	90	69,403	69,408	1,08,73,551	69,498	1,08,73,551
Treasure	...	...	...	...	...	...
Total Boat Traffic ...	110,718	741,115	851,833	7,14,61,015	851,833	7,14,61,015
Raft Traffic.						
Timber in logs C. ft.	11,403	27,547	38,950	98,092	38,950	98,092
Squared timber "	...	...	...	...	...	...
Sleepers, broad gauge "	...	...	...	...	...	...
Do. metre gauge "	...	...	...	...	...	...
Scantlings "	...	...	...	...	...	...
Poles "	...	...	...	...	...	...
Firewood "	...	...	...	...	...	...
Bamboos "	...	25,381	25,381	3,169	25,331	3,169
Reeds "	...	...	...	...	...	...
Total Raft Traffic ...	11,403	52,928	64,331	1,10,261	64,331	1,01,261
Grand Total ... Tons	110,718	741,115	851,833	7,15,62,276	851,833	7,15,62,276
Grand Total ... C. ft.	11,403	52,928	64,331		64,331	

NADIA RIVERS.

Description.	Total. Quantity—Tons.			Total. Value.	Private. Quantity.	Private. Value.
	38	39	40	41	42	43
Boat Traffic.	Up.	Down.	Total.	Rs.	Tons.	Rs.
Cotton, raw and manufactured	6	117	123	30,002	123	30,002
Woollen goods, raw and manufactured.	...	...	...	...	...	...
Dyes and tans	1	145	146	4,044	146	4,044
Rice	6,268	21,535	27,803	20,56,111	27,803	20,56,111
Other food-grains	11,202	79,649	90,851	54,22,443	90,851	54,22,443
Hides and skins	...	...	...	100	...	100
Liquors	1¼	...	1¼	2,380	1¼	2,380
Metals	934	329	1,263	4,31,795	1,263	4,31,795
Oils	8,273	26	8,299	11,63,955	8,299	11,63,955
Oilseeds	483	28,974	29,457	31,54,592	29,457	31,54,592
Provision	45	3,249	3,294	2,17,814	3,294	2,17,814
Salt	25,383	5	25,388	23,13,357	25,388	23,13,357
Spices	8	469	477	66,092	477	66,092
Sugar	36	413	449	79,069	449	79,069
Tobacco	66	4,870	4,936	9,03,069	4,936	9,03,069
Building materials	1,955	1,235	3,190	38,503	3,190	38,503
Miscellaneous goods	50,486	58,924	109,410	1,73,74,356	109,410	1,73,74,356
Timber	17	98	115	9,898	115	9,898
Firewood	143	979	1,122	5,894	1,122	5,894
Bamboos	1	1	2	87	2	87
Coal and coke	6,624	316	6,940	91,141	6,940	91,141
Jute	6	39,472	34,478	42,40,029	39,478	42,40,029
Treasure	...	...	...	...	...	...
Total Boat Traffic ...	111,938½	240,806	352,744½	3,76,05,221	352,744½	3,76,05,221
Raft Traffic.						
Timber in logs C. ft.	939	31,759	32,698	74,608	32,698	74,608
Squared timber "	6,306	51,661	57,967	1,28,924	57,967	1,28,924
Sleepers, broad gauge "	...	...	...	...	...	...
Do. metre gauge "	...	...	...	...	...	...
Scantlings "	...	...	...	...	...	...
Poles "	...	...	...	...	...	...
Firewood "	...	...	...	...	...	...
Bamboos "	824	81,215	82,039	7,107	82,039	7,107
Reeds "	...	185	185	41	185	41
Total Raft Traffic ...	8,069	1,64,820	172,889	2,10,680	172,889	2,10,680
Grand Total ... Tons	111,938½	240,806	352,744½	3,78,15,901	352,744½	3,78,15,901
Grand Total ... C. ft.	8,069	164,820	172,889		172,889	

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PUBLIC WORKS DEPARTMENT, BENGAL.

STATEMENT OF AREAS IRRIGATED BY IRRIGATION WORKS IN BENGAL DURING THE YEAR 1891-92.

Name of Canal.	Areas irrigated in acres.							Average discharge, cubic feet per second.				Areas irrigated per cubic foot per second.			
						Double-cropped.		At head.		Utilised.		Discharge at head.		Utilised.	
	Kharif.	Rabi.	Total.	Flow.	Lift.	Area irrigated.	Percentage of total area.	Kharif.	Rabi.	Kharif.	Rabi.	Kharif.	Rabi.	Kharif.	Rabi.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Kendrapara Canal and its branches	70,686	3,494	74,180	70,807	3,373	...	...	883·00	459·69	806·83	263·01	80·05	7·60	87·61	13·28
Taldundah ditto ditto ...	41,570	336	41,906	40,673	1,233	...	...	399·75	96·00	392·00	66·25	103·89	3·50	106·05	5·07
High Level Canal, Range I	22,394	29	22,423	21,651	772	...	...	264·25	213·50	221·50	42·25	84·75	0·14	101·10	0·68
Total Mahanadi Series ...	134,650	3,859	138,509	133,131	5,378	...	...	1,547·00	769·19	1,420·33	371·51	87·04	5·02	94·80	10·39
High Level Canal, Range II ...	2,451	62	2,513	2,490	23	...	...	98·25	21·50	38·75	...	24·95	2·88	63·25	...
Ditto ditto III ...	36,189	22	36,211	36,095	116	...	...	307·50	21·50	304·75	...	117·69	1·02	118·75	...
	452	...	452	401	51	...	...	...	...	...	...	...	...	...	...
Total Brahmini-Byturni Series	39,092	84	39,176	34,986	190	...	...	405·75	43·00	343·00	...	96·34	1·95	113·97	...
Total Orissa Canals ...	173,742	3,943	177,685	172,117	5,568	...	...	1,952·75	812·19	1,763·83	371·51	88·97	4·85	98·50	10·61
Under Midnapore weir	77,631	...	77,631	77,630	1	...	...	450	...	401	...	172·51	...	193·59	...
Under Panchkoorah weir	5,898	68	5,966	5,904	62	...	...	92	22	84	9	64·10	3·09	70·21	7·55
	376	...	376	368	8	...	...	...	...	...	...	...	...	...	...
Total Midnapore Canal ...	83,905	68	83,973	81,902	71	...	...	...	...	...	...	...	...	...	...
Eastern Main Series	76,853	17,237	94,090	89,111	4,979	...	...	1,303	515	1,236	429	57·59	40·49	60·71	48·60
Western ditto	207,237	173,396	380,633	355,007	25,626	...	...	3,258	2,563	2,988	1,861	57·94	74·80	63·18	103·02
Total Sone Canals ...	284,090	190,633	474,723	444,118	30,605	...	...	4,561	3,078	4,224	2,290	57·84	69·06	62·46	92·83
Saran Canals	3,425	2,540	5,965	...	...	...	...	113	245	Not recorded.		30·30	10·36	...	...

IIE.

PUBLIC WORKS DEPARTMENT, BENGAL.

STATEMENT SHOWING INCIDENCE OF WORKING EXPENSES AND ASSESSED WATER-RATES ON CANALS IN BENGAL DURING 1891-92.

Name of Canal.	Average discharge of the year at canal head in cubic feet per second.	Water-rates assessed in 1891-92.					Gross assessed revenue from all sources.	Working expenses, direct and indirect.	Areas irrigated during the year 1891-92.	Working expenses.			Occupier's rates (water-rates).		Total water-rates, direct and indirect.	
		Occupier's (water-rate).	Owner's.	Total direct.	Indirect.	Total of direct and indirect.				Per cent. on gross revenue.	Per acre irrigated.	Per cubic foot per second of discharge at canal head.	Per acre irrigated.	Per cubic foot per second of discharge at canal head.	Per acre irrigated.	Per cubic foot per second of discharge at canal head.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Major Irrigation Works.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Acres.							
Orissa project	1,095·10	2,66,587	...	2,66,587	...	2,66,587	4,20,253	4,23,086	177,685	100·67	2·38	386·34	1·50	243·06	1·50	243·06
Midnapore canal	288·50	1,29,245	...	1,29,245	...	1,29,245	2,80,961	2,66,326	83,973	94·79	3·10	923·10	1·53	447·98	1·49	447·98
Hidgellee Tidal canal	...	...	...	...	...	...	36,915	50,683	...	139·32	...	...	...	...	...	...
Sone project	29·08	9,82,032	...	9,82,032	...	9,82,032	10,76,356	6,97,840	474,723	64·83	1·47	2·40	2·06	337·70	2·06	337·70
Total ...	...	13,77,864	...	13,77,864	...	13,77,864	18,14,485	14,37,935	736,381	79·83	1·95	...	...	...	...	...
Minor Works and Navigation.																
Saran project	178	11,000	...	11,000	...	11,000	11,046	13,057	5,965	11·82	2·19	73·35	...*	...*	...*	...*
Orissa Coast canal	...	...	...	...	...	...	62,057	78,549	...	126·57	...	...	...	...	...	...
Calcutta and Eastern canals...	...	...	...	...	...	...	5,25,219	3,43,399	...	65·75	...	...	...	...	...	...
Nadia rivers	...	...	...	...	...	...	1,92,737	1,13,274	...	58·76	...	...	...	...	...	...
Total ...	...	11,000	...	11,000	...	11,000	7,91,059	5,48,279	5,965	...	...	...	...	...	...	...

* Cannot be filled in, as the payment is partly for water supplied for the manufacture of indigo.

Note A.—In this table the water-rates shown as assessed during the year are the amounts for which occupiers have rendered themselves liable in return for canal water supplied during the year, and include some demands which were not legally recoverable, and others of which the assessment papers were not completed till after the close of the year.

Note B.—Refunds of revenue have been deducted from "Gross assessed revenue from all sources."

IIIE.

PUBLIC WORKS DEPARTMENT, BENGAL.

STATEMENT OF QUANTITY AND VALUE OF CROPS IRRIGATED IN BENGAL DURING THE YEAR 1891-92.

Description.		Orissa Canals.		Midnapore Canal.		Sone Canals.		Saran Canals.		Total.	
		Area irrigated.	Estimated value.	Area irrigated.	Estimated value.	Area irrigated.	Estimated value.	Area irrigated.	Estimated value.	Area irrigated.	Estimated value.
1		2	3	4	5	6	7	8	9	10	11
		Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.	Acres.	Rs.
Gardens and orchards ...		134	26,800	...	...	56	1,644	...	...	190	28.144
Sugarcane ...		289	1,30,050	...	...	19,850	10,39,241	...	...	20,139	11,69,291
Cereals ...	Wheat ...	...	...	...	...	76,845	38 42,250	...	...	76,845	38,42,250
	Barley ...	...	...	...	...	44,369	7,98,642	...	...	44,369	798,642
	Rice ...	173,613	43,40,325	83,905	20,97,625	248,386	74,51,580	3,125	61,650	5,09,329	1,39,51.180
	Maize ...	...	...	...	...	2,575	34,923	...	...	2,575	34,923
	Juar ..	...	...	...	...	...	...	...	...	...	..
	Cheena ...	13	156	...	...	142	1,065	...	...	155	1,221
	Miscellaneous	2	20	...	...	2,605	64,517	1,604	32,080	4,211	96,617
	Zeera ...	...	...	...	...	8,830	3,53,200	...	...	8,830	3,53,200
Pulse ...	Gram ...	...	...	...	...	14,183	2.12,745	..	...	14,183	2.12,745
	Peas ...	..	...	...	...	10,260	1,57,078	..	...	10,260	1,57,078
	Miscellaneous	550	8,800	...	...	15,642	2,14,207	...	...	16,192	2,23,007
Fodder crops...	Grass, lucerne	...	...	...	...	4	96	...	...	4	96
Fibres ...	Cotton, &c ...	2,651	2,65,100	...	...	...	...	...	...	2,651	2,65,100
Dyes ...	Indigo, &c....	317	12,860	68	1,700	7	280	936	46,800	1,328	61,640
Drugs ..	Opium ...	...	...	...	...	2,281	76,258	...	...	2,281	76,258
	Tobacco .	...	...	...	...	..	...	...	...	...	...
Oilseeds ...	Mustard ...	...	...	...	...	437	11,043	...	...	437	11,043
	Linseed, &c.	113	3,390	...	..	577	9,440	...	...	690	12,830
Miscellaneous ...	...	3	45	...	...	14,349	1,74,732	...	...	14,352	1,74,777
Total ...		177,685	47,87,546	83,973	20,99,325	461,398	1,44,42,941	5,965	1,40,530	729,021	2,14,70,342
Hot weather irrigation ...		...	...	...	...	13,325	43,016	...	...	13,325	43,016
Land insufficiently irrigated...		...	...	...	.	..	...	...	...	...	...
Grand Total ...		177,685	47,87,546	83,973	20,99,325	474,723	1,44,85,957	5,965	1,40,530	742,346	2,15,13,358

IVE.

PUBLIC WORKS DEPARTMENT, BENGAL.

COMPARATIVE STATEMENT OF IRRIGATION AND RAINFALL FOR THE YEARS 1891-92 AND 1890-91 IN BENGAL.

Works supplying irrigation.	Civil districts.	Total area in acres.	Cultivated area in acres.	Areas irrigated in acres.						Rainfall.	
				1891-92.			1890-91.				
				Kharif inclusive of sugarcane.	Rabi inclusive of hot-weather.	Year.	Kharif inclusive of sugarcane.	Rabi inclusive of hot-weather.	Year.	1891-92.	1890-91.
1	2	3	4	5	6	7	8	9	10	11	12
										Inches.	Inches.
Orissa Canals ...	Cuttack	...	...	137,553	3,921	141,474	137,016	4,247	141,263	60·60	64 20
	Balasore	...	...	36,189	22	36,211	39,033	3	39,036	63·38	57·48
	Total Orissa Canals ...	...	...	**173,742**	**3,943**	**177,685**	**176,049**	**4,250**	**180,299**	**61·99**	**60·84**
Midnapore Canal	Midnapore	...	...	83,529	68	83,597	81,626	...	81,626	55·08	57·64
	Hooghly	...	...	376	...	376	376	...	376	...	...
	Total Midnapore Canal ...	...	...	**83,905**	**68**	**83,973**	**82,002**	...	**82,002**	...	...
Sone Canals ...	Shahabad	2,806,400	2,192,500	188,779	191,854	380,633	173,096	46,616	219,712	26·28	49·22
	Patna	1,329,920	1,039,000	41,096	6,827	47,923	27,454	2,330	29,784	36·00	56·49
	Gaya	3,015,680	2,356,000	33,941	12,226	46,167	29,146	2,372	31,518	28·49	57·97
	Total Sone Canals ...	**7,152,000**	**5,587,500**	**263,816**	**210,907**	**474,723**	**229,696**	**51,318**	**281,014**	...	...
Saran Canals ...	Saran	1,680,000	1,312,500	3,425	2,540	5,965	990	1,236	2,226	35·05	58·63
	GRAND TOTAL ...	...	...	...	...	...	488,737	56,804	545,541	...	...

No. IF.

STATEMENT SHOWING THE WATER-RATES PER ACRE IN FORCE ON CANALS IN BENGAL DURING 1891-92.

Canals.	Description of leases and crops.	Occupier's rates per acre. Flow irrigation.	Occupier's rates per acre. Lift irrigation.
1	2	3	4
	ORISSA CIRCLE.		
		Rs. A. P.	Rs. A. P.
Orissa Canals ...	I.—For the whole irrigable or rice cultivated area of any village, if application is made for a lease of five years ...	1 8 0	1 0 0
	For the rice crop.		
	II.—For any fractional area of a village or for other term	3 0 0	2 0 0
	For cold-weather crops.		
	III.—Dalwa rice	1 8 0	1 0 0
	IV.—For cotton, tobacco, huldi, ginger, wheat, vegetable, indigo and all garden produce grown in villages the rice-lands of which are leased under rate I	1 0 0	0 10 0
	V.—For the above produce when grown in villages the rice-lands of which are not leased under rate I ...	2 0 0	1 8 0
	VI.—For linseed, oil-seeds, dâl and all pulses grown in villages the rice-lands of which are leased under rate I ...	0 8 0	0 5 0
	VII.—For the above produce when grown in villages the rice-lands of which are not leased under rate I ...	1 0 0	0 10 0
	For perennial crops.		
	VIII.—For sugarcane	6 0 0	4 0 0
	IX.—The charge for filling tanks is Re. 1 per 10,000 cubic feet of water used	......	......
	SOUTH-WESTERN CIRCLE.		
	For the rice-crop.	Rs. A. P.	Rs. A. P.
Midnapore Canal	I.—Under five-year leases	1 8 0	1 0 0
	II.—Under annual leases	2 8 0	1 10 0
	For winter crops.		
	III.—In exceptional cases when water is available	1 8 0 (flow and lift)	
	IV.—The charge for the unauthorised use of canal water is Rs. 5 per acre per annum or such less sum as is fixed by the Collector	......	......

Canals.	Description of leases and crops.		Occupier's rates per acre.	
			Flow irrigation.	Lift irrigation.
1	2		3	4
SONE CIRCLE.				
	I.—Leases for a term of years.		Rs. a. p.	Rs. a. p.
	Five-year leases. Supply given.			
	All crops—From 25th June of one year to 25th March of next.		2 0 0	
	Note.—Leases for a term of years give no claim to a supply of water between 25th March and 25th June of any year.			
	II.—Leases for the Season.			
	Supply given.			
	* Sugarcane. For one year		5 0 0	3 5 4
	* This is applicable only to leases taken out before the 31st March 1891.			
	Supply given.			
	CROPS.			
	Kharif.			
Sone Canals ...	Rice and sugarcane ...	From 25th June to 25th October.	3 0 0	3 0 0
	Bhodoi Serha rice or any other crops.	From 25th June to 15th October.	2 8 0	2 8 0
	Rabi.			
	All crops including sugarcane on distributaries open for kharif irrigation.	From 15th October to 25th March.	2 0 0	1 8 0
	All crops including sugarcane on distributaries or parts of distributaries from which rabi irrigation only is allowed.	From 25th October to 25th March.	1 8 0	1 0 0
	Hot Weather.			
	All crops	From 25th March to 25th June, or at option of applicant from 25th February to 25th May.	4 0 0	4 0 0

III.—Sale by Volume.

Kharif season.—For water supplied between the 1st of September and the 31st of October, four rupees for a calculated discharge of one cubic foot per second for twelve hours. For less than a cubic foot per second or less than twelve hours, a proportionate charge is made, but a fraction of less than one-sixteenth is charged as one-sixteenth.

Rabi season.—For water supplied between the 1st of November and the 25th of March, one rupee for a calculated discharge of one cubic foot per second for twelve hours. For less than a cubic foot per second or less than 12 hours, a proportionate charge is made, but a fraction of less than one-sixteenth is charged as one-sixteenth.

Saran Canals.

Rates authorized for year 1891-92.

	Maximum rate charged.
	Rs. a. p.
For water supplied on application between 1st April and 15th June ...	2 8 0 per acre.
For water supplied in the *kharif* season	1 8 0 „
For water supplied in the *rabi* season	1 0 0 „

For water taken without previous application and permission, a further rate of 1 rupee per acre is charged, in addition to the several rates entered above.

For water supplied on application for the manufacture of indigo, Rs. 4 per maund on the outturn of indigo manufactured.

List of Officers in charge of Irrigation Circles and Divisions during the year 1891-92.

Circle or Division.	Name of Officer.	Period of charge.

SECRETARIAT.

Secretary, Irrigation Branch	Colonel J. M. McNeile, R.E.	From 1st April 1891 to 4th March 1892. [On privilege leave from 1st April to 30th April 1891.]
Offg. Joint-Secretary, Irrigation Branch.	Mr. C. W. Odling ...	„ 1st April to 30th April 1891.
Superintending Engineer on special duty.	Ditto ...	„ 1st May to 9th July 1891.
	Ditto ...	„ 1st February to 4th March 1892.
Joint-Secretary, Irrigation Branch.	Ditto ...	„ 5th to 31st March 1892.
Under-Secretary ...	Mr. G. A. G. Shawe ...	„ 1st April to 19th October 1891.
Ditto	„ W. A. Inglis ...	„ 20th October 1891 to 28th January 1892.
Ditto	„ G. C. Maconchy ...	From 29th January to 31st March 1892.

SUPERINTENDING ENGINEERS IN CHARGE OF CIRCLES.

South-Western Circle ...	Lieutenant-Colonel A. D. McArthur, R.E.	From 1st April 1891 to 31st March 1892.
Ditto Personal Assistant.	Mr. W. S. Bremner ...	„ 1st to 13th April 1891.
	Ditto ...	„ 6th August to 30th November 1891.
	Mr. C. H. DeMello ...	„ 8th to 20th January 1892.
Orissa Circle	„ R. H. Rhind ...	„ 1st to 25th April 1891.
	„ W. Connan ...	„ 26th April 1891 to 31st March 1892.
Sone Circle	„ C. W. Odling ...	„ 10th July 1891 to 1st February 1892.
	„ W. A. Inglis ...	„ 1st April to 9th July 1891.
	Ditto ...	„ 2nd February to 31st March 1892.

EXECUTIVE ENGINEERS IN CHARGE OF DIVISIONS.

SOUTH-WESTERN CIRCLE.

Nadia Rivers Division ...	Mr. C. E. Livesay ...	From 1st April 1891 to 31st March 1892.
Cossye Division	„ J. P. Scotland ...	Ditto ditto.
Northern Drainage and Embankment Division.	„ T. M. L. Thompson ...	Ditto ditto.
Circular and Eastern Canals Division.	„ G. J. R. Leeson ...	Ditto ditto.
Balasore Division ...	„ A. Hayes	From 1st to 3rd April 1891.
	Ditto	„ 31st December 1891 to 31st March 1892.
	Mr. A. Monies	„ 4th April to 30th December 1891.

ORISSA CIRCLE.

Aequapada-Jajpur Division	Mr. J. P. Coy ...	From 1st April 1891 to 5th March 1892.
	Rai Kally Podo Sen Sahib ...	„ 6th to 31st March 1892.
Brahmini-Byturni Division ...	Mr. D. B. Horn ...	„ 1st April 1891 to 31st March 1892.
Puri Division ...	„ J. R. Swinden ...	Ditto ditto.
Mahanuddy Division ...	„ T. Butler ...	Ditto ditto.

SONE CIRCLE.

Arrah Division	Mr. W. A. Inglis	From 1st to 29th April 1891.
	Ditto ...	„ 10th July to 5th August 1891. [On privilege leave from 6th August to 19th October 1891.]
	„ R. E. Carter ...	„ 30th April to 9th July 1891.
		„ 6th August 1891 to 31st March 1892.
Gunduck Division ...	„ O. C. Lees	„ 1st April 1891 to 31st March 1892.
Dehree Workshop Division ...	„ L. R. Fraser ...	Ditto ditto.
Eastern Sone Division ...	„ A. S. Thomson ...	Ditto ditto.
Buxar Division	„ K. H. Stephen ...	From 1st April 1891 to 9th February 1892.
	„ M. J. J. P. Norman ...	„ 10th February to 31st March 1892.

CANAL REVENUE OFFICERS.

Circle or Division.	Name of Officer.	Period of charge.
Deputy Collector, Sone Canals.	Babu Saroda Prosad Chatterjee.	From 1st April 1891 to 31st March 1892.
Sub-Deputy Collector, Sone Canals.	Babu Jugdum Sahai ...	Ditto ditto.
Ditto	" Siva Sankar Singh ...	Ditto ditto.
Ditto	" Jogesh Chunder Ghose	From 24th April 1891 to 29th February 1892.
Circle Officer, Sone Canals ...	" Moti Lal	" 1st April 1891 to 31st March 1892.
Deputy Revenue Superintendent, Orissa.	" S. C. Roberts ...	Ditto. ditto.
Deputy Revenue Superintendent, Midnapur.	" Koylash Chunder Ghose	Ditto ditto.
Supervisor, Calcutta Canals	Mr. W. R. Cooksey ...	Ditto ditto.

THE MONSOON OF 1892.

THE following report is published for general information

By order of the Lieutenant-Governor of Bengal,

C. E. BUCKLAND,

The 9th January 1893. *Secretary to the Govt. of Bengal.*

METEOROLOGICAL SUMMARY FOR THE MONSOON PERIOD OF 1892.

THE following statement is intended to give a brief history of the more important features which have characterized the south-west monsoon period and the preceding months of 1892.

The most noticeable feature of the weather in January was the almost entire absence of rainfall in all districts, for the whole rainfall of the month consisted of a few local showers in some of the districts of South Bihar and North Bengal. This was caused by the unusual absence of anything like influential barometric depressions existing in or travelling from North-Western India, but the province was nevertheless affected by two feeble barometric depressions. Up to the morning of the 8th of January ordinary cold weather conditions obtained, but on the 9th a disturbance existing in North-Western India began to affect the pressure and temperature in Bengal. The depression moved in an easterly direction and reached Bengal about the 11th, the centre apparently passing near Berhampore. The depression continued to influence Bengal up to the 15th, when it filled up, and ordinary cold weather conditions again set in. On the 20th another depression appeared in North-Western India, and advanced towards Bengal, filling up in its advance, and it thus did not actually reach the province, though on the 23rd and 24th it influenced Bihar, giving clouded skies and light rainfall. Weather continued slightly disturbed up to the 27th, and then normal cold weather conditions set in up to the close of the month. In January barometric pressure was generally in excess by about a hundredth of an inch, the excess being largest in East Bengal, while temperature was also in excess of the normal in different districts by from 1° to 3°, the excess being largest in South Bihar and Chota Nagpur. Owing to the comparative absence of disturbed weather, cloud proportion was in defect in all districts except Bihar, but on the other hand humidity was in slight excess of the normal.

In February only one important barometric depression affected Bengal. This depression appeared over the Western Desert on the 10th, and advanced slowly in an east, south-easterly direction, and on the 13th its centre was near Agra and Delhi, and it was still a considerable storm. On the 14th it was near Cawnpur and Sutna, but on the 15th and subsequent days it filled up and disappeared. It gave disturbed weather and fairly general rain to Bengal, the greatest disturbance being from the 11th to the 16th instant. Several other but much more feeble barometric depressions appeared in North-Western India during this month, and advanced south-eastwards, but they caused little disturbance to the weather in Bengal, beyond giving high temperature and humidity, with low pressure and a few local rain showers. On the whole, therefore, the month of February was more free from disturbance than usual. The rainfall in this month varied from a little more than a quarter of an inch in Orissa, South-West and North Bengal, to about three-quarters of an inch in North Bihar, East Bengal, and South Bihar, while Chota Nagpur received 1·30 inches. The falls were in excess of the normal in Bihar and Chota Nagpur, and in defect elsewhere. In February pressure was in defect of the normal by about a twentieth of an inch, the defect being largest in South-West and North Bengal, where it equalled 0·07", and the variations from day to day were also decidedly large. Temperature on the other hand was in excess by from two to four degrees, the largest excess temperature being reported in North Bengal and South Bihar, while the variations of cloud proportion and humidity from the normal were small.

In March the weather was again decidedly more free from disturbance than usual. A very shallow barometric depression passed over the province in the early part of the month, reaching North Bengal on the 4th, and passing away

in an easterly direction, and giving light rain in East Bengal and also a few showers in Orissa. Fine settled weather, with steadily and rather rapidly increasing temperature, then set in up till the 25th, when a shallow low pressure area formed in Bihar and West Bengal, which gave rise to disturbed conditions, and then travelled in an easterly direction, so that local storms, with rain, occurred in East and North Bengal and North Bihar for two or three days and particularly on the 28th, after which again fine settled weather set in. A fall of an inch and a half of rain occurred in North Bengal, and an inch in East Bengal, while only a fifth of an inch was reported in North Bihar, and in all other districts rainfall was practically absent. Hence the rainfall of March was in defect of the normal in all districts except North Bengal, the defect equalling from an inch and a half to two inches in South-West and East Bengal, and being about an inch in Orissa and Chota Nagpur, while the defects were unimportant in Bihar.

In March, again, pressure was rather largely in defect of the normal, the defect averaging more than 0·08″ and equalling nearly a tenth of an inch in South Bihar. The temperature was low in the early part of March, but it increased more rapidly than usual, and for the last three weeks was generally in excess of the normal, the mean temperature of the month showing 1° in excess. Also owing to the absence of disturbed weather cloud proportion was only about half the usual amount, and humidity was about 10 per cent. in defect of the normal.

At the commencement of April ordinary hot season conditions obtained, but the pressure distribution was a little anomalous, as there was a considerable excess of pressure in the north-east of the province, while the pressure decreased rapidly in amount towards the west. Hence winds were more easterly than usual. This distribution of pressure, however, rapidly changed, and from about the middle of the month two or three feeble low pressure areas formed in succession over the western part of the province, which afterwards extended to North Bengal and North Bihar, where at one time pressure was a quarter of an inch in defect. With this distribution of pressure, the southerly winds blowing from the Bay over Bengal became exceptionally strong, and these southerly winds brought up large amounts of moisture to the province, and gave rise to very numerous local storms, or nor'westers, with rain, which occurred during the second half of the month in East and North Bengal, and to a certain extent in South-West Bengal, Bihar, and Chota Nagpur. An average amount of from six to seven inches of rain fell in East Bengal, more than five inches in North Bengal, and about an inch in North Bihar, and in these three divisions the falls were in distinct excess of the normal. The fall in South-West Bengal averaged two inches and was slightly less than the normal, but in all other districts rainfall was very small in amount and largely below the normal.

Again, in April, the mean pressure for the month was in decided defect, the defect ranging from about a twentieth of an inch in South Bihar and Chota Nagpur to 0·02″ in East and North Bengal. The mean temperature for the greater part of the month was in decided excess, and was 1·8° higher than the normal for April. Owing to the rather numerous local storms, cloud proportion was rather considerably in excess, but humidity was lower than usual in South-West and East Bengal, and above it in some other districts. On the whole, perhaps also, winds were rather more easterly than is usual in April.

In May after a week of ordinary hot weather conditions a feeble low pressure area formed over the western parts of the province, which filled up about the 14th, while again from the 20th to the 24th a second feeble low pressure area developed over part of Chota Nagpur and West Bengal. During these periods, and specially during and after the second one, conditions were very disturbed in Bengal, and very numerous nor'westers, with rain, occurred, particularly in South-West, East, and North Bengal. These local storms brought up about twelve inches of rain to both East and North Bengal, or amounts very considerably larger than the normal, while in South-West Bengal the fall averaged nearly five inches, or almost a normal amount. The fall in North Bihar was about two inches, or nearly an inch in defect, and Orissa also received nearly two inches, or about two inches less than usual. South Bihar and Chota Nagpur during May received only small amounts of rain.

In the south of the Bay winds began to strengthen at the Ceylon stations, owing to the advance of the south-west monsoon, from about the 10th of May,

and they blew fairly steadily and rather strongly almost to the close of the month. By about the 24th these winds had apparently reached well into the middle of the Bay, and two feeble barometric depressions were formed in front of this advance, one of which passed into the Gulf of Martaban and over Burma, where it gave heavy rain, while the second low pressure area which formed off the South Orissa and Ganjam coasts filled up without passing inland. At the close of May the monsoon current had advanced well into the north of the Bay, and there was every prospect of the early break of the monsoon in Bengal.

In May, again, the mean pressure was moderately in defect of the normal, the usual variation equalling about 0·03″ to 0·05″, and being fairly uniform over the whole province. Temperature in Bengal at the commencement of May was about 4·2° in excess of the normal, and it continued rather largely in excess in the second week, when Chota Nagpur registered the very large excess temperature of 9·2°. Towards the close of the month, however, temperature fell considerably, and became even below the normal, so that the mean temperature for the month was only about 2° in excess of the normal. It was also noticeable in May that both cloud proportion and humidity were higher than usual, and also that the easterly component in the wind direction was very strongly developed, while the southerly winds blowing from the Bay over Bengal were also exceptionally strong.

During the first five months of the year therefore, or in what may be called the pre-monsoon months, it will be seen that rainfall over the whole province was generally in defect of the normal, except perhaps in the eastern and northern districts, where in April and May rather heavy falls were received. Rainfall was thus practically entirely absent from the province in January, and only a few unimportant showers fell in February. In March light rain fell in East and North Bengal, and practically none in any other division, and in April and May moderate to large amounts of rain fell in East, North, and South-west Bengal, and very little elsewhere. Thus, in Orissa, for the whole of the pre-monsoon months rainfall was in large defect; in South-west Bengal there was also moderate to large defect for every month; in East Bengal rainfall was in defect in January, February, and March, and in considerable excess in April and May; in North Bengal there was excess in March, April, and May, and defect in January and February; and in Bihar and Chota Nagpur there was slight excess rainfall in February and defect for the remainder of the pre-monsoon period. This lightness of the rainfall over the province generally was brought about by the comparatively absence of disturbed or stormy weather in Bengal, and from the comparative absence and general lightness of the cold weather storms forming in North Western India. For practically the whole of the pre-monsoon period pressure was in defect of the normal, the general defect equalling nearly a twentieth of an inch, and this defect continued almost up to the close of May. The mean temperature was also in excess of the normal in each of these five months, the usual excess averaging nearly two degrees, while, on the other hand, humidity and cloud proportion were generally smaller than usual during the five months, January to May.

As stated previously, the meteorlogical conditions in Bengal at the end of May pointed to the early commencement of the south-west monsoon rains, as the current had reached well into the north of the Bay, and pressure in Bengal was below the normal, and hence favourable for its further advance over the land. Early in June, however, pressure increased moderately in Bengal, and became in excess of the normal, and hence conditions were less favourable for the further advance of the monsoon current over Bengal, though the monsoon winds continued to blow strongly in the centre and south of the Bay. At this time, that is about the 6th or 7th of June, a very severe cyclone commenced to form in the north-west angle of the Bay, which, after remaining nearly stationary, and intensifying rapidly for two or three days, began to move in a northerly or north-north-westerly direction, until it struck the coast near the mouth of the Hooghly at about 6-30 A.M. of the 10th of June, the centre passing about 30 or 40 miles to the west of Saugor Island. After striking the coast it recurved, and moved in a west-north-westerly direction, and finally filled up near Sutna on the 14th instant. The storm was an exceedingly violent one, and is described as one of the most severe of recent years, but it was exceedingly small, and the area of hurricane winds was

probably not more than 70 or 80 miles across. It did, however, comparatively little damage either at sea or on land, though it gave a small storm-wave over part of the Balasore district, and in passing over the land it very rapidly decreased in force and became of little importance. A small inrush of monsoon winds accompanied the advance of the storm, and rainfall become general over the province from the 8th to the 12th instant, but it then fell off in amount, and when the storm filled up and disappeared, there was a rapid rebound of pressure in Bengal, and it became in excess of the normal, and conditions become so unfavourable for the further general advance of the monsoon current over Bengal, that from the 18th to the 25th there was practically no rain in the province, except in the eastern and northern districts. From the latter date, however, which may be taken practically as the date of the commencement of the true monsoon season, rain became fairly general, though light, in all districts of the province. This date of the commencement of the rains is about ten to twelve days later than usual.

Rainfall during June was hence generally below the normal amount, except in the western districts, which were directly influenced by the cyclone, and in parts of the northern districts. The falls varied from about thirteen and fourteen inches in East and North Bengal, and eleven inches in Orissa, to only about five inches in South Bihar. For the whole province the falls may be said to have equalled about 95 per cent. of the normal. The falls, indeed, in North Bihar, Chota Nagpur, and Orissa were from ten to thirty per cent. in excess of the usual amounts, while North and East Bengal, South Bihar, and South-West Bengal showed defects varying from twenty-five to sixteen per cent. In certain smaller districts, indeed, the falls were less than two-thirds of the normal amount, and this was the case in Hooghly, Khulna, Chittagong, Dacca, Malda, Dinajpur, Jalpaiguri, Bhagalpur, and the Sonthal Parganas.

Notwithstanding the very low pressures which were recorded during the cyclone in the early part of the month, the mean pressure for June was in slight excess of the normal. Temperature for the whole province was about three-tenths of a degree in defect, though there were slight excess temperatures recorded in North and East Bengal, and South Bihar. The humidity recorded was generally above the normal by moderate amounts, but cloud proportion was practically normal.

In July the conditions in Bengal were for the greater part of the month very favourable for good and heavy rainfall. One very pronounced barometric depression, which indeed might be classed as a feeble cyclonic storm, formed in the Bay in the early part of the month, and crossed the coast near Balasore on the 10th, after which it moved in a westerly direction, and in its rear a heavy wave of monsoon winds swept over the province. Two feeble land-formed depressions passed through the province in the middle of the month, and also gave very heavy rain, while another very feeble depression was formed in the last week of the month in the north-west angle of the Bay, which passed across Orissa, but brought up little rain in its rear. A fairly steady and strong monsoon was blowing in the Bay for practically the whole month, and the monsoon current was also rather strong in Bengal. Hence, the general rainfall of the province was about four per cent. in excess of the normal. The heaviest rainfall was, however, deflected towards the north and north-east of the province, and North Bengal received the exceptionally heavy fall of 23·61 inches, which is nearly ten inches more than usual, or 68 per cent. in excess of the normal fall. The falls in Bihar and Chota Nagpur averaged about twelve inches and were practically normal, the fall in East Bengal equalled about fourteen inches, or two inches less than usual, and was 14 per cent. in defect, while in Orissa and South-west Bengal about ten inches of rain fell, and the amounts were about 10 to 17 per cent. in defect. Again, in some of the smaller districts the falls were much more deficient than indicated in the above general figures, and thus the defects in Howrah, Bankura, Chittagong, and Saran equalled nearly 30 per cent. of the normal, while in Balasore, Midnapore, and Dacca the defects equalled about 40 per cent.

In July the variations of barometric pressure in different parts of the month were unusually large, but the mean for the month was in defect by from 0·02″ to 0·04″, the defect being largest in South Bihar, Chota Nagpur, and Orissa, through which the depressions of the month generally passed, and being smallest in East and North Bengal. Temperature variations during the month were

unimportant, and the mean for the month was practically normal, but in the case of humidity and cloud proportion excess amounts were registered.

In August the monsoon current blowing in the Bay and over Bengal appears to have been about its normal strength, and it gave good general rain, and taking the rainfall of all the divisions, of the province into consideration, the amounts registered equalled 99 per cent. of the fall in normal years. The tendency of the heavy rainfall to localize itself in the north and north-east of the province, which was well marked in June and July, was still more strongly pronounced in August, and thus, while Bihar and North Bengal received falls of about 50 per cent. more than usual, the falls over the southern half of the province were from 30 to 40 per cent. in defect. At the commencement of August a fairly strong monsoon current was blowing from the Bay over Bengal, the inrush being caused by the indraught towards a depression which had passed inland over Orissa at the end of July. This indraught ceased with the filling up of the depression, and from about the 7th of August a slight and partial break in the rains set in over Orissa, South-West Bengal, and Chota Nagpur, and also over parts of East Bengal and South Bihar, which lasted up till about the 20th, but it was only from the 23rd or 24th that fairly general and heavy rain again set in. During this period there were no barometric depressions or storms forming either over the Bay or inland, and hence conditions were not very favourable for heavy rainfall, but from the 28th a depression began to form off the Gangam and Circars coasts, which developed slowly up till the 30th, when it had also advanced in a north-westerly direction and the centre was probably near Puri. During the evening of the 30th the feeble depression passed inland over Orissa, and on the 31st its centre was near Sambalpur. During the formation of this depression the rainfall-bearing current was again deflected towards it, and hence not allowed to sweep over Bengal, and thus towards the close of the month there was another slight and partial break in the rains, but after the depression had passed inland the monsoon current again began to sweep over Bengal, and heavy general rain recommenced, particularly in the south-western districts and Orissa. Thus, during August the number of barometric depressions formed either over the Bay or over the land area was remarkably small, and the month was on the whole a very quiet one, and, as indicated before, conditions were not very favourable for rainfall in the western, south-western, southern, and central districts of Bengal. though in the north of the province exceptionally heavy falls were received. Thus an average amount of more than twenty inches was recorded in North Bengal, or between six or seven inches more than usual. North Bihar also received nearly twenty inches, or more than eight inches in excess. South Bihar received fourteen inches, or two and a half inches more than usual, but all other districts were in defect. East Bengal only received ten inches, or five inches less than usual, while South-West Bengal, Orissa, and Chota Nagpur received from seven to nine inches, or from three to five inches in defect. In some of the smaller districts the defects were exceedingly large. Thus, defects of more than 60 per cent. of the normal rainfall were recorded in Howrah, Hooghly, Burdwan, Bankura, Singhbhum, and Manbhum, and of more than 50 per cent. in Midnapore, Chittagong, and Tippera, while falls of less than two-thirds of the normal were reported in Balasore, 24-Parganas, Birbhum, Nadia, Jessore, Faridpur, Dacca, and Hazaribagh. On the other hand, Purnea received a fall 113 per cent. in excess of the normal, Rangpur and Saran 96 per cent. in excess, and several other northern districts more than 50 or 60 per cent. in excess.

The pressure conditions in August were for the greater part of the time unfavourable for the free advance of the monsoon current over Bengal, for the general pressure of the province for the month was more than a twentieth of an inch in excess of the normal, and this excess was very strongly marked in such districts as Orissa, South-West Bengal, and East Bengal, where the rainfall was very deficient almost throughout the month. The variations of temperature for the month were again of little importance, and the mean temperature almost agreed with the normal. The humidity registered was also almost normal, while cloud proportion was distinctly below it.

The meteorology of September was characterized by the occurrence of three very distinct barometric depressions, or cyclonic storms, in the Bay, and by the formation of a very feeble low pressure area over South east Bengal

at the close of the month. This is perhaps quite as large a number of depressions as is usual, and three of them were also of moderate intensity. These small storms, however, brought up, on the whole, less rainfall than usual in such cases. The monsoon current blowing in the Bay of Bengal was also somewhat weak, and showed very unmistakable signs of weakness towards the close of the month, when it commenced to withdraw from the province at a decidedly earlier date than the normal, for the monsoon rains had practically closed in Bihar and Chota Nagpur on the 28th of September. Again, a very distinct break in the rains, which was fairly well established in all divisions of the province, commenced on the 13th instant, and lasted up to the 22nd. Hence the general rainfall of the province was very considerably in defect of the normal, and it only equalled about 73 per cent of the usual amount.

The principal condition determining the distribution of the rainfall in the province in September was the line of advance of the depressions from the Bay. The first formed on September 1st in the north-west angle of the Bay, and passed inland near Balasore on the evening of the 2nd. The second formed in the north of the Bay on the 7th, and passed inland on the 9th between False Point and Puri. The third depression formed near the centre of the Bay on the 18th, and crossed the coast on the evening of the 21st between Coconada and Masulipatam. These depressions, all of which were fairly influential, it will be seen, mainly affected the western and south-western parts of the province, or the districts of Orissa, South-West Bengal, and Chota Nagpur, and they gave moderate to heavy rain over this area. The fourth depression was a feeble one, which existed in South-East Bengal at the close of the month, but it, nevertheless, gave heavy rain to the whole of East Bengal.

The heaviest rainfalls in September occurred in Orissa and East Bengal, which received between nine and ten inches, and while the fall in Orissa was practically normal, that in East Bengal was nearly three inches below it. Chota Nagpur received rather more than eight inches, which was also almost the normal fall. South-West and North Bengal received about seven inches, or falls rather largely in defect, while in Bihar only about five inches fell, which was also largely in defect.

In the following districts the rainfall was practically 50 per cent. and upwards in defect of the normal:—Pabna, Rajshahi, Malda, Dinajpur, Rangpur, Kuch Bihar, Purnea, Bhagalpur, Darbhanga, Shahabad, Monghyr, and Lohardaga, while the falls were less than two-thirds of the normal in the following districts:—Howrah, Jessore, Dacca, Muzaffarpur, Champaran, and Saran.

The general barometric pressure for September was slightly in defect of the normal, the defect ranging from about 0·03″ in the west and south-west of the province to 0·015″ in East and North Bengal. The general temperature for the month was nearly normal in all districts, except Bihar and North Bengal, where excess temperatures of a degree to a degree and-a-half were registered. Cloud proportion and humidity were also practically normal in amount during the month.

At the beginning of October an area of low pressure existed over South-East Bengal. This feeble depression apparently marked the retreat of the south-west monsoon current southwards, and when on the 2nd of October the depression filled up, or passed away in an easterly direction, the south-west monsoon current rapidly retreated from the province altogether, and from the 4th of October it had ceased to affect Bengal, and the true monsoom rains may be said to have ceased from this date. During the slow retreat of the south-west monsoon current down the Bay the weather was rather disturbed, and no less than three barometric depressions and one cyclonic storm formed in the Bay, and moved across it in a westerly direction. These depressions, as usual, rather largely affected the weather in Bengal, but the rainfall brought up to the province by them was rather smaller than usual.

After the withdrawal of the monsoon current from Bengal on about the 4th of October a period of fine settled weather set in, which lasted for about a week, when a feeble depression formed to the east of the centre of the Bay, and moving in a westerly direction crossed the Madras coast on the 12th, but it was not well-defined, and was decidedly feeble. A second more influential depression also formed to the east of the Bay a few days after this,

and moved towards the Madras coast, crossing it near Nellore on the 17th. A small but severe cyclone then formed in the rear of the second depression, and, following in nearly the same path, crossed the Madras coast a little to the south of Coconada on the 20th. This was a very influential storm, and caused a wave of moisture-laden winds to advance northwards up the Bay and over Bengal, and this wave gave fairly general rain from about the 21st to the 27th, but about this latter date the moist wind current was again driven back to the Bay. The fourth depression also originated to the east of the centre of the Bay on the 27th, and advanced towards the west coast, and on the 29th an influential barometric depression crossed the coast between Nellore and Masulipatam. This depression in breaking up again caused a wave of moisture-laden winds to advance northwards up the Bay and over Bengal, but the miost winds did not penetrate as far as in the previous case, and it gave general rain to only the southern half of Bengal. This advance of humid winds spread over the southern districts on the 30th and 31st, when good general rain was again received on those days.

By these actions heavy rain was received in East Bengal, Orissa, Chota Nagpur, and South-West Bengal, and moderate rain in North Bengal and South Bihar, but practically little or no rain fell in North Bihar. The actual falls varied from between six and seven inches in Orissa and East Bengal, and from three to four inches in South-West Bengal and Chota Nagpur, to an inch in South Bihar and North Bengal, and a quarter of an inch in North Bihar. The falls in East Bengal, Chota Nagpur, and Orissa were in decided excess of the normal, but elsewhere they were in defect, the deficiency being large in North Bengal and Bihar. In the districts of Darbhanga, Muzaffarpur, Champaran, Saran, Shahabad, and Patna practically no rain at all fell, while in the following the falls only equalled a third or less than a third of the normal amounts:—Pabna, Bogra, Rajshahi, Dinajpur, Kuch Bihar, Jalpaiguri, Darjeeling, Purnea, Bhagalpur, Gaya, and Palamau Falls of less than two-thirds the normal amount were also registered in Midnapore, Howrah, Nadia, Murshidabad, Mymensingh, Malda, Rangpur, Monghyr, and Sonthal Parganas.

In October the variations of pressure from the normal were very small, and did not average as much as a hundredth of an inch below the normal for the whole province; indeed the defect was only a few thousandths of an inch in all divisions except South Bihar and Chota Nagpur, where it slightly exceeded a hundredth of an inch The changes of temperature during the month were unusually large, but the variations in different parts of the month to a great extent neutralized each other, and hence the mean temperature for the month for the whole province was only in excess of the normal by three-tenths of a degree. Cloud proportion in October, owing to the early withdrawal of the monsoon current, was much lower than usual, but humidity was about the ordinary amount.

In most years the meteorological summary of the monsoon season ends with the review of October's weather, but as the meteorology of the early part of November was decidedly important, the tables appended to this summary have been made up to include the first half of November. As stated previously, quite at the close of October a wave of humid winds, forced up by the action of a barometric depression which had formed in the Bay and had crossed towards the Madras coast, had advanced over the southern half of the province, and was giving heavy rain over this area. In connection with this advance of moist winds and disturbed weather, pressure fell so rapidly over Bengal, that at the beginning of November a feeble low pressure area existed over the south-western districts of the province, with a centre near Chaibassa and Balasore, on the 1st of the month, but which on the 2nd was near Calcutta and Jessore, and round which an irregular cyclonic circulation of winds existed. From the 3rd, however, the depression began to fill up, and by the 5th it had practically disappeared, and the pressure distribution rapidly became that which characterizes the beginning of the cold weather or north-east monsoon season in Bengal. During the existence of this depression exceedingly heavy rain fell in the southern districts of the province, and for the first four or five days of November an average rainfall of three and a half inches was reported in East Bengal, a fall of two and a half inches in South-West Bengal, a fall of about an inch in Orissa, and half an inch in Chota Nagpur, while North Bengal and Bihar were almost absolutely rainless. These figures, of course, in the case of South-West and East Bengal

represent many times the normal rainfall for the period. From the 5th of November, however, the moist current from the Bay finally withdrew from Bengal. and ordinary cold weather conditions were established from that date.

The principal features of the monsoon season of 1892 and of the previous months of the year have therefore been as follows:—

1. Except in January, when there was slight excess, the pressure of the pre-monsoon months up to and including May was rather considerably in defect of the normal, the usual defect equalling from 0·04″ to 0·08″.

2. Temperature was in distinct excess in each of the first five months of the year, the usual excess equalling from 1° to 3°.

3. The number of cold weather storms which occurred in the early part of the year was decidedly small, and those which did occur were of comparatively little importance.

4. The hot weather storms of the type called nor'westers were also not numerous in March or April, but fairly numerous in May.

5. Rainfall in the pre-monsoon period was very decidedly in defect of the normal in all divisions except East and North Bengal, in which districts rather heavy rain fell in April and May.

6. The first small, or preliminary burst, of the monsoon rains in Bengal was brought up by the action of a severe, but small, cyclone, which formed in the early part of June in the north-west angle of the Bay, and passed inland between Saugor Island and Balasore, but the effect of this inrush rapidly died away.

7. The monsoon current did not permanently establish itself in Bengal until the the 24th or 25th of June, or about 10 or 12 days later than usual.

8. The strength of the monsoon current from the date of its establishment up to its withdrawal appeared to be fairly normal. The rainfall brought up by this current, however, was mainly deflected towards the north and north-east of the province.

9. The number of barometric depressions and feeble cyclonic storms formed during the south-west monsoon season was rather smaller than usual, and they, in the majority of cases, passed from the north-west angle of the Bay over Orissa and through Chota Nagpur, but the rainfall brought up by them was decidedly lighter than usual.

10. Hence, during the monsoon season, though the rainfall of the province taken as a whole was nearly normal, North Bengal and North Bihar received falls very largely in excess of the usual quantities, while all other divisions received defective falls, the defects being very large in some parts of South-West Bengal, Orissa, and Chota Nagpur. Parts of East Bengal also showed very deficient rainfall.

11. The monsoon current commenced to retreat from Bengal about a week earlier than usual, as general rainfall practically ceased in Bihar from the 27th or 28th of September, and in lower Bengal from about the 4th of October, and all rainfall in the province after this date practically was brought up by the action of cyclonic storms or barometric depressions in the Bay, which formed in front of the retreating south-west monsoon current, and which depressions afterwards advanced towards the west coast of the Bay.

12. As the monsoon current finally established itself in Bengal about ten days later than usual, and withdrew about a week before the normal period, the south-west monsoon season was a decidedly short one.

13. During October more barometric depressions and small cyclonic storms were formed in the Bay than usually occur, but the majority of them were of little importance. Only one fierce, but small storm formed, which crossed the west coast of the Bay near Coconada. Two of these disturbances, one in the middle of October, and one quite at the close of that month, caused a wave of humid winds to advance northward, and hence gave moderate to heavy rain in Bengal, and the rainfall in the second half of October and early in November was very important.

14. The rainfall brought up in this way was particularly heavy in Orissa, Chota Nagpur, South-West and East Bengal; smaller amounts extended to South Bihar and North Bengal, but North Bihar was practically rainless.

15. The following tables give briefly the amount and variation of the rainfall in each of the seven meteorological divisions, month by month, for the period from the 1st of May to 15th November inclusive.

Actual Rainfall in inches.

Meteorological Divisions.	May.	June.	July.	August.	September.	October.	1st—15th November.	Monsoon Season, 1892.
Orissa ...	1·93	11·64	10·40	7·98	9·88	6·26	0·98	49·07
South-West Bengal ...	4·82	8·51	10·62	7·33	7·00	3·93	2·44	44·65
North Bengal ...	12·72	13·24	23·61	20·29	6·78	1·22	0·03	77·89
East Bengal ...	11·16	14·32	14·35	10·53	9·29	6·43	3·44	69·52
North Bihar ..	2·13	8·95	12·93	19·70	4·44	0·25	Nil	48·40
South Bihar ...	0·86	5·43	11·96	13·88	5·22	1·00	0·05	38·40
Chota Nagpur ...	1·40	8·83	12·58	9·01	8·32	3·60	0·49	44·23

Variation of actual Rainfall from the average in inches.

Orissa ...	— 1·94	+ 2·85	— 2·10	— 3·43	— 0·37	+ 0·10	+ 0·07	— 4·82
South-West Bengal ...	— 0·58	— 1·63	— 1·38	— 5·38	— 2·04	— 0·40	+ 2·16	— 9·25
North Bengal ..	+ 4·20	— 4·33	+ 9·53	+ 6·42	— 6·64	— 3·16	— 0·11	+ 5·91
East Bengal ...	+ 1·90	— 3·84	— 2·25	— 5·43	— 2·79	+ 1·00	+ 2·67	— 8·74
North Bihar ...	— 1·00	+ 0·34	+ 0·75	+ 8·20	— 5·20	— 3·27	— 0·03	— 0·21
South Bihar ...	— 1·51	— 1·23	— 0·18	+ 2·43	— 2·76	— 2·30	— 0·07	— 5·62
Chota Nagpur ...	— 1·25	+ 0·85	— 0·58	— 4·55	— 0·39	+ 0·63	+ 0·28	— 5·01

Variation expressed in a percentage of the normal fall.

Orissa ...	— 50	+ 32	— 17	— 30	— 4	+ 2	+ 8	— 9
South-West Bengal ...	— 11	— 16	— 12	— 42	— 23	— 9	+ 771	— 17
East Bengal ...	+ 49	— 25	+ 68	+ 46	— 49	— 72	— 79	+ 8
North Bengal ...	+ 21	— 21	— 14	— 34	— 23	+ 18	+ 347	— 11
North Bihar ...	— 32	+ 4	+ 6	+ 71	— 54	— 93	— 100	— 1
South Bihar ...	— 64	— 18	— 1	+ 21	— 35	— 70	— 58	— 13
Chota Nagpur ...	— 48	+ 11	— 4	— 34	— 4	+ 21	+ 133	— 10

16. Finally, the rainfall of the whole province from May to the middle of November inclusive has averaged 53·17 inches, while the normal fall for the period is 57·13 inches. So that the actual fall has shown a defect of 3·96 inches. Expressed as a percentage, the actual rainfall of Bengal for the monsoon season of 1892 has equalled 93 per cent. of the normal amount.

METEOROLOGICAL OFFICE, BENGAL,
The 10*th December* 1892.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

TABLE I.

Actual Monthly Rainfall of districts in Bengal for the months of May to 15th November 1892.

[*N. B.*—The figures in this table are the arithmetical averages of the corresponding figures in the returns for the subdivisional stations.]

Meteorological Division.	District.	May.	June.	July.	August.	September.	October.	1st—15th November.	Total.
Orissa	Puri ...	1·06	12·97	10·04	8·32	10·96	5·76	1·71	50·82
	Cuttack ...	1·35	9·88	12·70	9·21	9·94	6·97	0·62	50·67
	Balasore ...	3·03	12·22	8·74	6·73	9·11	5·99	0·79	46·61
South-West Bengal.	Midnapore ...	4·44	6·67	8·65	5·56	7·26	2·93	5·24	40·75
	24-Parganas ...	4·07	8·17	13·02	7·89	8·83	4·64	3·54	50·16
	Howrah ...	3·00	7·55	9·74	4·97	5·73	2·13	2·35	35·47
	Hooghly ...	4·84	6·37	10·95	5·55	6·17	3·43	4·37	41·68
	Nadia ...	6·12	8·22	8·10	6·10	6·43	2·87	1·64	39·48
	Khulna ...	5·89	7·78	12·81	8·87	6·88	6·97	1·32	50·52
	Jessore ...	7·18	9·33	10·59	7·61	5·30	6·82	4·24	51·07
	Burdwan ...	3·39	9·66	10·21	6·28	7·05	4·10	1·57	42·26
	Bankura ...	4·11	9·16	9·84	6·05	8·11	3·28	1·88	42·43
	Birbhum ...	3·06	12·36	13·60	8·84	6·98	4·01	0·10	48·95
	Murshidabad ...	5·26	8·33	9·54	10·35	6·95	2·01	0·08	42·52
North Bengal.	Pabna ...	8·47	9·88	14·63	8·48	5·22	1·26	0·33	48·27
	Bogra ...	6·18	10·72	15·32	12·30	7·35	1·13	0·01	53·01
	Rajshahi ...	6·19	8·16	13·36	10·44	4·17	1·32	0·05	43·69
	Malda ...	1·45	5·84	17·13	10·61	4·67	1·46	Nil	41·16
	Dinajpur ...	4·56	8·49	22·50	19·18	5·49	1·05	Nil	61·27
	Rangpur ...	16·71	14·84	27·37	24·04	6·06	1·67	Nil	90·69
	Jalpaiguri ...	28·90	18·46	52·82	39·11	17·64	1·54	Nil	158·47
	Kuch Bihar ...	34·06	28·01	37·62	39·35	9·60	0·76	Nil	149·40
	Darjeeling ...	17·37	29·67	50·98	31·95	21·76	2·98	0·31	155·02
East Bengal	Chittagong ...	13·63	18·96	24·38	13·29	18·36	15·43	2·94	106·99
	Chittagong Hill Tracts	15·26	15·39	15·53	10·39	8·39	7·05	3·00	75·01
	Backergunge ...	5·65	13·77	15·22	10·17	7·97	6·33	2·57	61·68
	Noakhali ...	9·65	21·17	22·09	16·19	12·44	12·20	6·15	99·89
	Faridpur ...	8·42	9·67	11·26	8·15	6·68	4·03	4·53	52·74
	Dacca ...	8·83	8·27	8·60	8·21	6·90	5·38	5·22	51·41
	Tippera ...	13·33	18·66	13·89	6·92	9·06	6·06	3·93	71·85
	Mymensingh ...	16·18	14·10	13·14	13·64	9·30	3·04	0·89	70·29
North Bihar	Purnea ...	5·84	11·55	21·07	31·67	4·34	0·47	Nil	74·94
	Bhagalpur ...	1·60	8·09	12·69	14·51	4·19	0·59	Nil	41·67
	Darbhanga ...	1·52	8·09	12·69	19·23	3·48	0·01	Nil	45·02
	Muzaffarpur ...	0·93	8·55	10·98	13·52	4·51	0·18	Nil	38·67
	Champaran ...	2·38	13·16	16·78	22·17	5·38	Nil	Nil	59·87
	Saran ...	0·79	5·95	8·52	19·65	5·09	0·03	Nil	40·03
South Bihar	Shahabad ...	0·26	6·03	9·92	14·82	3·08	0·23	0·12	34·46
	Gaya ...	0·25	4·78	10·77	13·51	5·92	0·53	Nil	35·76
	Patna ...	0·27	5·18	10·96	22·45	5·24	0·22	0·01	44·33
	Monghyr ...	0·59	5·12	12·34	11·14	3·97	1·53	Nil	34·69
	Sonthal Parganas ...	2·28	5·67	14·95	9·03	7·17	2·21	0·06	41·37
Chota Nagpur.	Hazaribagh ...	1·31	9·14	11·89	8·61	7·53	3·91	0·06	42·45
	Lohardaga ...	0·78	10·09	12·99	12·05	6·46	5·76	0·39	48·52
	Palamau ...	0·16	6·28	13·81	14·89	8·30	0·57	Nil	44·01
	Singbhum ...	2·19	5·98	17·06	5·07	13·05	2·75	3·25	49·35
	Manbhum ...	1·95	10·43	11·02	6·03	9·80	2·58	0·55	42·36

TABLE II.

Variation of the average district actual Monthly Rainfall from the normal average for the months of May to 15th November 1892.

Meteorological Division.	District.	May.	June.	July.	August.	September.	October.	1st—15th November.	Total.
Orissa	Puri ...	—1·94	+4·55	—1·95	—3·56	+0·81	—2·42	+0·07	—4·44
	Cuttack ...	—2·16	+0·32	+0·39	—1·82	+0·61	+1·34	—0·15	—1·47
	Balasore ...	—1·72	+3·82	—4·27	—4·68	—1·99	+0·74	+0·12	—7·98
South-West Bengal.	Midnapore ...	—0·60	—2·79	—4·67	—8·31	—1·62	—2·36	+4·96	—15·39
	24-Parganas ...	—1·52	—2·01	—0·17	—5·33	—0·77	—0·51	+3·18	—7·13
	Howrah ...	—2·70	—1·92	—3·29	—7·92	—2·75	—1·76	+2·05	—18·29
	Hooghly ...	—0·47	—3·05	—1·50	—7·88	—1·88	—0·80	+4·18	—11·40
	Nadia ...	—0·25	—1·50	—2·14	—5·93	—2·16	—1·34	+1·35	—11·97
	Khulna ...	—0·72	—5·45	—0·05	—3·48	—2·66	+2·25	+0·93	—9·18
	Jessore ...	+0·28	—2·44	+0·40	—4·11	—3·28	+2·58	+3·98	—2·59
	Burdwan ...	—1·18	+0·90	—1·15	—6·20	—0·52	+0·27	+1·31	—6·57
	Bankura ...	+0·28	—1·18	—3·45	—7·68	—0·06	—0·18	+1·55	—10·72
	Birbhum ...	—0·42	+1·72	+0·93	—4·10	—3·77	+0·54	—0·03	—5·13
	Murshidabad ...	0	—0·80	—1·34	—1·53	—3·45	—2·21	—0·14	—9·47
North Bengal	Pabna ...	+1·36	—1·27	+4·06	—3·52	—5·20	—3·33	+0·08	—7·82
	Bogra ...	—1·61	—2·05	+2·57	+0·67	—3·01	—3·27	—0·30	—7·00
	Rajshahi ...	+0·32	—3·04	+1·77	—0·55	—7·69	—2·41	—0·13	—11·73
	Malda ...	—3·04	—6·02	+5·14	—1·41	—6·38	—2·23	—0·18	—14·12
	Dinajpur ...	—1·54	—5·13	+10·37	+7·46	—5·83	—2·50	—0·08	+2·75
	Rangpur ...	+5·48	—6·46	+13·38	+11·97	—7·38	—3·22	—0·08	+13·69
	Jalpaiguri ...	+16·94	—9·96	+27·16	+14·17	—6·29	—4·06	—0·08	+37·88
	Kuch Bihar ...	+20·68	—3·74	+17·88	+17·52	—10·52	—5·29	—0·03	+36·59
	Darjeeling ...	+6·52	+0·56	+16·13	+4·80	+3·12	—3·07	+0·14	+28·20
East Bengal	Chittagong ...	+3·63	—10·67	—6·68	—10·16	+4·04	+8·77	+1·45	—9·62
	Chittagong Hill Tracts	+5·73	—3·52	—3·51	—8·05	—4·33	+0·04	+1·49	—12·15
	Backergunge ...	—2·01	—5·43	—2·76	—5·44	—4·15	+0·78	+1·44	—17·57
	Noakhali ...	—0·74	—6·15	—1·18	—8·48	—4·32	+5·83	+4·23	—10·81
	Faridpur ...	—0·17	—2·88	—0·64	—3·91	—2·37	—0·41	+4·24	—6·14
	Dacca ...	+0·03	—4·98	—5·52	—4·90	—3·27	+0·93	+4·69	—13·08
	Tippera ...	+3·20	+2·21	+0·07	—9·05	—2·29	+0·95	+3·35	—1·56
	Mymensingh	+6·48	—3·50	—0·45	—0·24	—3·74	—2·37	+0·68	—3·14
North Bihar	Purnea ..	+0·26	—1·62	+5·62	+16·90	—9·61	—3·15	—0·04	+8·36
	Bhagalpur ...	—1·71	—0·28	+1·65	+3·16	—4·79	—2·88	—0·08	—4·93
	Darbhanga ..	—1·11	+0·06	+1·10	+8·48	—5·77	—2·91	—0·02	—0·17
	Muzaffarpur ...	—1·53	+1·13	—0·44	—3·44	—4·48	—3·22	—0·04	—5·14
	Champaran ...	—0·21	+4·97	+5·21	+10·23	—3·92	—3·54	0	+12·74
	Saran ...	—1·21	—0·47	—3·66	+9·36	—2·36	—4·18	—0·03	—2·55
South Bihar	Shahabad ..	—1·06	+0·83	—1·47	+3·31	—3·99	—3·07	+0·01	—5·44
	Gaya ...	—1·52	—0·85	—1·46	+1·78	—0·87	—2·30	—0·14	—5·36
	Patna ...	—1·82	—1·06	—0·97	+11·97	—1·80	—3·03	—0·09	+3·20
	Monghyr .	—1·74	—1·31	+0·27	—0·21	—3·94	—1·57	—0·10	—8·60
	Sonthal Parganas ...	—1·56	—3·28	+2·09	—2·89	—3·04	—1·54	—0·07	—10·29
Chota Nagpur.	Hazaribagh .	—1·15	+0·97	—1·63	+4·97	—1·54	+0·94	—0·16	—7·54
	Lohardaga ..	—2·07	+1·85	—0·12	—2·71	—2·98	+3·08	+0·22	—2·73
	Palamau ...	—1·25	+0·24	+1·25	+3·33	+0·48	—2·24	—0·33	+1·48
	Singbhum ...	—1·98	—2·32	+2·79	—8·76	+4·73	—0·20	+3·02	—2·72
	Manbhum ...	—0·82	+2·35	—1·05	—7·17	+2·11	—0·76	+0·40	—4·94

TABLE III.

The variation of the average District Monthly Rainfall expressed as a percentage of the Normal Rainfall for the months of May to 15th November 1892.

Meteorological Division.	District.	May.	June.	July.	August.	September.	October.	1st—15th November.	Total.
Orissa	Puri	-65	+54	-16	-30	+8	-30	+4	-8
	Cuttack	-62	+3	+3	-17	+7	+24	-19	-21
	Balasore	-36	+45	-33	-41	-18	+14	+18	-15
South-West Bengal.	Midnapore	-12	-29	-35	-60	-18	-44	+1,771	-27
	24-Parganas	-27	-20	-1	-4	-8	-10	+883	-12
	Howrah	-47	-20	-25	-61	-32	-45	+683	-34
	Hooghly	-9	-32	-12	-59	-23	-19	+2,200	-21
	Nadia	-4	-16	-20	-49	-25	-32	+466	-23
	Khulna	-11	-41	-1	-28	-28	+48	+238	-15
	Jessore	+4	-20	+4	-35	-38	+61	+1,531	-5
	Burdwan	-26	+10	-10	-50	-7	+7	+504	-13
	Bankura	+7	-11	-26	-56	-1	-5	+470	-2
	Birbhum	-12	+16	+7	-32	-35	+16	-23	-9
	Murshidabad		-9	-12	-13	-33	-52	-64	-18
North Bengal.	Pabna	+19	-11	+38	-29	-50	-73	+32	-14
	Bogra	-20	-16	+2	+6	-29	-74	-97	-12
	Rajshahi	+5	-27	+15	-5	-65	-65	-72	-21
	Malda	-68	-60	+43	-12	-58	-60	-100	-26
	Dinajpur	-25	-38	+85	+64	-52	-70	-100	+5
	Rangpur	+49	-30	+96	+99	-55	-66	-100	+17
	Jalpaiguri	+142	-35	+106	+57	-26	-73	-100	+31
	Kuch Bihar	+155	-12	+10	+80	-52	-87	-100	+32
	Darjeeling	+60	+2	+46	+18	+17	-60	+82	+22
East Bengal	Chittagong	+36	-36	-22	-43	+28	+132	+97	-8
	Chittagong Hill Tracts	+60	-19	-18	-44	-34	+1	+99	-14
	Backergunge	-26	-28	-15	-35	-34	+14	+127	-22
	Noakhali	-7	-23	-5	-34	-26	+92	+220	-10
	Faridpur	-2	-23	-5	-32	-26	-9	+1,462	-10
	Dacca	-1	-38	-39	-37	-32	+21	+885	-20
	Tippera	+32	+13	+1	-57	-20	+19	+578	-2
	Mymensingh	+67	-20	-3	-2	-29	-44	+324	-4
North Bihar	Purnea	+5	-12	+36	+114	-69	-87	-100	+13
	Bhagalpur	-52	-3	+15	+28	-53	-83	-100	-11
	Darbhanga	-42	+1	+9	+79	-62	-100	-100	-1
	Muzaffarpur	-62	+15	-4	+34	-50	-95	-100	-12
	Champaran	-8	+61	+45	+86	-42	-100	-100	+27
	Saran	-61	-7	-30	+91	-32	-99	-100	-6
South Bihar	Shahabad	-80	+16	-13	+29	-56	-93	+9	-14
	Gaya	-86	-15	-12	+15	-13	-81	-100	-13
	Patna	-87	-17	-8	+114	-26	-93	-90	+8
	Monghyr	-75	-20	+2	-2	-50	-51	-100	-20
	Sonthal Parganas	-41	-37	+16	-24	-30	-41	-54	-20
Chota Nagpur.	Hazaribagh	-47	+12	-12	-37	-17	+32	-73	-15
	Lohardaga	-73	+22	-1	-18	-32	+115	+129	-5
	Palamau	-89	+4	+10	+29	+6	-80	-100	+3
	Singbhum	-47	-28	+20	-63	+57	-7	+1,313	-5
	Manbhum	-30	+29	-9	-54	+27	-23	+267	-10

TABLE IV.

Monthly Rainfall of the Subdivisional Rainfall-recording Stations in the Province of Bengal for the months of May to 15th November 1892.

Meteorological Division.	District.	Station.	May.	June.	July.	August.	September.	October.	1st—15th November.	Total.
Orissa	Puri	Puri ...	Nil	11·36	8·76	6·96	8·24	6·97	3·36	45·65
		Khurda ...	1·37	12·67	10·63	9·71	8·44	4·78	0·17	47·77
		Bhanpur ...	0·71	12·14	11·87	10·94	11·73	6·12	Nil	53·51
		False Point ...	2·17	15·69	8·90	5·67	15·43	5·18	3·29	56·33
		Gop ...	Nil	6·17	10·55	7·08	10·26	6·44	1·75	42·25
		Satpara ...	0·03	11·88	8·83	7·15	7·49	6·30	2·07	43·75
		Pipli ...	0·45	9·06	8 03	12·26	9·25	4·66	1·36	45·07
	Cuttack	Jagatsingpore ...	0·34	7·34	14·41	10·35	10·45	9·02	0·76	52·67
		Banki ...	1·85	9·14	15·34	10·58	8·20	3·65	0·94	49·70
		Cuttack ...	1·75	11·78	12·45	6·37	9·20	12·47	0·36	54·38
		Kendrapara ...	0·54	10·34	12·34	8·20	7·77	6·29	0·93	46·41
		Jajpur ...	2·27	10·79	9·05	10·57	14·07	3·40	0·12	50·27
		Dharmsala ...	1·12	10·39	13·05	8·28	19·60	3·50	0·15	56·09
		Salipore ...	0·43	7·03	15·25	13·49	8·58	3·95	1·60	50·33
		Pal Lahara ...	?	9·10	24·07	4·74	11·67	2·70	0 68	52·96
	Balasore	*Aquapada* ..	2·80	12·75	7·90	9·22	15·73	2·34	1·21	51·95
		Chandbally ...	1·50	15·88	8·15	8·52	4·61	3·35	1·36	43·37
		Bhuddruck ...	2·92	17·98	8·06	10·09	10·46	6·12	0·33	55·96
		Sorah ...	3·95	15·24	6·10	4·93	10·72	5·73	0·75	47·42
		Balasore ...	2·58	9·49	7·54	5·54	12·34	9·73	1·09	48·31
		Jellasore ...	2·79	8·60	8·42	8·29	7·75	3·56	0·80	40·21
		Baripodah ...	4·35	6·14	14·14	3·03	8·77	7·47	0·42	44·32
South-West Bengal.	Midnapore	Contai ...	3·11	8·28	7·52	6·25	9·58	4 03	6·49	45·26
		Tamluk ...	4·26	4·48	8·92	6·79	6·92	2·35	3·40	37·12
		Midnapore ...	3·29	6·72	6·27	5·51	6·87	3·15	4 88	36·69
		Ghatal ...	7·11	7·19	11·87	3·67	5·67	2·19	6·17	43·87
		Kukrahaty ..	5·98	7·31	18·73	13·14	9·55	2·01	3·17	59·89
		Garbehta ...	3·51	11·01	11·40	5·81	4·89	2·25	1·56	40·43
	24-Parganas	Saugor Island ...	1·69	7·44	6·71	9·99	13·89	7·28	7·42	54·42
		Diamond Harbour	7·89	8·70	21·86	12·99	9·69	2·19	6·17	69·49
		Canning Town ...	2·69	19·31	19·87	16·03	8·69	4·39	7·15	78·13
		Alipore Observatory.	4·45	9·00	10·26	8·86	7·60	3·35	1·74	45·26
		Barrackpore ...	2·67	6·20	10·05	7·60	5·85	4·73	3·92	41·02
		Dum-Dum ...	3·90	10·00	13·72	4·96	11·16	2·48	2·10	48·32
		Barasat ...	4·60	7·68	10·24	4·38	8·35	5·19	2·13	42·57
		Basirhat ...	3·31	8·14	18·27	6·48	5·26	7 23	1·29	49 98
	Howrah	Howrah ...	3·02	9·37	10·86	6·30	6·37	1·55	1·54	39·01
		Mohesreka ..	2·98	5·72	8·62	3·65	5·09	2·70	3·15	31·91
		Ulubaria ...	3·88	8·54	12·02	8 48	10·89	2·34	2·52	48·67
	Hooghly	Serampore ...	3·57	6·61	11·15	8·28	4·67	4·51	5·85	44·64
		Hooghly ...	5·18	4·74	7·61	4·75	7·44	3·95	4·05	37·72
		Jahanabad ..	5·78	7·75	14·08	3·63	6·39	1·84	3·21	42·68
	Nadia	Ranaghat ...	5·38	8·71	10·52	4·49	5·63	3·81	2·71	41·25
		Krishnaghur ...	2·24	8·61	6·28	3·38	4·55	3·52	2·62	31·20
		Chuadanga ...	9·74	7·40	5·07	5·68	?	?	?	27·89
		Meherpore ...	4·47	9·76	8·03	10·13	7·99	1·84	0·43	42·65
		Kushtia ...	8·75	6·62	10·62	6·80	7·56	2·30	0·80	43·45
	Khulna	Satkhira ...	5·57	5·68	10·01	8·18	8·48	6·32	0·68	44·92
		Bagerhat ..	6·66	8·68	13·66	10·80	6·96	8·03	1·67	56·46
		Khulna ..	5·45	8·97	14·76	7·64	5·20	6·56	1·60	50·18
		Nakipore ...	4·67	12·07	14·19	11·35	9·50	4·70	2·19	58·67
		Rampal ...	3·89	11·93	12·80	10·05	8 51	5·74	1·01	53·96

Meteorological Division.	District.	Station.	May.	June.	July.	August.	September.	October.	1st—15th November	Total.
South-West Bengal—*concld.*	Jessore ...	Narail ...	6·39	10·94	12·11	6·59	2·81	6·01	3·34	48·19
		Jessore ...	8·12	10·54	8·45	4·61	5·96	6·63	7·71	52·02
		Jhenidah ...	8·80	8·60	10·13	10·07	5·77	8·77	2·15	54·29
		Magura ..	6·62	10·00	12·79	10·31	3·45	5·24	3·76	52·17
		Bangaon ...	5·97	6·59	9·45	6·48	8·51	7·47	4·25	48·72
	Burdwan ...	Kalna ...	3·80	9·01	10·68	7·39	5·25	6·11	3·33	45·57
		Burdwan ...	3·92	10·73	7·94	3·48	6·81	3·92	1·93	38·73
		Katwa ...	3·15	5·50	13·84	6·71	6·39	3·09	0·84	39·52
		Raniganj ...	2·68	13·39	8·37	7·54	9·73	3·28	0·19	45·18
		Mankur ...	3·16	5·99	8·29	5·73	5·08	0·98	0·93	30·16
	Bankura ...	Bankura ...	5·30	10·03	9·33	3·88	6·57	4.29	1·90	41 30
		Vishnupur ...	5 12	8·11	10·40	5·97	8·47	3·45	2·44	43·96
		Maliara ...	1·60	8·78	7·17	7·20	6·77	1·07	0·32	32·91
		Khatra ...	4·40	9·72	12·47	7·14	10·64	4·30	2·84	51·51
		Indas ...	5·82	7·40	14·06	6·92	5·08	3·66	1·98	44·92
		Kotalpore ...	1·89	9·62	11 74	8·87	2·02	1·91	1·75	37·80
		Onda ...	5·07	9·26	11·83	5·08	2·80	4·00	0·80	38·84
		Gangajalghati ...	2·50	8·77	9·43	6·92	5·17	2·25	0·60	35·64
		Raipore ...	3·20	9·85	13·49	5·65	10·16	7·24	1·68	51·27
		Sonamukhi ...	4·21	13·05	8·24	4·78	3·30	4·73	2·47	40·78
	Birbhum ...	Suri ...	2·42	16·78	14·69	9·36	5·90	1·74	0·08	50·97
		Hetampore ...	2·83	9·44	16·00	9·62	7·06	4·82	0·15	49·92
		Rampur Hat ...	3·94	10·85	10·10	7·53	7·97	5·46	0·08	45·93
		Bolpur ...	2·50	16·29	9·81	6·32	6·82	0·99	1·26	43·99
		Morarai ...	6·04	10·03	10·96	6·67	7·75	1·10	Nil	42·55
	Murshidabad.	Kandi ...	2·97	8 42	9·80	9·48	7·81	2·31	0·22	41·01
		Berhampore ...	4·64	10 38	9·39	15·78	8·24	1·49	0·14	50·06
		Lalbagh ...	8·06	11·90	7·16	9·70	7·68	3 26	0·13	47·89
		Azimgunge ...	5·45	9·09	13·41	3·10	6·82	2·44	Nil	40·31
		Jangipur ...	4·68	5·76	8·84	11·15	5·14	1·39	0·01	36·97
		Lalgola ...	5·75	4·45	8·62	12·90	6·00	1·15	Nil	38·87
		Akhrigunge ...	5·99	5·68	8·57	4·47	6·60	0 94	0·11	32·36
		Patkabari ...	4·30	7·80	8·00	4·70	3·30	2·80	0·40	31·30
North Bengal	Pabna ...	Pabna ...	8·15	8·13	11·31	6·02	4·91	1·78	0·52	40·82
		Sirajganj ...	8·78	11·63	17·95	10·93	5·54	0·73	0·14	55·70
	Bogra ...	Sherpur ...	6·46	9·26	14·97	10·36	5·62	1·21	Nil	47·88
		Nowkhilla ...	7·93	11·81	17·47	12·83	10·41	1·41	Nil	61·86
		Bogra ...	6·13	9·49	15·02	13·51	8·23	0·99	0·02	53·39
		Panchbibi ...	4·20	12·32	13·82	12·50	5·14	0·91	Nil	48·89
	Rajshahi ...	Boalia ...	4·73	6·09	6·51	11·40	4·93	1·37	0·07	35·10
		Nator ...	9·71	9·95	19·72	9·44	4·48	0·98	0·08	54·36
		Naogaon ...	4·14	8·45	13·84	10·47	3·11	1·60	Nil	41·61
		Lalpur ...	5·97	11·28	7·38	8·69	3·01	0·58	Nil	36·91
		Manda ...	3·85	8·07	14·35	16·17	3·10	0·14	Nil	45·68
	Malda ...	Malda ...	0·94	7·66	16·02	8·46	6·60	2·65	Nil	42·33
		Chanchal ...	1·96	4·01	18·23	12·77	2·75	0·27	Nil	39·99
		Gajol ...	2·49	9·44	21·41	14·72	4·67	1·87	Nil	54·60
		Sibgunj ...	4·23	4·42	9·27	8·37	5·92	1·45	0·05	33·71
	Dinajpur ...	Mohadebpore ...	3·32	8·52	12·26	15·68	5·27	1·68	Nil	46·73
		Churamon ...	3·80	5·51	29·16	17·20	3·92	0·62	Nil	60·21
		Raigunge ...	4·72	8·73	29·03	24·51	7·08	0·84	Nil	74·91
		Dinajpur ...	7·98	13·22	22·27	23·58	2·74	0·50	Nil	70·29
		Balurghat ...	2·96	6·45	19·76	14·92	8·42	1·63	Nil	54·14
		Thakurgaon ...	10·15	19·95	22·91	29·92	7·22	0·47	Nil	90·62
	Rangpur ...	Bhawanigunge ... (*Gyabanda*).	17·33	14·19	13·71	13·29	4·62	0·70	Nil	63·84
		Rangpur ...	16·34	14·23	24·93	28·20	7·43	3·54	Nil	94·67
		Kurigaon ...	17·75	20·52	22·08	23·18	5·63	0·21	Nil	89·37
		Bagdogra ... (*Nilphamari*).	15·42	10·40	48·76	31·50	6·55	2·21	Nil	114·84
		Ulipore ...	26·61	18·05	18·76	18·83	6·83	0·38	Nil	89·46

Meteorological Division.	District.	Station.	May.	June.	July.	August.	September.	October.	1st—15th November.	Total.
North Bengal—*concld.*	Jalpaiguri ...	Jalpaiguri ...	28·90	18·46	52·82	39·11	17·64	1·54	Nil	158·47
		Alipore Doar ...	28·46	27·20	50·80	40·34	14·51	Nil.	Nil	161·31
		Fallacotta ...	28·21	16·79	34·73	50·90	12·24	1·21	Nil	144·08
		Debigunj ...	14·49	19·75	26·92	32·73	11·00	1·27	Nil	106·16
		Bhagatpore (*Nagrakatta*).	38·82	26·21	51·99	36·86	26·70	8·03	0 64	189·25
	Kuch Bihar	Dinhatta ...	30·86	27·80	32·34	34·10	7·24	0·03	Nil	132·37
		Kuch Bihar ...	46·22	29·39	41·05	39·97	10·81	0·33	Nil	167·77
		Mekligunge ...	27·77	30·32	36·29	45·64	9·54	1·45	Nil	151·01
		Matabhanga ...	31·39	24·53	40·81	37·68	10·79	1·23	Nil	146·43
	Darjeeling	Buxa ..	31·96	44·48	82·09	51·28	44·78	9·77	1·06	265·42
		Siliguri ...	14·89	32·72	47·78	35·85	18·01	0·99	0·16	150·40
		Darjeeling ...	12·79	25·60	43·23	26·25	12·55	1·02	Nil	121·44
		Kalimpong ...	9·86	15·88	30·82	14·41	11·71	0·14	Nil	82·82
		Kurseong ...	12·28	26·71	53·70	29·73	19·20	2·16	0·60	144·38
East Bengal.	Chittagong...	Cox's Bazar ...	15·03	28·36	32·95	18·64	19·64	17·40	0·90	132·92
		Chittagong ...	12·22	9·56	15·81	7·94	17·08	13·46	4·97	81·04
		Kutubdia ...	11·88	20·77	24·23	15·32	14·03	17·96	5·23	109·42
		Satkanya ...	9·41	18·53	24·26	9·70	8·47	9·10	2·10	81·57
	Chittagong Hill Tracts.	Rangamati ...	15·26	15·39	15·53	10·39	8·39	7·05	3·00	75·01
		Bundarban ...	11·72	19·21	16·90	12·08	7·48	8·03	2·86	78·28
	Backergunge.	Patuakhali ...	4·22	13·46	19·32	15·91	7·92	7·08	2·44	70·35
		Pirojpur ...	5·43	12·19	11·30	6·33	6·54	5·69	2·76	50·24
		Barisal ..	7·31	13·38	12·94	9·46	9·27	5·64	2·41	60·41
		Gournaddi ...	9·40	9·49	11·80	6·46	4·53	3·10	3·40	48·18
		Bhola ...	5·66	16·07	17·30	8·99	8·14	6·89	2·66	65·71
		Daulatkhan ...	9·24	16·33	24·25	11·16	10·52	10·55	5·17	87·22
		Bauphal ..	10·05	14·63	18·76	13·03	10·35	7·43	2·21	76·46
	Noakhali ..	Noakhali ...	7·07	25·13	23·88	19·76	14·73	11 19	6·54	108·30
		Fenny ...	12·24	17·21	20·29	12·64	10·15	13·22	5·75	91·50
		Harishpore ...	9·02	32·37	21·24	34·31	21·66	17 89	6·01	142·50
		Ramganj ...	6·11	13·83	13·30	9·96	9·28	6·74	5·99	65·21
	Faridpur ...	Madaripur ...	9·71	11·16	10·73	5·08	7·11	3·87	4·45	52·11
		Faridpur ...	8·55	8·26	11·64	9·58	7·16	5 36	6·11	56·66
		Goalundo ...	7·00	9·59	11·40	9·80	5·76	2·85	3·02	49·42
	Dacca ...	Munshiganj ...	10·06	9·53	9·08	9·07	9·44	7·45	3·80	58·43
		Dacca ...	9·38	7·51	8·08	6·07	5·25	5 35	7·12	48·74
		Naraingunge ...	9·34	9·24	7·87	9·56	9·05	6·11	5·51	56·68
		Manikganj ..	6·54	6·79	9·38	8·14	3·86	2·59	4·43	41·73
		Joydebpore ...	9·16	9·63	8·16	7·83	5·77	2 01	2·91	45·47
	Hill Tippera ...	Agartola ...	12·00	15·98	12·18	6·30	9·42	2·28	4·72	688
	Tippera ...	Comillah ...	11·88	16·55	15·96	7·31	6·56	7·88	3·06	69·20
		Chandpore ...	15·52	24·98	19·28	8·34	7·29	5 09	4·21	84·71
		Brahmunbaria ...	13·93	17·11	8·14	5·74	12·95	8·99	3·73	70·59
		Ramchandrapore	4·60	8·15	5·83	1·96	4·00	4·80	3·17	32·51
		Nasirnagar ...	9·10	16·88	8·06	6·09	13·69	7·84	3·65	65·31
		Daudkandi ...	7·86	9·62	12·58	3·90	3·73	2·78	2·05	42·52
		Kusba ...	6·34	12·72	11·73	7·98	6·92	8·30	5·69	59·68
		Laksham ...	11·50	20·70	13·25	10·22	9·25	5·61	4·15	74·68
	Mymensingh	Kishoregunge ...	19·82	15·32	8·11	13·40	9·54	3·19	3·37	72·75
		Atia (*Tangail*) ...	9·03	8·40	8·62	6·90	7·23	3·02	0·56	43·76
		Mymensingh .	18·48	14·87	13·51	11·89	7·02	2·00	0·24	68·01
		Jamalpore ...	11·39	11·10	16·83	16·16	11·17	2·09	Nil	68·74
		Netrokona ...	22·16	20·83	18·63	19·87	11·55	4·90	0·28	98·22
		Subarnakhally ...	6·73	10·98	10·93	11·53	13·32	1·40	0·29	55·18
		Durgapore ...	23 68	33·57	26·87	31·20	24·55	7·96	Nil	147·83
		Sherpur Town ...	14·68	18·30	22·74	19·95	8·55	4·37	Nil	88·59
		Dewanganj ...	15·75	16·61	10·93	16·07	6·28	1·53	Nil	67·17

Meteorological Division.	District.	Station.	May.	June	July.	August.	September.	October.	1st—15th November.	Total.
North Bihar.	Purnea	Kishanganj	6·99	9·09	18·90	39·22	4·69	1·33	Nil	80·22
		Araria	5·28	17·21	21·88	32·68	3·19	0·05	Nil	80·29
		Purnea	5·24	8·36	22·44	23·10	5·14	0·03	Nil	64 31
		Gondwara (Korah)	2·84	7·57	18·14	20·17	3·56	Nil	Nil	52·28
		Barsoe	5·14	8·36	29·02	17·20	7·00	Nil	Nil	66·72
		Forbesganj	8·09	10·32	18·26	32·88	2·97	0·42	Nil	72·94
		Kahaganj	11·39	14·40	31 83	29·23	...	Nil	Nil	...
	Bhagalpur	Madhipura	2·02	10·63	13·57	16·59	3·38	0·25	Nil	46·44
		Bangaon (Syfabad)	0·38	6·85	11·88	22·50	2·12	Nil	Nil	43·73
		Supaul	2·71	12·64	11·35	17·59	3·34	Nil	Nil	47·63
		Pratapganj	5·41	9·58	15·20	19·09	2·75	Nil	Nil	52·03
		Bhagalpur	0 47	5·20	8·18	14·90	2·34	0·49	Nil	31·58
		Banka	1·20	3·90	17·66	8·94	7·69	1·61	Nil	41·00
		Colgong	0·54	6·89	14·58	9·34	3·06	1·54	Nil	35·95
	Darbhanga	Tajpur	0·50	6·40	9·47	17·50	5·27	Nil	Nil	39·14
		Darbhanga	2·00	7·80	11·19	24·15	3·02	0·02	Nil	48·18
		Madhubani	2·06	10·08	17·41	16·04	2·15	Nil	Nil	47·74
		Bahera	0·60	9·78	10·57	24·23	4·88	Nil	Nil	50·06
		Rosera	0·07	3·66	9·31	19·77	2·93	Nil	Nil	35·74
	Muzaffarpur	Sitamarhi	1·81	12·46	13·16	12·11	5·92	Nil	Nil	45·46
		Muzaffarpur	0·73	8·39	10·44	12·47	4·09	Nil	Nil	36·12
		Hajipur	0·26	4·79	9·35	15·97	3·51	0·54	Nil	34·42
		Paru	1·35	8·21	10·44	18·48	4·43	Nil	Nil	42 91
		Mohuwa	0·38	8·86	9·31	18·75	2·46	0·08	Nil	39·84
		Sinhar	1·28	8·16	15·23	15·17	4·76	Nil	Nil	44·60
		Pupri	1·18	14·40	11·21	?	1·84	Nil	Nil	28·63
	Champaran	Motihari	3·54	15·89	19·14	24·18	5·95	Nil	Nil	68·70
		Bettiah	1·21	10·43	14·42	20·96	4·81	Nil	Nil	51·83
		Bagaha	0·82	9·87	9·83	29·51	2·83	Nil	0·09	52·95
		Burhurwa	0·57	9·65	9·00	21·39	3·41	Nil	Nil	44·02
South Bihar.	Saran	Gopalganj	0·90	5·08	9·96	18·43	6·55	Nil	Nil	40·92
		Siwan	0·26	5·17	8·81	17·08	5·25	Nil	Nil	36·57
		Chapra	1·22	7·60	6·78	23·43	3·46	0·09	Nil	42·58
	Shahabad	Buxar	0·15	5·32	8·81	21·52	2·72	0·08	0·60	39·20
		Dehri	0·16	6·98	13·09	12·46	1·52	0·36	Nil	34·57
		Bhabhua	0·29	5·42	8·75	11·54	2·56	0·21	Nil	28·77
		Sasaram	Nil	7·44	8·86	12·02	2·42	0·23	Nil	30·97
		Arrah	0·70	5·00	10·09	16·56	6·19	0·29	Nil	38·83
		Mohaniah	Nil	1·88	8·11	21·53	2·32	Nil	Nil	33·84
		Khiri	Nil	7·53	11·34	22·60	2·53	Nil	Nil	44·00
		Ageaon	Nil	6·05	11·58	12·08	4·64	Nil	Nil	34·35
		Ramagar	Nil	5·12	8·72	13·48	5·71	Nil	Nil	33·03
		Koath	0·09	4 53	8·76	12·34	4·09	1·12	Nil	30 93
		Sikroul	Nil	1·71	4·43	17·53	2·36	Nil	Nil	26·03
		Bassawan	Nil	4·35	13·08	10·98	4·00	1·11	Nil	33·52
		Monaharpur	Nil	5·03	9·72	19 01	1·89	0·08	Nil	35·73
	Gaya	Aurungabad	0·06	5·18	10·48	12·09	5·28	0·74	Nil	33·83
		Gaya	0·57	5·33	12·98	16·36	5·77	0·41	Nil	41·42
		Nawadah	0·38	6·32	8·38	11·81	6·08	0·81	Nil	33·78
		Jahanabad	Nil	2·29	11·22	13·79	6·53	0·16	Nil	33·99
		Arwal	Nil	4·93	12·43	10·27	4·35	0·30	Nil	32·28
		Daudnagar	Nil	3·75	8·80	9·55	1·69	Nil	Nil	23·79
		Sherghati	Nil	4·13	5·18	14·57	12·98	0·99	Nil	37·85
		Rajauli	0·07	4·03	12·74	16·48	4·08	2·95	Nil	40·35
		Pakri Barawan	0·15	3 07	9·27	10·85	4·60	0·19	0·23	28·36
	Patna	Patna	0·45	5·29	11·20	23·57	4·69	0·12	0·02	45·34
		Dinapore	0·21	3·94	12·78	30·94	3·39	Nil	Nil	51·26
		Bihar	0·40	4·72	9·67	18·57	8·15	0·30	Nil	41·81
		Barh	Nil	6·76	10·18	16·72	4·72	0 45	Nil	38·83
		Bickram	0·20	3·71	7·28	11·41	5·93	0 20	Nil	28·73
		Hilsa	0·80	2·93	6·29	16 82	3·91	0·27	Nil	31·02

Meteorological Division.	District.	Station.	May.	June.	July.	August.	September.	October.	1st—15th November.	Total.
South Bihar —*concld.*	Monghyr	Begusarai ...	0·27	4·39	9·08	11·59	3·61	2·20	Nil	31·14
		Monghyr ...	0·35	5·32	12·57	12·16	3·69	1·55	Nil	35·64
		Jamui ...	1·15	5·64	15·38	9·66	4·61	0·84	Nil	37·28
		Gogri ...	0·15	1·56	12·04	10·92	2·13	0·57	Nil	27·37
		Shaikpura ...	0·15	4·77	13·95	11·50	6·42	1·20	Nil	37·99
		Chahai Bamda ...	?	?	?	13·78	4 20	1·22	Nil	19 20?
	Sonthal Parganas.	Rajmahal ...	0·75	5·65	9·94	10·00	3·23	1·55	Nil	31·12
		Godda ...	1·74	4·57	23·13	7·81	6·97	0·48	Nil	44·70
		Pakaur ...	4·10	6·49	7·10	7·73	7·52	5·46	Nil	38·40
		Naya Dumka ...	3·13	6·73	14·24	6·77	7·65	3·17	0·06	41·75
		Deoghur ...	1·01	5·71	15·91	15·57	6·31	0·50	Nil	45·01
		Jamtara ...	2·97	4·88	19·36	6·28	11·31	2·09	0·32	47·21
		Belbodda ...	?	5·46	13·11	11·63	?	0·97	Nil	...
		Nanihat ...	1·85	4·25	19·90	?	4·55	0·12	Nil	...
Chutia Nagpur.	Hazaribagh	Pachamba (*Giridh*)	1·36	5·63	11·75	8·54	7·96	3·07	Nil	38·31
		Hazaribagh ...	0·88	9·48	17·12	7·24	7·86	2·66	0·02	45·26
		Semtagurah ...	1·20	8·94	6·80	6·88	6·84	3·77	Nil	34·43
		Mahudi Hills ...	0·83	9·84	7·98	12·47	7·17	4·96	0·09	43·34
		Jhumra Hill ...	2·30	11·80	15·80	7·90	7·80	5·10	0·20	50·90
		Barhi ...	0·77	5·83	8·58	15·27	6·95	1·24	Nil	38·64
		Chatra ...	0·25	7·87	11·52	15·20	6·13	1·45	Nil	42·42
		Karagdeha ...	1·24	6·97	14·18	13·14	7·33	1·04	0·13	44·03
		Ramgar ...	2·00	6·92	10·31	7·67	6·01	3·27	Nil	36·18
	Lohardaga	Lohardaga ...	0·45	9·26	14·02	12·27	4·61	5·82	Nil	46·43
		Ranchi ...	1·11	10·91	11·96	11·82	8·31	5·70	0·78	50·59
		Silli ...	...	11·65	...	...	...	...	...	...
	Palamau	Palamau (*Daltonganj*). ...	0·16	6·28	13·81	14·89	8·30	0·57	Nil	44·01
		Balumath ...	0·22	9·03	12·44	19·15	7·52	3·58	0 01	51·95
		Husainabad ...	1·00	7·34	12·25	16·71	6·99	0·62	Nil	44·91
		Garwah ...	0·15	4·48	16·29	18·86	5·26	1·33	Nil	46·37
	Singbhum	Chaibassa ...	2·19	5·98	17·06	5·07	13·05	2·75	3·25	49·35
		Chakardharpur ...	?	?	?	3·10?	11·66	4·04	2·03	20·83?
		Ghatsila ...	1·99	8·63	11·80	5·57	9·35	2·15	2·00	41·49
		Baharagura ...	1·39	8·31	12·36	9·10	9·31	2·95	3·00	46·42
	Manbhum	Purulia ...	1·74	12·46	13·00	3·11	9·23	3·65	0·70	43·89
		Gobindpur ...	2·16	8·39	9·03	8·95	10·36	1·51	0·40	40·80
		Raghunathpur ...	2·64	10·05	17·70	8·83	8·85	1·54	0·15	49·76
		Barabhum ...	1·02	14·78	11·90	4·55	7·50	3·83	2·05	45·63
		Jhalda ...	1·02	14·08	6·69	3·31	5·09	2·06	0 42	32·67
		Chas ...	1·83	5·72	11·60	9·48	14·06	2·50	0·23	45·42
		Pandra ...	1·01	7·71	12·39	9 65	11·54	1 32	0·11	43·73

TABLE V.

Variation of the subdivisional actual Monthly Rainfall from the Normal Average for the months of May to 15th November 1892.

Meteorological Division.	District.	Station.	May.	June.	July.	August.	September.	October.	1st—15th November.	Total.
Orissa	Puri	Puri	—2·58	+3·38	—1·63	—2·28	—1·78	—1·84	+1·77	—4·96
		Khurda	—2·14	+3·17	—2·19	—2·72	—1·93	—2·11	—1·00	—8·92
		Bhanpur	—1·35	+4·97	+1·21	—1·17	+2·67	—0·19	—1·93	+4·21
		False Point	—1·67	+6·68	—5·19	—8·05	+4·28	—5·52	+1·41	—8·06
	Cuttack	Jagatsingpur	—2·65	+0·11	+3·38	+0·23	+1·95	+2·22	+0 14	+5·38
		Banki	—0·24	—1·14	+3·55	—0·13	—0·64	—0·76	+0·21	+0·85
		Cuttack	—2·45	+0·26	—0·91	—4·71	—0·87	+6·84	—0·42	—2·26
		Kendrapara	—3·37	+1·47	+0·07	—4·36	—1·60	+0·03	+0·33	—7·43
		Jajpur	—2·22	+0·91	—4·07	—0·13	+4·20	—1·67	—0·23	—3·21
	Balasore	Chandbally	—3·49	+8·10	—3·74	—2·54	—6·58	—3·11	+0·26	—11·10
		Bhadrak	—2·24	+9·07	—3·97	—0·57	—0·19	+1·51	—0·45	+3·16
		Sorah	—1·14	+8·46	—6·17	—6·10	—0·52	+0·23	+0·17	—5·07
		Balasore	—2·39	+0·78	—6·39	—6·88	+0·43	+3·32	+0·38	—10·75
		Jellasore	—0·58	+0·63	—6·73	—2·53	—2·73	—1·00	+0·55	—12·39
		Baripodah	—0·56	—4·10	+1·37	—9·43	—2·34	+3·54	—0·16	—11·68
South-West Bengal	Midnapore	Contai	—1·46	—1·23	—7·51	—7·44	—1·69	—4·33	+5·89	—17·77
		Tamluk	—0·81	—4·78	—3·06	—7·01	—1·40	—2·11	+3·13	—16·04
		Midnapore	—1·84	—2·10	—6·27	—7·02	—0·30	—1·63	+4·68	—14·48
		Ghatal	+1·73	—3·05	—1·87	—11·79	—3·10	—1·38	+6·11	—13·35
	24-Parganas	Saugor Island	—2·97	—2·60	—9·82	—5·07	+1·93	—2·38	+6·64	—14·27
		Diamond Harbour	+2·73	—1·17	+7·05	—1·18	—1·44	—2·94	+5·87	+8·92
		Alipore (Observatory)	—0·97	—1·37	—3·18	—4·65	—2·31	—1·07	+1·47	—12·68
		Barrackpore	—2·57	—4·40	—2·11	—4·47	—1·62	+1·17	+3·48	—10·52
		Dum-Dum	—2·03	+0·06	+1·82	—7·73	+2·30	—1·89	+1·91	—5·56
		Barasat	—1·45	—1·86	—0·65	—7·56	—0·69	+0·68	+1·87	—9·66
		Basirhat	—3·35	—2·74	+5·67	—6·60	—3·58	+2·82	+0·99	—6·79
	Howrah	Howrah	—2·14	—0·54	—1·65	—5·91	—1·98	—2·79	+1·27	—13·74
		Mohesreka	—3·27	—3·31	—4·93	—9·92	—3·51	—0·74	+2·83	—22·85
	Hooghly	Serampore	—1·41	—3·13	—1·64	—4·06	—3·29	+0·32	+5·68	—7·53
		Hooghly	—0·59	—4·42	—4·47	—7·16	+0·29	—0·14	+3·86	—12·63
		Jahanabad	+0·61	—1·60	+1·60	—12·40	—2·65	—2·56	+3·00	—14·00
	Nadia	Ranaghat	+0·12	—0·92	+0·36	—8·07	—1·32	+0·03	+2·35	—7·45
		Kishnaghur	—3·59	—0·20	—3·86	—7·85	—3·35	—0·67	+2 29	—17·23
		Chuadanga	+2·00	—1·84	—5·14	—6·43	?	?	?	—11·41?
		Meherpur	—1·35	+0·04	—1·79	—2·18	—0·07	—1·84	+0·30	—6·89
		Kushtia	+1·56	—4·59	—0·26	—5·16	—2·77	—2·69	+0·59	—13 32
	Khulna	Satkhira	—0·71	—6·82	—2·34	—4·23	—0·40	+1·62	+0·35	—12·53
		Bagerhat	—0·28	—5·57	—1·08	—1·67	—3·05	+2·78	+1·20	—7·67
		Khulna	—1·17	—3·96	+3·26	—4·53	—4·53	+2·36	+1·24	—7·33
	Jessore	Narail	—0·40	—0·27	+3·06	—4·05	—4·50	+2·39	+2·97	—0·80
		Jessore	+0·77	—2·20	—2·90	—7·77	—2·78	+2·25	+7·47	—5·16
		Jhenidah	+2·27	—4·15	+0·43	—2·65	—3·34	+3·94	+1·92	—1·58
		Magura	—1·33	—1·77	+2·54	+0·43	—5·27	+1·43	+3·58	—0·39
		Bangaon	+0·09	—3·78	—1·16	—6·50	—0·52	+2·92	+3·99	—4·96
	Burdwan	Kalna	—1·06	+0·58	+0·11	—4·09	—1·39	+2·19	+2·99	—0·67
		Burdwan	—1·06	+2·43	—3·2	—9·32	—1·26	—0·03	+1·65	—10·87
		Katwa	—2·16	—4·42	+3·90	—5·32	—1·91	—0·95	+0·56	—10·30
		Raniganj	—0·45	+5·01	—5·35	—6·06	+2·47	—0·13	+0 06	—4·45

Meteorological Division.	District.	Station.	May.	June.	July.	August.	September.	October.	1st—15th November.	Total
South-West Bengal—concld.	Bankura ...	Bankura ...	+1·43	+0·68	−3·14	−10·44	−1·41	+0·14	+1·73	−11·04
		Vishnupur ...	+0·33	−2·39	−1·64	−8·05	−0·63	+0·74	+2·31	−9·30
		Maliara ...	−1·65	−1·52	−6·94	−6·06	+0·25	−2·20	−0·04	−18·16
		Khatra ...	+1·01	−1·47	−2·11	−6·13	+1·55	+0·59	+2·17	−4·39
	Birbhum ...	Suri ...	−1·30	+6·31	+1·99	−4·29	−4·51	−1·93	−0·03	−3·76
		Hetampur ...	−0·22	−1·98	+1·56	−2·82	−3·78	+1·95	+0·02	−5·27
		Rampur Hat ...	+0·27	+0·83	−0·78	−5·19	−3·02	+1·58	−0·08	−6·39
	Murshidabad	Kandi ...	−1·58	−1·12	−2·20	−2·05	−1·76	−1·62	−0·10	−10·43
		Berhampore ...	−0·90	+1·11	−0·99	+3·60	−2·67	−2·99	−0·10	−2·94
		Lalbag ...	+2·57	+3·72	−3·14	−2·58	−3·00	−1·27	−0·18	−3·88
		Azimganj ...	+0·20	−0·44	+3·07	−9·60	−2·88	−2·27	−0·19	−12·11
		Jangipur ...	−0·32	−2·96	−2·15	−0·43	−5·64	−1·91	−0·07	−13·48
		Lalgola ...	+0·03	−5·10	−2·64	+1·88	−4·76	−3·22	−0·20	−14·01
North Bengal.	Pabna ...	Pabna ...	+1·20	−2·77	+1·14	−6·76	−6·06	−3·02	+0·38	−15·89
		Sirajganj ...	+1·51	+0·23	+6·98	−0·30	−4·33	−3·65	−0·21	+0·23
	Bogra ...	Sherpur ...	−2·02	−3·16	+1·96	−1·89	−4·63	−2·97	−0·54	−13·25
		Nowkhilla ...	+1·01	−1·08	+6·10	+2·02	+0·64	−3·71	−0·47	+4·51
		Bogra ...	−2·24	−4·78	+1·05	+1·58	−2·52	−2·99	−0·20	−10·10
		Panchbibi ...	−3·20	+0·84	+1·16	+0·97	−5·54	−3·40	−0·01	−9·18
	Rajshahi ...	Boalia ...	−0·71	−3·56	−5·16	−0·65	−6·34	−3·07	−0·08	−19·57
		Nator ...	+2·89	−0·30	+7·86	−2·72	−7·16	−3·48	−0·18	−3·09
		Naugaon ...	−1·22	−5·24	+2·59	+1·72	−9·57	−0·69	−0·13	−12·54
	Malda ...	Malda ...	−3·19	−3·48	+4·61	−1·49	−4·90	−1·73	−0·16	−10·34
		Chanchal ...	−2·90	−8·57	+5·67	−1·32	−7·85	−2·73	−0·19	−17·89
	Dinajpur ...	Mahadebpur ..	−2·92	−4·28	+0·85	+2·14	−6·04	−1·35	−0·08	−11·68
		Churaman ...	−0·90	−6·36	+17·26	+6·65	−8·76	−1·80	−0·12	+5·97
		Raiganj ..	−1·51	−5·65	+16·78	+11·77	−3·53	−2·94	−0·06	+14·86
		Dinajpur ...	+0·76	−3·28	+8·82	+11·41	−8·40	−4·63	−0·06	+4·62
		Balurghat ...	−3·13	−6·03	+8·13	+5·30	−2·42	−1·77	−0·09	−0·06
	Rangpur ...	Bhawaniganj (*Gaibanda*). ...	+8·44	−1·80	+1·47	+3·06	−7·35	−4·42	−0·06	−0·66
		Rangpur ...	+6·12	−5·28	+8·45	+16·14	−6·18	−1·78	−0·09	+17·38
		Kurigaon ...	+3·97	−2·97	+8·59	+12·11	−7·03	−4·20	−0·15	+10·32
		Bagdogra (*Nilphamari*).	+3·39	−15·79	+35·03	+16·58	−8·97	−2·48	−0·02	+27·74
	Jalpaiguri ...	Jalpaiguri ...	+16·94	−9·96	+27·16	+14·17	−6·29	−4·06	−0·08	+37·88
	Kuch Bihar	Dinhatta ...	+16·90	−2·23	+18·78	+16·59	−11·29	−5·11	−0·03	+33·61
		Kuch Bihar ...	+31·46	−7·45	+18·49	+18·52	−11·79	−5·10	−0·05	+43·90
		Mickliganj ...	+15·62	+2·07	+15·85	+21·07	−10·35	−2·52	Nil	+41·74
		Matabhanga ...	+18·73	−7·34	+18·42	+13·90	−8·50	−5·07	−0·03	+30·11
	Darjeeling	Buxa ...	+11·63	−0·74	+34·08	+9·23	+13·30	−0·44	+0·71	+67·77
		Siliguri ...	+6·09	+4·95	+14·87	+13·52	+3·08	−3·35	+0·02	+39·18
		Darjeeling ...	+4·21	+1·60	+13·16	+0·80	−5·11	−5·94	−0·07	+8·65
		Kalimpong ...	+4·19	−3·55	+2·40	−4·34	+1·23	−2·53	−0·12	−2·72
East Bengal	Chittagong...	Cox's Bazar ...	+4·67	−5·95	−7·19	−8·49	+4·53	+9·68	−1·00	−3·75
		Chittagong ...	+2·59	−15·38	−6·16	−11·83	+3·56	+7·86	+3·89	−15·47
	Chittagong Hill Tracts.	Rangamati ...	+5·13	−3·52	−3·51	−8·05	−4·33	+0·04	+1·49	−12·75
	Backergunge	Patuakhali ...	−4·06	−8·90	−2·16	−1·14	−5·44	+1·09	+1·08	−19·53
		Pirojpur ...	−1·67	−4·24	−4·78	−8·43	−4·79	−0·06	+1·74	−22·23
		Barisal ...	−0·72	−3·12	−2·79	−2·95	−2·41	+0·66	+1·41	−9·92
		Bhola ...	−1·58	−5·42	−1·32	−9·24	−3·98	+1·40	+1·54	−18·60

Meteorological Division.	District.	Station.	May.	June.	July.	August.	September.	October.	1st—15th November.	Total.
East Bengal —*concld.*	Noakhali ...	Noakhali ...	—2·75	—0·94	—0·09	—5·57	—3·07	+4·33	+5·02	—3·07
		Fenny ...	+1·27	—11·35	—2·27	—11·37	—5·56	+7·34	+3·44	—18·5
	Faridpur ...	Madaripur ...	+0·47	—2·14	—1·25	—7·17	—1·39	—0·31	+4·16	—7·62
		Faridpur ...	—0·35	—4·23	—0·21	—2·99	—2·88	+1·06	+5·83	—3·77
		Goalundo ...	—0·63	—2·27	—0·47	—1·57	—2·85	—1·98	+2·73	—7·04
	Dacca ...	Munshiganj ...	+0·63	—6·31	—6·66	—5·81	—2·80	+1·99	+3·19	—15·77
		Dacca ...	+0·43	—5·86	—5·16	—6·49	—4·74	+1·40	+6·68	—13·74
		Narainganj ...	+1·14	—4·72	—7·82	—3·90	—1·30	+1·66	+4·79	—10·15
		Manikganj ...	+2·31	—3·05	—2·42	—3·39	—4·27	—1·36	+4·08	—12·72
	Hill Tippera	Agartola ...	+1·26	+1·54	+0·36	—7·02	—1·08	—3·02	+4·03	—3·93
	Tippera ...	Comillah ...	+1·53	—2·58	—1·02	—10·34	—4·84	+3·65	+2·35	—11·25
		Chandpur ...	+6·90	+8·21	+3·77	—11·89	—4·53	—1·05	+3·73	+5·14
		Brahmanbaria ...	+3·12	+1·65	—2·83	—6·93	+1·26	+4·23	+3·28	—3·78
	Mymensingh	Kishorganj ...	+9·63	—3·75	—4·97	+0·22	—3·57	—2·11	+3·03	—1·52
		Atia (*Tangail*) ...	+1·99	—4·76	—2·48	—5·11	—2·57	—1·95	+0·37	—14·51
		Mymensingh ...	+7·45	—4·13	—0·92	—1·89	—7·17	—3·69	—0·04	—10·39
		Jamalpur ...	+2·60	—3·89	+4·36	+2·71	—2·89	—2·94	—0·22	—0·27
		Netrokona ...	+10·70	—0·95	+1·77	+2·90	—2·49	—1·16	+0·24	+11·01
North Bihar.	Purnea ...	Kishanganj ...	+0·67	—6·24	+2·41	+23·01	—9·39	—2·03	—0·02	+8·41
		Araria ...	—0·64	+4·50	+5·90	+19·02	—10·57	—3·48	—0·03	+14·7
		Purnea ...	+0·73	—3·10	+8·55	+8·66	—8·88	—3·94	—0·06	+1·96
	Bhagalpur ...	Madhipura ...	—2·04	+1·97	+2·08	+4·80	—6·92	—4·06	—0·03	—4·2
		Supaul ...	—1·18	+3·31	+0·40	+5·27	—6·43	—2·88	Nil	—1·5
		Bhagalpur ...	—2·12	—2·51	—2·98	+4·75	—5·26	—2·71	—0·21	—11·0
		Banka ...	—1·48	—3·88	+7·05	—2·19	—0·54	—1·87	—0·07	—2·9
	Darbhanga	Tajpur ...	—1·85	—1·18	—2·72	+7·15	—2·74	—3·16	—0·04	—4·5
		Darbhanga ...	—0·58	—0·12	—0·70	+12·76	—6·56	—2·97	—0·01	+1·8
		Madhubani ...	—0·90	+1·49	+6·72	+5·53	—8·02	—2·62	Nil	+2·2
	Muzaffarpur	Sitamarhi ...	—0·85	+4·43	+2·57	+2·36	—3·84	—2·74	Nil	+1·9
		Muzaffarpur ...	—1·99	+0·86	—1·37	+2·13	—5·88	—3·47	—0·05	—9·7
		Hajipur ...	—1·73	—1·90	—2·50	+5·82	—3·72	—3·44	—0·06	—7·5
	Champaran	Motihari ...	+1·04	+8·00	+8·69	+12·65	—3·21	—3·49	Nil	+23·6
		Bettiah ...	—1·47	+1·94	+1·74	+8·62	—4·63	—3·58	Nil	+2·6
	Saran ...	Gopalganj ...	—1·74	—1·35	—2·55	+8·25	—0·39	—5·01	—0·03	—2·8
		Siwan ...	—1·58	—1·64	—2·92	+6·30	—3·27	—4·02	—0·04	—7·1
		Chapra ...	—0·30	+1·58	—5·52	+1352	—3·44	—3·51	—0·03	+2·3
South Bihar.	Shahabad ...	Buxar ...	—0·88	+0·36	—2·26	+11·30	—4·47	—3·27	+0·54	+1·3
		Dehri ...	—1·26	+2·33	+1·84	—0·32	—6·15	—2·53	—0·04	—6·1
		Bhabua ...	—0·87	+0·16	—3·56	—0·17	—4·11	—3·07	—0·33	—11·9
		Sasaram ...	—1·17	+2·27	—2·46	+0·13	—4·52	—3·45	—0·05	—9·2
		Arrah ...	—1·10	—0·95	—0·94	+5·63	—0·68	—2·99	—0·05	—1·0
	Gaya ...	Aurungabad ...	—1·62	—0·64	—162	—0·43	—1·93	—2·01	—0·12	—8·3
		Gaya ...	—1·07	—0·83	+012	+4·94	—1·55	—1·95	—0·22	—0·5
		Nawadah ...	—1·64	+0·87	—3·33	+1·08	—0·89	—1·86	—0·09	—5·8
		Jahanabad ...	—1·74	—2·77	—1·02	+1·56	+0·87	—3·39	—0·14	—6·6
	Patna ...	Patna ...	—1·75	—1·59	—0·39	+12·95	—2·40	—3·21	—0·03	+3·5
		Dinaporo ...	—1·48	—2·58	+1·39	+19·61	—3·45	—3·26	—0·05	+10·1
		Bihar ...	—1·80	—1·76	—2·93	+7·97	+1·62	—2·92	—0·13	+0·0
		Barh ...	—2·26	+1·68	—2·04	+7·34	—2·98	—2·73	—0·15	—1·1
	Monghyr ...	Begusarai ...	—2·02	—1·85	—2·03	+1·65	—3·66	—0·97	—0·21	—9·0
		Monghyr ...	—2·16	—1·23	+0·22	—0·53	—5·32	—1·97	—0·07	—11·0
		Jamui ...	—1·04	—0·85	+2·63	—1·75	—2·84	—1·77	—0·03	—5·6

Meteorological Division.	District.	Station.	May.	June.	July.	August.	September.	October.	1st—15th November.	Total.
South Bihar —*contd.*	Sonthal Parganas.	Rajmahal ...	—4·30	—4·81	—2·99	+0·12	—9·01	—1·76	—0·11	—22·86
		Godda ...	—1·86	—2·24	+12·06	—3·89	—2·56	—2·59	—0 05	—1·13
		Pakour ...	—0·21	—4·01	—5·34	—3·96	—5·23	+0·95	—0·05	—17·85
		Naya Dumka ...	—0·35	—2·13	+0·80	—6·58	—2·98	—0·91	—0·12	—12·27
		Deoghur ...	—2·14	—2·75	+2·31	+3·30	—2·42	—3·83	—0·09	—5·62
		Jamtara ...	—0·48	—3·72	+5·70	—6·32	+3·95	—1·13	+0·02	—1·98
	Hazaribagh	Pachamba (*Giridih*). ...	—0·93	—2·57	—0·80	—3·80	—0·86	—0·09	—0·16	—9·21
		Hazaribagh ...	—1·46	+2·36	+4·13	—6·17	—0·72	—0·60	—0·17	—2·63
		Semtagurah ...	—1·38	+1·33	—6·01	—4·14	—1·33	+0·81	—0·23	—10·95
		Mahudi Hills ...	—1·38	+2·27	—4·38	—2·27	—1·71	+2·41	—0·24	—5·30
		Jhumra Hill ...	—0·59	+1·46	—1·07	—8·48	—3·12	+2·17	+0·03	—9·60
Chota Nagpur.	Lohardaga	Lohardaga ...	—2·08	+1·43	+1·53	—2·94	—5·09	+3·45	—0·07	—3·77
		Ranchi ...	—2·06	+2·26	—1·76	—2·49	—0 86	+2·72	+0 51	—1·68
	Palamau ...	Palamau (*Daltonganj*). ...	—1·25	+0·24	+1·25	+3·33	+0·48	—2·24	—0·33	+1·48
	Singbhum ...	Chaibassa ...	—1 98	—2·32	+2·79	—8·76	+4·73	—0·20	+3·02	—2·72
	Manbhum ...	Purulia ...	—1·83	+3·78	+0·78	—10·80	+1·10	+0·56	+0·54	—5·87
		Gobindpore ...	+0·20	+0·91	—2·89	—3·55	+3·11	—2 07	+0·26	—4·03

TABLE VI.

Percentage variation of the monthly Rainfall of the subdivisional Rainfall-registering Stations in Bengal from the Normal Average Rainfall for the months of May to 15th November 1892.

Meteorological Division.	District.	Station.	May.	June.	July.	August.	September.	October.	1st—15th November.	Total.
Orissa	Puri	Puri ...	−100	+42	−16	−25	−18	−21	+111	−10
		Khurdah ...	−61	+33	−17	−22	−19	−31	−85	−16
		Bhanpur ...	−66	+69	+11	−10	+29	−3	−100	+9
		False Point ...	−43	+74	−37	−59	+38	−52	+75	−13
	Cuttack	Jagatsingpur ...	−89	+2	+31	+2	+23	+33	+23	+11
		Banki ...	−12	−11	+30	−1	−7	−17	+29	+2
		Cuttack ...	−58	+2	−7	−43	−9	+121	−54	−4
		Kendrapara ...	−86	+17	+1	−35	−17	+1	+55	−14
		Jajpore ...	−49	+9	−31	−1	+43	−33	−66	−6
	Balasore	Chandbaly ...	−70	+104	−31	−23	−59	−48	+24	−20
		Bhadrak ...	−43	+102	−33	−5	−2	+33	−57	+6
		Sorah ...	−20	+125	−50	−55	−5	+4	+29	−10
		Balasore ...	−48	+9	−46	−55	+4	+52	+54	−18
		Jellasore ...	−17	+8	−44	−23	−26	−22	+220	−24
		Baripodah ...	−11	−40	+11	−76	−21	+90	−27	−21
South-West Bengal.	Midnapore...	Contai ...	−32	−13	−50	−54	−15	−52	+982	−28
		Tamluk ...	−16	−52	−26	−51	−17	−47	+1,159	−3
		Midnapore ...	−36	−24	−50	−56	−4	−34	+2,340	−28
		Ghatal ...	+32	−30	−14	−76	−35	−39	+10,185	−23
	24-Parganas	Saugor Island ...	−64	−26	−59	−34	+16	−25	+851	−21
		Diamond Harbour	+53	−12	+48	−8	−13	−57	+1,957	+15
		Alipore (Observatory).	−18	−13	−24	−34	−23	−24	+544	−21
		Barrackpore ...	−49	−42	−17	−37	−22	+33	+791	−20
		Dum-Dum ...	−34	+1	+15	−61	+26	−43	+1,005	−10
		Barasat ...	−24	−19	−6	−63	−8	+15	+719	−18
	Howrah	Basirhat ...	−50	−25	+45	−50	−40	+64	+330	−12
		Howrah ...	−41	−5	−13	−48	−24	−64	+470	−26
		Mohesreka ...	−52	−37	−36	−73	−41	−22	+884	−42
	Hooghly	Serampore ...	−28	−32	−13	−33	−41	+8	+3,341	−14
		Hooghly ...	−10	−48	−37	−60	+4	−3	+2,032	−25
		Jahanabad ...	+12	−17	+13	−77	−29	−58	+1,429	−25
	Nadia	Ranaghat ...	+2	−10	+4	−64	−20	+1	+653	−15
		Kishnaghur ...	−62	−2	−38	−70	−42	−16	+694	−36
		Chuadanga ...	+26	−20	−50	−53	?	?	?	−21?
		Meherpur ...	−23	+1	−18	−18	−1	−50	+231	−14
		Kushtia ...	+22	−41	−2	−43	−27	−54	+281	−23
	Khulna	Satkhira ...	−11	−55	−11	−34	−5	+34	+100	−22
		Bagerhat ...	−4	−39	−7	−13	−30	+53	+255	−12
		Khulna ...	−18	−31	+28	−37	−47	+56	+344	−13
	Jessore	Narail ...	−6	−2	+34	−38	−62	+66	+803	−2
		Jessore ...	+10	−17	−26	−63	−32	+51	+3,113	−9
		Jhenidah ...	+35	−33	+4	−21	−37	+82	+835	−3
		Magura ...	−17	−15	+25	+4	−60	+38	+1,98[illegible]	−1
		Bangaon ...	+2	−36	−11	−50	−6	+64	+1,53[illegible]	−9
	Burdwan	Kalna ...	−22	+7	+1	−36	−21	+56	+87[illegible]	−1
		Burdwan ...	−21	+29	−29	−73	−16	−1	+58[illegible]	−22
		Katwa ...	−41	−45	+39	−44	−23	−24	+20[illegible]	−21
		Raniganj ...	−14	+60	−39	−45	+34	−4	+4[illegible]	−9

Meteorological Division.	District.	Station.	May.	June.	July.	August.	September.	October.	1st—15th November.	Total.
South-West Bengal—*concld.*	Bankura ...	Bankura ...	+37	+7	—25	—73	—18	+3	+1,018	—21
		Vishnupur ...	+7	—23	—13	—57	— 7	+27	+1,777	—17
		Maliara ...	—51	—15	—49	—46	+4	—67	—11	—36
		Khatra ...	+30	—13	—14	—46	+17	+16	+324	—8
	Birbhum ...	Suri ...	—35	+60	+16	—31	—43	—53	—27	—7
		Hetampur ...	—7	—17	+11	—23	—35	+68	+15	—10
		Rampur Hat ...	+7	+8	—7	—41	—27	+41	—50	—12
	Murshidabad	Kandi ...	—35	—12	—18	—18	—18	—41	—31	—20
		Berhampore ...	—16	+12	—10	+30	—24	—67	—42	—6
		Lalbag ...	+47	+45	—30	—21	—28	—28	—58	—7
		Azimganj ...	+4	—5	+30	—76	—30	—48	—100	—23
		Jangipur .	—6	—34	—20	—4	—52	—58	—88	—27
		Lalgola ...	+1	—53	—23	+17	—44	—74	—100	—26
North Bengal.	Pabna ...	Pabna ...	+17	—25	+11	— 53	—55	—63	+271	—28
		Sirajganj ...	+21	+2	+64	—3	—44	—83	— 60	+1
	Bogra ...	Sherpur ...	—24	—25	+15	—15	—45	—71	—100	—22
		Nowkhilla ..	+15	—8	+54	+19	+7	—72	—100	+8
		Bogra ...	—27	—33	+8	+13	—23	—75	— 91	—16
		Panchbibi ...	—43	+7	+9	+8	—52	[illegible]	—100	—16
	Rajshahi ...	Boalia ...	—13	—37	—44	—5	—56	—69	—53	—36
		Nator ...	+42	—3	+66	—22	—62	—78	—69	—5
		Naugaon ...	—23	—38	+23	+20	—75	—30	—100	—23
	Malda ...	Malda ...	—77	—31	+40	—15	—43	—40	—100	—20
		Chanchal ...	—60	—68	+45	—9	—74	—91	—100	—31
	Dinajpur ...	Mahadebpur ...	—47	—33	+7	+16	—53	—45	—100	—20
		Churaman ...	—19	—54	+15	+63	—69	—74	—100	+11
		Raiganj ...	—24	—39	+137	+92	—33	—78	—100	+25
		Dinajpur ...	+11	—20	+66	+94	—75	—90	—100	+7
		Balurghat ..	—51	—49	+70	+55	—22	—52	—100	—1
	Rangpur ...	Bhawaniganj (*Gaibanda*) ...	+95	—11	+12	+30	—61	—86	—100	—1
		Rangpur ...	+60	—27	+51	+134	—45	—33	—100	+22
		Kurigaon ...	+29	—13	+64	+109	—56	—95	—100	+13
		Bagdogra (*Nilphamari*) ..	+28	—60	+255	+111	—58	—53	—100	+32
	Jalpaiguri ...	Jalpaiguri ...	+142	—35	+106	+57	—26	—73	—100	+31
	Kuch Bihar	Dinhatta ...	+121	—7	+138	+95	—61	—99	—100	+34
		Kuch Bihar ...	+213	—20	+82	+86	—53	—94	—100	+35
		Mickliganj ...	+129	+7	+78	+86	—52	—63	—100	+38
		Matabhanga ...	+148	—23	+82	+58	—44	—80	—100	+26
	Darjeeling	Buxa ...	+57	—2	+71	+22	+42	—4	+203	+34
		Siliguri ...	+69	+18	+45	+61	+21	—77	+14	+35
		Darjeeling ...	+49	+7	+44	+3	—29	—85	—100	+8
		Kalimpong ...	+74	—18	+8	—23	+12	—95	—100	—3
East Bengal—	Chittagong ..	Cox's Bazar ...	+45	—17	—18	—30	+30	+125	—53	—3
		Chittagong ...	+27	—62	—28	—59	+26	+140	+360	—16
	Chittagong Hill Tracts.	Rangamati ...	+51	—19	—18	—44	—34	+1	+99	—15
	Backergunge	Patuakhali ...	—49	—40	—10	—7	—41	+18	+79	—22
		Pirojpur ...	—24	—26	—30	—57	—42	—1	+171	—31
		Barisal ...	—9	—19	—18	—24	—21	+1[illegible]	+141	—14
		Bhola ...	—22	—25	—7	—51	—33	+26	+138	—22

Meteorological Division.	District.	Station.	May.	June.	July.	August.	September.	October.	1st–15th November.	Total.
East Bengal—*concld.*	Noakhali ...	Noakhali ...	—28	—4	—1	—22	—17	+63	+330	—3
		Fenny ...	+12	—40	—10	—52	—35	+125	+149	—17
	Faridpur ...	Madaripur ...	+5	—16	—10	—58	—16	—7	+1,435	—13
		Faridpur ...	—4	—34	—2	—24	—28	+25	+2,082	—6
		Goalundo ...	—8	—11	—4	—14	—33	—41	+941	—12
	Dacca ...	Munshiganj ...	+6	—40	—42	—39	—23	+36	+523	—21
		Dacca ...	+5	—44	—39	—52	—47	+35	+1,518	—22
		Narayanganj ...	+14	—34	—50	—29	—13	+37	+665	—15
		Manikganj ...	—26	—31	—21	—29	—52	+34	+1,166	—23
	Hill Tippera ...	Agartola ...	+12	+11	+3	—53	—10	—57	+584	—6
	Tippera ...	Comillah ...	+15	—13	—6	—59	—42	+86	+331	—14
		Chandpur ...	+80	+49	+24	—58	—38	—17	+777	+6
		Brahmanbaria ...	+29	+11	—26	—55	+11	+89	+729	+6
	Mymensingh	Kishorganj ...	+95	—20	—38	+2	—27	—40	+891	—2
		Atia (*Tangail*) ...	+28	—36	—22	—43	—26	—39	+195	—25
		Mymensingh ...	+67	—22	—6	—14	—51	—65	—14	—13
		Jamalpur ...	+30	—27	+34	+20	—21	—58	—100	—1
		Netrokona ...	+93	—4	+11	+17	—18	—19	+600	+13
North Bihar.	Purnea ...	Kishanganj ...	+11	—41	+15	+142	—67	—60	—100	+12
		Arariah ...	—11	+35	+37	+139	—77	—99	—100	+22
		Purnea ...	+16	—27	+62	+60	—63	—99	—100	+3
	Bhagalpur ...	Madhipura ...	—50	+23	+18	+41	—67	—94	—100	—8
		Supaul ...	—30	+36	+4	+43	—66	—100	—100	—3
		Bhagalpur ...	—82	—83	—27	+47	—69	—85	—100	—26
		Banka ...	—55	—50	+66	—20	—7	—54	—100	—7
	Darbhanga ..	Tajpur ...	—79	—16	—22	+69	—34	—100	—100	—10
		Darbhanga ...	—22	—2	—6	+112	—68	—99	—100	+4
		Madhubani ...	—30	+17	+63	+53	—79	—100	—100	+5
	Muzaffarpur	Sitamarhi ...	—32	+55	+24	+24	—39	—100	—100	+4
		Muzaffarpur ...	—73	+11	—12	+21	—59	—100	—100	—21
		Hajipur ..	—87	—28	—21	+57	—51	—86	—100	—18
	Champaran	Motihari ...	+42	+101	+83	+110	—35	—100	—100	+52
		Bettiah ...	—55	+23	+14	+70	—49	—100	—100	+5
	Saran ...	Gopalganj ...	—66	—21	—20	+81	—6	—100	—100	—6
		Siwan ...	—86	—24	—25	+58	—38	—100	—100	—16
		Chapra ...	—20	+26	—45	+137	—50	—97	—100	+6
South Bihar.	Shahabad ...	Buxar ...	—85	+7	—20	+111	—62	—98	+900	+3
		Dehri ...	—89	+50	+16	—3	—80	—88	—100	—15
		Bhabhua ...	—75	+3	—29	—1	—62	—95	—100	—29
		Sasaram ...	—100	+44	—22	+1	—65	—94	—100	—23
		Arrah ...	—61	—16	—9	+51	—10	—91	—100	—3
	Gaya ...	Aurungabad ...	—96	—11	—13	—3	—27	—73	—100	—19
		Gaya ...	—65	—13	+1	+43	—21	—83	—100	—1
		Nawadah ...	—81	+16	—28	+10	—13	—69	—100	—1
		Jahanabad ...	—100	—55	—8	+13	+15	—96	—100	—16
	Patna ...	Patna ...	—80	—23	—3	+12	—34	—97	—60	+9
		Dinapore ...	—88	—39	+12	+173	—51	—100	—100	+25
		Bihar ...	—82	—27	—23	+75	+25	—91	—100	+1
		Barrh ...	—100	+33	—17	+78	—40	—86	—100	—3
	Monghyr ...	Begusarai ...	—88	—30	—18	+16	—50	—31	—100	—23
		Monghyr ...	—86	—19	+2	—4	—59	—56	—100	—24
		Jamui ...	—48	—13	+20	—16	—38	—68	100	—13

Meteorological Division.	District.	Station.	May.	June.	July.	August.	September.	October.	1st–15th November.	Total.
South Bihar.—*concld.*	Sonthal Parganas.	Rajmahal ...	—85	—46	—23	+1	—74	—53	—100	—42
		Godda ...	—52	—33	+109	—33	—27	—85	—100	—2
		Pakour ...	—5	—38	—43	—34	—41	+21	—100	—32
		Naya Dumka ...	—10	—24	+6	—49	—28	—22	—67	—23
		Deoghur ...	—68	—32	+17	+27	—28	—88	—100	—11
		Jamtara ...	—14	—43	+42	—50	+53	—35	+7	—4
Chota Nagpur.	Hazaribagh	Pachamba (*Giridi*). ...	—41	—31	—6	—31	—10	—3	—100	—19
		Hazaribagh ...	—62	+33	+32	—46	—8	—19	—89	—5
		Semtagurah ...	—54	+18	—47	—38	—16	+28	—100	—24
		Mahudi Hills ...	—62	+30	—35	—15	—20	+95	—73	—11
		Jhumra Hill ..	—21	+14	—6	—52	—29	+74	+18	—16
	Lohardga	Lohardga ...	—82	+18	+12	—19	—52	+146	—100	—8
		Ranchi ...	—65	+26	—13	—17	—10	+91	+189	—3
	Palamau ...	Palamau (*Daltonganj*). ...	—89	+4	+10	+29	+6	—80	—100	+3
	Singbhum ...	Chaibassa ...	—47	—28	+20	—63	+57	—7	+1,313	—5
	Manbhum	Purulia ...	—51	+43	+6	—78	+13	+16	+337	—12
		Gobindpur ..	+11	+12	—24	—29	+43	—58	+185	—9

Meteorological Office, Bengal,
The 10*th December* 1892.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 7th January, 1893.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.			
Burdwan Divn.			
1	Burdwan Jan. 7, '93 Kalna ... Katwa ... Raniganj ..	Nil Nil Nil Nil	Weather—foggy and cloudy. Harvesting of *aman* finished. Prospects of *rabi* crops and sugarcane fair. Condition of cattle good. Prices of common rice:— Srs. Burdwan ... ... 10 to 13 } Kalna ... ... 11 to 13 } Katwa ... ... 13½ } per rupee. Raniganj ... ... 13 }
2	Bankura „ 7, '93	Nil	Weather—cloudy and rather hot for the season. Harvesting of *aman* paddy over. *Rabi* crops doing well. Fodder and water sufficient. No cattle-disease reported. Prices of common rice:— Srs. Sadar ... ... 12½ } per rupee. Vishnupur ... ... 11½ }
3	Birbhum .. 7, '93 Rampur Hât ...	0·01 Nil	Weather—cloudy and seems to promise rain. Prices of rice still 12 to 14 seers per rupee. Fodder and water sufficient.
4	Midnapore „ 7, '93	Nil	Weather—somewhat warmer than last week; cloudy occasionally. The rice harvest is finished. Prices of common rice:— Srs. Sadar ... ... 11 } Contai ... ... 10 to 14 } Tamluk ... ... 12 to 14 } per rupee. Garhbeta ... ... 12 to 13 }
5	Hooghly .. 7, '93 Serampore .. Jahanabad ...	Nil Nil Nil	Weather—rather warm; clouding over. No material change to report. *Rabi* crops doing fairly well, though in the drier parts not quite up to its first promise. There has been some cattle-disease in Jahanabad. Water-supply rather short in Dwarbasini in thana Pandua, as previously reported. Prices of common rice:— Srs. C. Sadar ... ... 9 to 10 0 } Serampore ... ... 10 8 } per rupee. Jahanabad ... .. 10 13 }
6	Howrah .. 7, '93 Uluberia ...	Nil Nil	Weather—seasonable. Harvesting of winter rice progressing. Sugarcane and spring crops doing well. Condition of cattle good. Fodder and water-supply sufficient except that in Howrah Municipility the tanks are drying too quickly. Price of rice 10 to 12 seers per rupee.
Presidency Divn.			
7	24-Parganas „ 7, '93	Nil	Weather—seasonable. Harvesting of *aman* all but finished. *Rabi* crops promising. Condition of cattle good. Fodder and water sufficient. Prices of common rice:— Srs. C. Srs. Sadar ... ... 9 0 to 13 } Barasat .. .. 10 14 } Basirhat ... . 11 11 } Diamond Harbour ... ... 13 0 } per rupee. Barrackpore ... ... 11 0 } Dum-Dum ... . 11 0 }
8	Nadia „ 7, '93 Kushtia ... Meherpur ... Chuadanga ... Ranaghat ...	Nil Nil Nil Nil Nil	Weather—cloudy; getting warm. *Rabi* crops on the ground doing well. Price of rice remains unchanged.
9	Khulna „ 7, '93 Bagerhat ... Satkhira ...	Nil Nil Nil	Weather—seasonable. Harvesting of *aman* continues. Outturn good except in Paikgachha. Common rice selling at from 12 to 16 seers per rupee. Prices continue to be high in Satkhira. Prospects of *rabi* crops good. Fodder and water sufficient.
10	Jessore „ 7, '93 Jhenida ... Magura .. Narail ... Bangaon ...	Nil Nil Nil Nil Nil	Weather—seasonable. Harvesting of *aman* nearly over; outturn good. Prospects of winter crops fair. Fodder and drinking water sufficient. No cattle-disease. Prices of rice stationary.
11	Murshidabad „ 7, '93	0·09	Weather—cloudy during the latter part of the week. Harvesting of *aman* nearly finished. *Kalai* being still harvested. State of *rabi* crops appear to be favourable except that of wheat in Jangipur. There is sufficient supply of fodder for cattle. Common rice selling at 13 seers per rupee.

Division	No.	District and date of return.		Rainfall at Sadar Station in inches	Character of the weather and State and prospects of the crops.
BENGAL—*concld.*					
CHITTAGONG DIVN.	12	Chittagong	Jan. 7, '93	Nil	Weather—seasonable. Prospect of crops good. *Rabi* cultivation in progress. Prices stationary. Condition of cattle generally good. Supply of fodder sufficient.
	13	Noakhali	„ 7, '93	Nil	Weather—seasonable. Harvesting of *aman* already completed. *Rabi* crops are still being sown. Cow-pox and *damka* prevalent amongst cattle in Sundip. Fodder and water available everywhere. Common rice from 13 to 14 seers per rupee.
	14	Tippera	„ 7, '93	Nil	Weather—seasonable. *Aman* crop has nearly been harvested. State of standing crops good. Price of rice stationary.
	15	Chittagong Hill Tracts.	„ 6, '93	Nil	Weather—seasonable. Harvesting of winter paddy almost over. Vegetables being sold in the bazar. Cutting and pressing of sugarcane commenced. No cattle-disease reported. Prices of common rice:— Srs. Rangamati .. ... 10 } Banderban ... ... 11 } per rupee. Manicksury ... ... 16 }
DACCA DIVN.	16	Dacca	„ 7, '93	Nil	Weather—seasonably cold and fine. Harvesting of *aman* paddy nearly completed. *Rabi* crops doing well. *Kalai* being gathered. Fodder available. No cattle-disease. Common rice selling at from 12 to 13½ seers per rupee.
	17	Faridpur	„ 7 '93	Nil	Weather—seasonable. Cloudy on the 7th. Harvesting of *aman* not yet completed everywhere. *Mug* and *kalai* continue to be harvested. Cultivation and sowing of *jaii* paddy in progress in the char lands. Common rice sells at 13 seers per rupee at Sadar and Goalundo and 14 seers at Madaripur. Condition of cattle good. Fodder and water available.
	18	Backergunge	„ 7, '93	Nil	Seasonably cold weather. Reaping of winter rice is far advanced. Coarse rice sells at from 10 to 15 seers per rupee. Fodder and water enough.
	19	Mymensingh	„ 7, '93	Nil	Weather—seasonable. Prospects of standing crops good. Rice is selling at from 12 to 14 seers per rupee. No cattle disease. Fodder and water sufficient.
RAJSHAHI DIVN.	20	Dinajpur	„ 7 '93	0·23	Weather—cool and cloudy. The rain is beneficial to *rabi* crops, specially to wheat, barley, and tobacco. Prospects of standing crops continue good. Harvesting of winter rice nearly finished. Sugarcane being pressed. Lands being prepared for *bhadoi* and jute. The rain will facilitate the cultivation for these crops. Prices of rice stationary. Condition of cattle good. Supply of fodder and drinking water plentiful.
		Thakurgaon	...	Nil	
	21	Rajshahi	„ 7, '93	Nil	Weather—cloudy and cool. Harvesting of *aman* coming to a close. Prospects of *rabi* crops good. A few cases of small-pox among cattle reported from thana Singra; otherwise the condition of cattle good. Fodder and water sufficient. Price of common rice ranges from 12 to 18 seers per rupee.
		Nator	...	Nil	
		Naugaon	..	Nil	
	22	Rangpur	„ 7, '93	0·37	Weather—seasonable. Prospects of *rabi* crops good. Lands are being ploughed for *bhadoi*. Price of rice unchanged.
		Kurigaon	..	Nil	
		Gaibanda	.	Nil	
		Nilphamari	.	Nil	
		Ulipur	...	Nil	
	23	Bogra	„ 7, '93	Nil	Weather—seasonably cold. Harvesting of *aman* still going on. *Rabi* crops look favourable. Rice selling at 15 seers per rupee. No cattle-disease except in one village in thana Nawabganj. Supply of fodder and water sufficient.
	24	Pabna	„ 7, '93	Nil	Weather—cool; cloudy during the last two days. *Aman* is still being harvested in parts of the Sadar subdivision. Prospects of *rabi* crops continue good. Price of common rice at Sirajganj is Rs. 2-14 to Rs. 3-12 per maund and at Pabna 13½ seers per rupee. Condition of cattle good. Fodder and water sufficient.
	25	Darjeeling	„ 7, '93	0·09	Weather—mornings clear; hills overclouded by the afternoon; nights chilly. Rain on Friday night at Darjeeling. *In the hills*.—Wheat, barley and potatoes progressing favourably. *Tori, phaphur* and *marua* being harvested. *In the terai*:—Paddy nearly all harvested, while potato harvesting still going on. Tobacco and mustard doing well. Prices of coarse rice:— Srs. Hills ... . 10 } Terai ... ... 12 } per rupee.
		Siligari	...	Nil	
	26	Jalpaiguri	„ 7, '93	0·04	Weather—very cold and cloudy. Harvesting of *haimanti* paddy still continues. Prospects of tobacco and potatoes good. *Common rice sells at 13 seers per rupee. Water and fodder sufficient. No cattle-disease.

No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
BHAGALPUR DIVN.				
27	Monghyr	Jan. 7, '93	Nil	Weather—cold and cloudy towards the latter end of the week. Harvesting of rice has been completed. Prospects of indigo are favourable. Condition of cattle good. Prices of common rice:— Srs. Sadar ... ... 13 to 16; Begusarai ... ... 16; Jamui ... ... 14½ } per rupee.
	Begusarai	...	Nil	
	Jamui	...	Nil	
28	Bhagalpur	" 7, '93	0·04	Weather—cloudy. Rice harvest still in progress. Harvesting of mustard has commenced, and in Supaul and Banka it is expected to yield from 12 to 16 annas outturn. Rain wanted for the *rabi* crops.
	Banka	...	Nil	
	Madhipura	...	Nil	
	Supaul		Nil	
29	Purnea	" 7, '93	Nil	Weather—seasonable. Harvesting and threshing of *aghani* going on briskly. *Rabi* doing well. Fodder and water plentiful. No cattle-disease. Price of rice continues the same.
	Kishanganj	...	Nil	
	Araria	...	Nil	
30	Malda	" 7, '93	0·01	Weather—latter part of the week cloudy with a drizzling rain last night (6th). Harvesting and threshing of winter rice approaching completion. Prospects of wheat, barley and other winter crops continue satisfactory. Common rice sells at from 12 to 17 seers per rupee. Supply of fodder and drinking water sufficient.
31	Sonthal Parganas	" 7, '93	0·8	Weather—cool; occasionally somewhat cloudy. Harvesting and threshing of paddy nearly completed; outturn fair. Prospects of *rabi* crops good. Fodder and water sufficient.
	Deoghur	...	Nil	
	Godda	...	Nil	
	Jamtara	...	Nil	
	Pakur	...	Nil	
	Rajmahal	...	Nil	
PATNA DIVISION.				
32	Patna	" 7, '93	0·22	Weather—cool and occasionally cloudy. There has been a slight shower of rain last night (6th) which will be beneficial to the *rabi* crops. Harvesting and threshing of paddy nearly finished. *Rabi* crops generally in ear. Poppy doing well. Prices of common rice:— Srs. Sadar ... . 17; Bihar . ... .. 17; Dinapore ... ... 13 to 14; Barh .. .. .. 13 } per rupee.
33	Gaya	" 7, '93	0·02	Weather—cold and clear in the first part of the week and cloudy towards its close. Harvesting of paddy crop approaching completion, and threshing is in progress. *Rabi* crops are in flower. Prospects of poppy good. Pressing of sugarcane is still going on. Common rice sells at 11 seers per rupee at Gaya. Fodder and water for cattle sufficient.
	Aurangabad	...	0·01	
	Nawada	...	Nil	
	Jahanabad	...	0·04	
34	Shahabad	" 7, '93	0·26	Weather—close and cloudy. Harvesting of rice nearly over. Sugarcane pressing in progress. Rain wanted in Bhabhua. Prospect of *rabi* has changed for better on account of slight rain in Sasaram and Sadar. Fodder and water sufficient. Prices stationary.
	Buxar	...	0·18	
	Sasarám	...	0·20	
	Bhabhua	...	0·10	
35	Darbhanga	" 7, '93	0·67	Weather—cloudy with east winds. Harvesting of winter rice completed. *Rabi* crops will be greatly benefited by the rain which fell last night (6th). Poppy doing well. Common rice selling at 15 seers per rupee. Supply of fodder and water sufficient.
36	Muzaffarpur	" 7, '93	0·94	Weather—occasionally cloudy. Harvesting still continues. *Rabi* doing well. The recent rain will much improve it, but more rain will do good. Fodder and water sufficient.
	Hajipur	..	Nil	
	Sitamarhi		0·03	
37	Saran	" 7, '93	0·23	Weather—cloudy and unseasonably warm. *Rabi* prospects still good. Rain would be of much benefit to them. Even the slight drizzle which has fallen in the last day or two reported to have been beneficial. Condition of poppy excellent. Prices of common rice:— Srs. c. Chapra ... ... 13 8; Siwan ... ... 13 2; Gopalganj .. .. .. 14 15 } per rupee.
	Siwan	..	0·14	
	Gopalganj	...	0·10	
38	Champaran	" 7, '93	0·15	Weather—very cool and cloudy. Harvesting of rice crop is over, but threshing still continues. There has been a slight rainfall twice during the week, which will do good. Poppy plants doing well, and second weeding in progress. The crop is in good condition. Fodder and water for cattle sufficient. Prices slightly rising.
	Bettia	...	0·04	
ORISSA.				
ORISSA DIVN.				
39	Cuttack	" 7, '93	Nil	Weather—cool. Harvesting of winter crops in progress. Supply of fodder and water sufficient. Price of rice stationary.
40	Puri	" 5, '93	Nil	Weather—seasonable. *Sarad* rice being collected. *Dalua* rice being sown. Miscellaneous crops growing fairly well. Prices of common rice stationary.
	Khurda	...	Nil	
	Banpur	..	Nil	
41	Balasore	" 7, '93	Nil	Weather—normal. Harvesting of paddy continues. Price of common rice 17 seers per rupee at Balasore and 18 seers at Bhadrak

	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
CHOTA NAGPUR.				
		South-West Frontier Agency.		
Chota Nagpur Divn.	42	Hazaribagh Jan. 7, '93	...	Weather—cloudy and slight rain. Prospects generally good. Poppy progressing. Common rice selling at from 12 to 16 seers per rupee.
		Giridi ...	Nil	
	43	Lohardaga „ 7, '93	Nil	Weather—cloudy. Harvesting of winter rice finished. Prospects of *rabi* crops continue favourable. Common rice selling at 14 seers per rupee. Fodder and water plentiful.
	44	Palamau „ 6, '93	Nil	Weather—cloudy since last two days. Threshing of paddy is not yet completed. Rain wanted for *rabi*. Common rice selling at 16 seers per rupee. Water and fodder sufficient. No cattle-disease reported.
	45	Singhbhum „ 7, '93	Nil	Weather—cloudy. *Rabi* crops doing well; estimated expected outturn from 12 to 16 annas. Common rice selling at 16 seers per rupee at Chaibassa market. Water and fodder plentiful. Health of cattle good.
	46	Manbhum „ 7, '93	Nil	Weather—cloudy and warm. Prospects of *rabi* crops good Rice selling at from 10 to 14 seers per rupee. Fodder and water-supply sufficient.
		Gobindpur ...	Nil	

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 10th January, 1893.

C. E. BUCKLAND,
Secy. to the Govt. of Bengal.

STATEMENT SHOWING THE STOCKS OF RICE IN AND AROUND CALCUTTA.

NAMES OF MARTS.	Stock in hand as compiled of—												
	1st week of Jan. 1892.	1st week of Feb. 1892.	1st week of March 1892.	1st week of April 1892.	1st week of May 1892.	1st week of June 1892.	1st week of July 1892.	1st week of August 1892.	1st week of Sept. 1892.	1st week of Oct. 1892.	1st week of Nov. 1892.	1st week of Dec. 1892.	1st week of Jan. 1893.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Baliaghata	3,68,200	7,99,000	11.29,000	12,67,000	10,25,000	12.28,000	9,62.000	8,39,000	6,74,000	4,96.500	4.39,000	3,16,000	3,34,000
Ultadanga	58,900	68,500	75,500	69,000	85,900	73.900	65,800	65.900	70,900	65,100	57,300	57,800	65,200
Chitpur, Golabaree, Kumartooly, Hatkhola, and Culpi Ghat.	6,29,500	6,17,700	8,41,400	8,78,400	7,83,000	7,61,300	7,20,400	6,56,300	6,41,400	5,63,300	5,64,800	5,40,700	5,64.700
Pathuriaghatta, Posta, and Jorabagan.	2,500	2,000	3,000	4,000	5,000	4.000	3,000	4,000	3,700	3,000	2.500	2,000	3,000
Tollygunge, Chetla, Kidderpore, and Munshiganj.	1,23,600	1,04,500	1,55,900	1,44,500	1,41,500	1,37,200	1,12,100	1,43,400	96,500	93,600	51.100	40,600	87,900
21 Minor bazars (estimated) ...	2 40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000
Other retail shops, 3,129 in number (estimated).	2,50,000	2,50,000	2,50,000	2,50,000	2.50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000
Baidyabati, Nowabganj, Bhadreshwar, and Chandernagore.	27,135	18,938	31,250	59,450	42,000	32,325	26,062	61,125	51,250	33,908	31,125	40,037	63,961
Total ...	16,99,835	21,00,638	27,26,050	29,12,350	25,77,400	27,26,725	23,79,362	22,59,725	20,27,750	17,45,408	16,35,825	14,87,137	16,08,761
On Railway premises on both sides of the river.	66,689 (on 3rd Jan. 1892.)	44,775 (on 3rd Feb. 1892.)	41,862 (on 3rd March 1892.)	38,171 (on 3rd April 1892.)	17,133 (on 3rd May 1892.)	12.011 (on 3rd June 1892.)	5,239 (on 3rd July 1892.)	1,322 (on 3rd August 1892.)	11,336 (on 3rd Sept. 1892.)	17,216 (on 8th Oct. 1892.)	9,774 (on 3rd Nov. 1892.)	24,557 (on 3rd Dec. 1892.)	35,589 (on 3rd Jan. 1893.)
On boats unloaded ... By Port Commissioners' returns.	84,951 (2nd to 4th Jan. 1892.)	63,215 (1st to 3rd Feb. 1892.)	53,460 (1st to 3rd March 1892.)	29.556 (1st to 3rd April 1892.)	23,662 (2nd to 4th May 1892.)	25,598 (1st to 3rd June 1892.)	27,288 (1st to 3rd July 1892.)	25,889 (1st to 3rd August 1892.)	18,308 (1st to 3rd Sept. 1892.)	27,678 (6th to 8th Oct. 1892.)	13,606 (1st to 3rd Nov. 1892.)	38,882 (1st to 3rd Dec. 1892.)	47,638 (3rd to 5th Jan. 1893.)
On boats unloaded ... By Canal returns	1,22,177 (2nd to 4th Jan. 1892.)	1,90,718 (1st to 3rd Feb. 1892.)	96,456 (1st to 3rd March 1892.)	38.474 (1st to 3rd April 1892.)	17,050 (2nd to 4th May 1892.)	37.916 (1st to 3rd June 1892.)	21,650 (1st to 3rd July 1892.)	17,415 (1st to 3rd August 1892.)	27,069 (1st to 3rd Sept. 1892.)	24,097 (6th to 8th Oct. 1892.)	15,777 (1st to 3rd Nov. 1892.)	16,296 (1st to 3rd Dec. 1892.)	1,30,459 (3rd to 5th Jan. 1893.)
Grand total of Stocks ...	19,73,652	23,99,346	29,17,828	30,18,551	26,40,245	28,02,250	24,33,539	23,04,351	20,84,183	18,14,399	16,74,982	15,66,872	18,22,447
Probable stock available for exportation by sea.	9¾ lakhs	13¾ lakhs	18¾ lakhs	19¾ lakhs	15¾ lakhs	17¾ lakhs	13¾ lakhs	12¾ lakhs	10½ lakhs	7¾ lakhs	6½ lakhs	5 lakhs	7¾ lakhs

STATISTICAL DEPARTMENT,
The 9th January, 1893

C. E. BUCKLAND,
Secy. to the Govt. of Bengal.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the

QUANTITIES PER RUPEE IN

Number.	DISTRICTS.	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum. (Sorghum Vulgare.) Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
	BENGAL.															
		S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
	Burdwan Division.															
1	Burdwan	12 0	11 12	10 11	...	...	...	11 4	Old 9 0, New 10 8	12 0	12 12	Old 11 1, New 12 0	15 0	...	...	...
2	Bankura	12 0	11 7	12 0	...	...	...	10 0	10 0	12 8	11 12	13 0	16 4	.	...	...
3	Birbhum	10 4	10 4	12 8	9 0	9 0	...	11 0	11 0	13 0	14 4	15 0	15 0	...	...	...
4	Midnapore	10 4	11 4	11 0	...	...	...	10 0	9 4	11 0	13 2	12 12	17 0	...	...	...
5	Hooghly	11 0	11 0	13 0	11 0	11 0	..	9 0	8 8	8 0	9 8	10 0	13 0	...	...	...
6	Howrah	...	...	...	...	...	...	9 6	8 14	10 4	12 4	11 13	13 0	.	...	...
	Presidency Division.															
	Calcutta	11 0	11 0	11 2	15 0	14 0	19 0	8 0	8 0	8 7	10 0	10 0	12 12	17 0	17	16 0
7	24-Parganas	11 0	11 0	10 10	16 0	16 0	20 0	8 0	8 0	8 0	11 12	11 4	13 0	16 0	...	...
8	Nadia	13 14½	13 5	12 13	...	...	22 14	9 4	9 2	10 0	11 4½	11 3	13 1	..		...
9	Khulna	...	...	...	...	...	...	12 8	10 8	12 8	15 0	13 0	14 0	.	..	...
10	Jessore	10 0	10 0	10 0	...	...	...	8 0	8 8	11 0	13 0	12 0	16 0	..	...	...
11	Murshidabad	13 0	13 0	12 0	..	..	..	10 0	10 0	10 0	13 0	12 0	13 4	..	..	...
	Chittagong Division.															
12	Chittagong	9 4	9 4	9 12	..	...	..	10 8	9 0	9 8	12 4	13 0	13 0		.	..
13	Noakhali	...	..	...	...	...	...	11 0	10 0	14 0	13 0	13 0	15 0	.	.	...
14	Tippera	9 0	10 0	10 0	...	...	...	9 8	10 0	10 10	12 0	12 0	14 12			...
15	Chittagong Hill Tracts.	...	...	...	...	...	...	...	...	...	10 0	8 14	11 3	..	...	...
	Dacca Division.															
16	Dacca	...	...	10 8	...	...	26 0	8 0	8 8	12 0	12 0	13 0	14 0	...	.	...
17	Faridpur	11 0	10 0	16 0	20 0	11 0	16 0	8 0	8 0	10 0	12 0	12 0	16 0	...	...	...
18	Backergunge	...	...	...	...	..	..	New 12 8, Old 8 0	New 12 14, Old 8 2	Old 10 8	14 0	13 0	Old 14 0	...	...	...
19	Mymensingh	9 8	9 8	9 8	...	...	...	10 0	10 0	13 0	12 0	11 8	14 8	...	...	...
	Rajshahi Division.															
20	Dinajpur	11 13	11 4	12 0	15 12	15 12	17 8	8 0	8 0	10 0	15 0	14 8	12 8	...	..	...
21	Rajshahi	12 12	12 12	10 8	19 8	19 8	26 4	11 4	9 0	12 0	12 12	12 12	12 12	...	...	...
22	Rangpur	11 8	11 0	8 0	...	..	...	9 6	8 0	10 0	10 10	9 8	13 0	...	...	...

A In the subdivisional marts the retail prices of salt per rupee are :—Kalna 10 seers, Katwa 10¾ seers, and Raniganj 10½ seers.
B At Vishnupur the retail price of salt is 11 seers per rupee.
C At Rampur Hát the retail price of salt is 11 seers per rupee.
D In the subdivisional marts the retail prices of salt per rupee are :—Contai 10 seers, Tamluk 11½ seers, and Ghatal 10 seers 11 chitaks.
E In the subdivisional marts the retail prices of salt per rupee are :—Bhaddreswar 10½ seers and Jahanabad 10 seers 10 chitaks.
F At Ulubaria the retail price of salt is 10½ seers per rupee.
G In the subdivisional marts the retail prices of salt per rupee are :—Chetla Hát 12 seers 9 chitaks, Barasat 10 seers 10 chitaks, Magrahat 10 seers 10 chitaks, and Baduria 10 seers 10 chitaks.
H In the subdivisional marts the retail prices of salt per rupee are :—Bahadurkhali 10½ seers, Chuadanga 10 seers, Meherpur 10½ seers, and Ranaghat 10½ seers.
I In the subdivisional marts the retail prices of salt per rupee are :—Bagerhat 8 seers and Satkhira 11 seers.
J In the subdivisional marts the retail prices of salt per rupee are :—Jhenida 9 seers 9 chitaks, Magura 10 seers, Narail 9 seers 10 chitaks, and Bangaon 10 seers 11 chitaks.

Head-quarters Station Bazars of the Districts of Bengal on the 31st December, 1892.

Salt. Present return. (S. Ch.)	Salt. Next preceding return. (S. Ch.)	Salt. Corresponding return of last year. (S. Ch.)	Wholesale prices per maund of 40 seers. Salt. Present return. (Rs. A. P.)	Wholesale Salt. Next preceding return. (Rs. A. P.)	Wholesale Salt. Corresponding return of last year. (Rs. A. P.)	Average wages per month. Unskilled labour—able-bodied agricultural labourer. Present return. (Rs. A.)	Unskilled. Next preceding return. (Rs. A.)	Unskilled. Corresponding return of last year. (Rs. A.)	Syce or horse-keeper. Present return. (Rs. A.)	Syce. Next preceding return. (Rs. A.)	Syce. Corresponding return of last year. (Rs. A.)	Skilled labour—common mason, carpenter, or blacksmith. Present return. (Rs. A.)	Skilled. Next preceding return. (Rs. A.)	Skilled. Corresponding return of last year. (Rs. A.)	Districts.	Number.	Division
															BENGAL.		
A 12 0	12 0	11 4	3 5 4	3 5 4	3 6 0	7 0	8 0	8 0	6 0	6 0	6 0	11 0 to 15 0	10 0 to 15 0	10 0 to 15 0	Burdwan	1	Burdwan Division.
B 11 0	11 0	11 8	3 10 0	3 10 0	3 10 0	6 0 to 7 8	6 0 to 7 8	6 0 to 7 8	4 0 to 6 0	4 0 to 6 0	4 0 to 6 0	10 0 to 15 0	10 0 to 15 0	10 0 to 15 0	Bankura.	2	Burdwan Division.
C 10 12	10 12	10 8	3 12 6	3 12 6	3 10 0	6 0 to 7 8	6 0 to 7 8	6 0 to 7 8	4 0 to 6 0	4 0 to 6 0	4 0 to 6 0	7 8 to 12 0	7 8 to 12 0	7 8 to 12 0	Birbhum.	3	Burdwan Division.
D 11 7	11 7	10 0	3 8 0	3 8 0	4 0 0	7 0	7 0	6 9	5 0	5 0	5 10	7 8 to 12 0	7 8 to 12 0	7 8 to 11 4	Midnapore.	4	Burdwan Division.
E 11 8	11 12	10 0	3 8 0	3 6 0	3 12 0	7 8	9 13-6	9 13-6	6 0 to 7 0	6 0 to 7 0	6 0 to 7 0	8 0 to 30 0	8 0 to 30 0	8 0 to 30 0	Hooghly.	5	Burdwan Division.
F 10 10⅔	10 10⅔	10 8	3 8 0	3 8 0	3 6 0	9 6	7 8	7 8	7 0	7 0	6 0	12 0 to 20 0	12 0 to 20 0	12 0 to 25 0	Hâwrah.	6	Burdwan Division.
9 8	9 8	11 4	4 0 0	4 0 0	3 4 7		Agri. labourer. 6 0; Cooly. 9 0	5 12; 9 0		6 0	6 0		15 0	15 0	Calcutta.		Presidency Division.
G 11 0	11 0	11 0	3 4 6	3 4 6	3 4 0	9 0 to 10 0	9 0 to 10 0	9 0 to 10 0	6 0 to 7 0	6 0 to 7 0	6 0 to 7 0	15 0 to 20 0	15 0 to 20 0	15 0 to 20 0	24-Parganas.	7	Presidency Division.
H 10 0	10 0	10 8½	3 8 0	3 8 0	3 9 0	7 8	7 8	7 8	6 0	6 0	6 0	7 8 to 15 0	7 8 to 15 0	7 8 to 15 0	Nadia.	8	Presidency Division.
I 9 0	10 0	9 0	4 0 0	4 0 0	4 0 0	7 8 to 9 6	7 8	7 8 to 9 6	7 0 to 9 0	8 0	7 0 to 9 0	10 0 to 30 0	10 0 to 20 0	10 0 to 30 0	Khulna.	9	Presidency Division.
J 9 14	9 14	9 2	3 10 0	3 10 0	3 10 0	7 8	7 8	7 8 to 10 0	6 0	5 0 to 7 0	5 0 to 7 0	10 0 to 20 0	10 0 to 20 0	10 0 to 20 0	Jessore.	10	Presidency Division.
K 10 8	10 8	10 8	3 7 0	3 7 0	3 12 0	3 12	3 12	3 12	4 0 to 5 0	4 0 to 5 0	4 0 to 5 0	8 0 to 20 0	7 8	7 8	Murshidabad.	11	Presidency Division.
K1 10 0	10 0	10 8	3 10 0	3 9 0	3 8 0	9 0	11 0	10 0	7 8	8 0	7 0	12 0 to 14 0	13 0	12 0	Chittagong.	12	Chittagong Division.
L 9 0	9 0	10 0	4 0 0	4 0 0	3 12 0	6 0 to 10 0	5 0 to 8 0	7 8 to 10 0	5 0 to 8 0	5 0 to 7 0	5 0 to 8 0	8 0 to 15 0	6 0 to 15 0	8 0 to 15 0	Noakhali.	13	Chittagong Division.
M 10 0	10 0	10 0	4 0 0	4 0 0	3 12 0	7 8 to 10 0	7 0 to 9 0	7 8 to 10 0	6 0 to 8 0	6 0 to 8 0	6 0 to 8 0	7 8 to 15 0	8 0 to 15 0	7 8 to 15 0	Tippera.	14	Chittagong Division.
8 0	8 0	8 0	4 8 0	4 8 0	4 8 0	12 0	12 0	12 0	12 0	...	...	20 0	20 0 to 25 0	20 0 to 25 0	Chittagong Hill Tracts.	15	Chittagong Division.
N 10 0	10 0	10 0	3 10 0	3 10 0	3 12 0	6 0 to 7 0	6 0 to 7 0	6 0 to 7 0	6 0 to 7 0	6 0 to 7 0	6 0 to 7 0	8 0 to 20 0	8 0 to 20 0	8 0 to 20 0	Dacca.	16	Dacca Division.
O 10 0	10 0	10 8	3 14 0	3 14 0	3 12 0	10 0	9 6	7 8	6 0 to 9 0	7 0 to 8 0	8 0	15 0 to 30 0	15 0 to 20 0	10 0 to 20 0	Faridpur.	17	Dacca Division.
P 10 8	10 0	10 8	3 10 0	3 10 0	3 10 0	6 0	6 0	7 8	7 0	7 0	6 0	13 8	13 8 to 15 0	14 0	Backergunge.	18	Dacca Division.
Q 10 0	10 0	10 0	3 15 0	3 15 0	3 15 0	7 0 to 10 0	7 0 to 10 0	7 0 to 10 0	6 0 to 7 0	7 0 to 8 0	7 0 to 8 0	12 0 to 25 0	12 0 to 30 0	12 0 to 30 0	Mymensingh.	19	Dacca Division.
9 4	9 4	10 8	3 12 0	3 12 0	3 12 0	7 8	7 8	7 8	6 0 to 8 0	6 0 to 8 0	6 0 to 8 0	7 8 to 15 0	10 0 to 15 0	10 0 to 15 0	Dinajpur.	20	Rajshahi Division.
R 9 9	9 9	9 9	3 10 8	3 10 8	3 10 8	5 0 to 7 0	5 0 to 7 0	5 0 to 7 0	5 0 to 6 0	5 0 to 6 0	5 0 to 6 0	7 8 to 16 0	7 8 to 16 0	7 8 to 15 0	Rajshahi.	21	Rajshahi Division.
S 10 0	9 12	9 6	4 4 0	4 4 0	4 4 0	6 0 to 7 8	7 0	6 0 to 7 8	6 0 to 10 0	8 0	6 0 to 10 0	15 0 to 30 0	15 0 to 20 0	15 0 to 30 0	Rangpur.	22	Rajshahi Division.

K At Kandi and Jangipur the retail price of salt is 11 seers per rupee.
K1 At Cox's Bazar the retail price of salt is 8 seers per rupee.
L At Fenny Hát the retail price of salt is 8 seers 5 chitaks per rupee.
M In the subdivisional marts the retail prices of salt per rupee are :—Brahmanbaria 10 seers and Chandpur 9 seers.
N In the subdivisional marts the retail prices of salt per rupee are:—Madanganj 11½ seers, Manikganj 9 seers 13 chitaks, Miokadim 10 seers, and Munshirhat 10 seers.
O In the subdivisional marts the retail prices of salt per rupee are :—Madaripur 10 seers and Goalundo 10 seers.
P In the subdivisional marts the retail prices of salt per rupee are :—Patuakhali 9 seers, Pirojpur 10¼ seers, and Bhola 9 seers.
Q In the subdivisional marts the retail prices of salt per rupee are :—Jamalpur 10 seers, Kishorganj 10 seers, Netrakona 10 seers, and Kagmari 10 seers.
R In the subdivisional marts the retail prices of salt per rupee are :—Nator 9 seers and Naugaon 9 seers 9 chitaks.
S In the subdivisional marts the retail prices of salt per rupee are :—Gaibanda 10 seers, Nilphamari 10 seers, and Kurigaon 8 seers.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the Head-quarters

Division	Number.	DISTRICTS.	QUANTITIES PER RUPEE IN														
			WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.			JOWAR OR CHOLUM. (*Sorghum Vulgare.*)		
			Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
BENGAL—*continued.*			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
RAJSHAHI DIVISION—*contd.*	23	Bogra ...	10 14	10 8	9 0	...	...	...	9 12	9 0	12 0	15 0	15 0	15 0	...	...	...
	24	Pabna	14 4	13 8	12 12	...	...	...	6 12	6 10	7 8	14 2	12 8	15 0	...	...	...
	25	Darjeeling	7 0	7 0	8 0	8 0	8 0	10 0	5 0	5 0	5 0	11 0	11 0	11 0	...	...	...
	26	Jalpaiguri	11 0	11 0	10 0	13 0	13 0	14 0	7 0	7 0	8 0	13 0	12 0	11 0	...	...	...
BIHAR.																	
BHAGALPUR DIVISION.	27	Monghyr ...	12 0 to 13 0	12 0 to 13 0	13 10½	14 0 to 15 0	14 0 to 15 0	20 0	8 0 to 9 0	8 0 to 9 0	10 8	11 4	11 4	12 10	...	...	...
	28	Bhágalpur	13 14	13 14	13 4	13 14	12 10	22 11	8 13 / 12 10	8 13 / 12 10	Old. 10 11 New. 11 6	12 10 / 15 2	12 10 / 14 8	12 0 / 12 10	...	...	...
	29	Purnea (Kasba)	10 0	10 0	11 0	...	..	...	13 0	13 0	9 8	15 0	14 0	11 0	...	...	...
	30	Malda ...	13 0	13 0	12 0	...	...	...	10 0	8 8	10 0	14 0	13 8	13 0	...	...	...
	31	Sonthal Parganas.	11 0	11 8	11 0	...	...	...	11 0	8 0	12 0	14 8	14 8	15 0	...	...	...
PATNA DIVISION.	32	Patna ...	15 0 / 14 0	Red. 15 0 White 14 0	16 0 / 14 0	20 0	21 8	26 0	10 8	10 8	11 8	17 0	16 0	17 8	28 0	30 0	21 0
	33	Gaya ...	12 8	12 8	12 8	18 0	18 0	24 0	9 0	9 0	10 8	14 0	14 0	14 0	20 4	20 4	...
	34	Shahabad ...	15 0	15 0	13 8	16 0	16 0	20 0	8 0	8 0	9 0	15 0	15 0	15 0	...	...	...
	35	Darbhanga ...	13 3	13 3	14 4	12 0	11 8	22 0	11 0	11 0	11 0	15 0	14 0	13 3	...	...	...
	36	Muzaffarpur	12 0	12 0	12 0	18 0	18 0	24 0	8 8	8 0	11 0	14 0	15 0	13 0	...	...	...
	37	Saran ...	14 0	13 12	12 12	20 0	20 0	26 0	10 8	10 7	8 8	15 8	13 10	13 9	...	...	...
	38	Champaran ...	11 0	11 0	12 0	12 8	14 8	21 0	9 0	9 0	9 0	15 8	15 8	16 8	...	...	...
ORISSA.																	
ORISSA DIVISION.	39	Cuttack ...	11 13	11 13	8 8	...	..	...	10 8	10 8	10 8	15 1	13 2	13 2	...	...	...
	40	Puri ..	..	...	...	..	...	...	9 3	7 14	11 13	15 12	15 12	15 12	...	...	...
	41	Balasore ...	11 0	11 0	11 0	10 0	10 0	10 0	10 0	10 0	13 0	16 8	15 0	17 0	...	...	...
CHOTA NAGPUR.																	
CHOTA NAGPUR DIVISION.	42	Hazáribágh	12 0	12 0	11 0	11 0	11 0	16 0	8 0	8 0	8 0	14 0	13 8	13 0 to 14 0	...	...	...
	43	Lohardaga ..	11 8 / 8 0 to 10 0	Red. 12 0 White. 8 0 to 12 0	10 0 to 11 0 / 7 4 to 9 0	10 0	9 0	14 0	11 0 to 14 0	11 0 to 13 0	12 0	16 4	15 0 to 16 0	14 0 to 16 0	...	...	...
	44	Palámau ...	11 13	11 4	..	..	...	...	11 13	11 4	...	16 14	15 12	...	...	...	...
	45	Singhbhum ...	12 0	12 0	15 0	...	...	16 0	10 0	11 0	16 0	16 0	13 0	20 0	...	...	...
	46	Manbhum ...	11 8	11 8	11 0	.	...	...	10 0	8 8	14 0	13 0 to 14 0	13 0 to 14 0	18 0	...	...	...

T At Sirajganj the retail price of salt is 11¼ seers per rupee.
U At Alipur the retail price of salt is 8 seers per rupee.
V In the subdivisional marts the retail prices of salt per rupee are:—Begusarai 10 seers and Jamui 10 seers.
W At Banka, Madhipura, and Supaul the retail price of salt is 10 seers per rupee.
X At Kishanganj and Araria the retail price of salt is 10 seers per rupee.
Y In the subdivisional marts the retail prices of salt per rupee are:—Deoghur 10 seers, Godda 9 seers, Jamtara 9 seers, Pakur 10½ seers, and Rajmahal 10 seers.
Z In the subdivisional marts the retail prices of salt per rupee are:—Barh 11 seers 6 chitaks, Bihar 10½ seers.
a In the subdivisional marts the retail prices of salt per rupee are:—Aurangabad 10 seers, Nawada 9 seers, and Jahanabad 10 seers.

CALCUTTA,
The 10th January, 1893.

PRICES-CURRENT (retail)

Division	Number.	DISTRICTS.	Wheat. Present return.	Wheat. Next preceding return.	Indian-corn or Maize (*Zea Mays.*) Present return.	Indian-corn or Maize Next preceding return.	Indian-corn or Maize Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus indicus.*) Present return.	Arhar or Thur Next preceding return.	Arhar or Thur Corresponding return of last year.	Firewood. Present return.	Firewood. Next preceding return.	Firewood. Corresponding return of last year.
			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
BENGAL—*continued.*													
Rajshahi Division—*contd.*	23	Bogra ...	10 11	10 8	...	...	...	...	...	...	90 0	90 0	90 C
	24	Pabna	14 4	13 8	...	...	...	21 0	17 8	...	200 0	200 0	200 0
	25	Darjeeling	7 0	7 0	14 0	16 0	16 0	8 0	8 0	8 0	120 0	120 0	120 0
	26	Jalpaiguri	11 0	11 0	...	...	...	10 0	10 0	8 0	180 0	200 0	200 0
BIHAR.													
Bhagalpur Division.	27	Monghyr ..	12 0 to 13 0	12 0 to 13 0	22 0	23 0	21 0	15 0	15 0	15 12	140 0	160 0	145 0
	28	Bhagalpur ...	13 14	13 14	27 11	27 14	20 3	16 6	16 6	16 6	176 0	164 0	164 0
	29	Purnea (Kasba)	10 0	10 0	25 0	24 0	18 0	16 0	16 0	13 0	320 0	320 0	84 0
	30	Malda ...	13 0	13 0	26 0	26 0	...	12 0	11 0	...	160 0	160 0	120 0
	31	Sonthal Parganas.	11 0	11 8	24 0	24 0	23 0	18 8	18 8	17 0	200 0	200 0	200 0
Patna Division.	32	Patna ...	15 0 / 14 0	Red. 15 0 / White 14 0	24 0	25 0	24 0	20 0	20 8	19 0	130 0	130 0	120 0
	33	Gaya ...	12 8	12 8	23 0	23 0	...	19 0	19 0	15 4	200 0	200 0	140 0
	34	Shahabad ...	15 0	15 0	21 0	22 0	21 8	16 0	16 0	15 0	160 0	160 0	120 0
	35	Darbhanga ...	13 3	13 3	27 8	27 8	21 0	17 9	17 9	16 8	176 0	176 0	160 0
	36	Muzaffarpur	12 0	12 0	26 0	26 0	22 0	16 0	17 0	16 0	160 0	160 0	160 0
	37	Saran ...	14 0	13 12	22 0	23 4	23 8	18 12	18 0	17 8	200 0	200 0	160 0
	38	Champaran ...	11 0	11 0	25 0	26 8	22 0	16 4	16 4	14 8	160 0	160 0	160 0
ORISSA.													
Orissa Division.	39	Cuttack ...	11 13	11 13	...	...	...	17 1	16 7	17 1	80 0	80 0	80 0
	40	Puri .	..	...	...	...	...	...	...	...	...	...	...
	41	Balasore ...	11 0	11 0	...	...	...	10 12	10 12	...	160 0	160 0	140 0
CHOTA NAGPUR.													
Chota Nagpur Division.	42	Hazáribágh	12 0	12 0	22 0	22 0	18 0	16 0	16 0	17 0	240 0	240 0	240 0
	43	Lohardaga .	11 8 / 8 0 to 10 0	Red. 12 0 / White. 8 0 to 12 0	21 0	21 0	20 0	Big. 11 8 Small. 13 4	Big. 11 0 Small. 15 0	Big. 12 0 Small. 17 8	160 0	140 0 to 160 0	140 0 to 160 0
	44	Palámau ...	11 13	11 4	25 5	28 2	...	...	...	...	...	...	...
	45	Singhbhum ...	12 0	12 0	16 0	16 0	20 0	12 0	12 0	16 0	100 0	100 0	160 0
	46	Manbhum	11 8	11 8	21 0	24 0	24 0	18 0	18 0	18 8	...	...	...

T At Sirajganj the retail price of salt is 11½
U At Alipur the retail price of salt is 8 seers
V In the subdivisional marts the retail prices
W At Banka, Madhipura, and Supaul the r
X At Kishanganj and Araria the retail price
Y In the subdivisional marts the retail pri
seers, and Rajmahal 10 seers.
Z In the subdivisional marts the retail prices of salt per rupee are :—Barh 11 seers 6 chitaks, Bihar 10½ seers.
a In the subdivisional marts the retail prices of salt per rupee are :—Aurangabad 10 seers, Nawada 9 seers, and Jahanabad 10 seers.

CALCUTTA,
The 10th January, 1893.

PRICES-CURRENT (wholesale) of Food-grains, Firewood, and Salt

Number.	MARTS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE COMMON.		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
1	Calcutta ...	3 6 0	3 6 0	3 5 0	2 8 0	2 12 0	1 13 9	5 8 0	5 0 0	4 7 9	4 0 0	3 12 0	2 15 6
2	Sirajganj ...	3 8 0	3 6 0	3 6 0	...	..	...	5 4 0	5 6 0	5 0 0	3 0 0	3 6 0	2 15 0
3	Dacca ...	...	...	3 12 0	...	...	1 8 0	5 0 0	4 10 0	3 5 0	3 4 0	3 1 0	2 13 0
4	Narayanganj	...	3 8 0	...	...	3 0 0	...	3 4 0	3 0 0	2 10 0	3 0 0	2 12 0	2 6 0
5	Chittagong	4 2 0	4 2 0	4 0 0	...	...	...	3 12 0	4 6 0	4 0 0	3 2 0	3 0 0	3 0 0
6	Patna ...	2 10 6 2 13 6	Red. 2 10 6 White. 2 13 6	2 8 0 2 13 6	2 0 0	1 13 9	1 10 6	3 13 0	3 13 0	3 8 0	2 5 6	2 8 0	2 4 9
7	Balasore ...	3 8 0	3 8 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 0 0	2 6 0	2 10 0	2 6 0
8	Puri ...	...	...	...	...	...	...	4 5 0	5 1 0	4 9 0	2 8 6	2 8 6	2 8 6
9	Cuttack ...	3 10 0	3 10 0	4 10 0	...	...	...	3 12 0	3 12 0	3 10 0	2 10 0	3 0 0	3 0 0

CALCUTTA,
The 10th January, 1893.

in the undermentioned Marts of Bengal on the 31*st December*, 1892.

Gram, Chana, Chhola, Kadalay or Sunaga. (*Cicer Arietinum.*)			Indian-corn or Maize. (*Zea Mays.*)			Arhar or thur, Cadjan Pea. (*Cajanus indicus.*)			Firewood.			Salt.			Marts.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
2 13 0	2 13 0	2 4 5	1 13 0	1 13 0	2 1 7	3 4 6	3 0 0	2 8 7	0 7 0	0 7 0	0 5 9	4 0 0	4 0 0	3 4 7	Calcutta.
2 14 0	3 0 0	2 10 0	...	...	...	...	...	...	0 6 6	0 6 6	0 6 3	3 8 0	3 8 0	3 7 0	Sirajganj.
...	...	2 8 0	...	...	...	...	...	2 12 0	0 5 0	0 5 0	0 5 0	3 10 0	3 10 0	3 12 0	Dacca.
3 12 0	3 8 0	3 8 0	...	...	...	3 6 0	3 4 0	3 8 0	0 8 0	0 8 0	0 8 0	3 8 0	3 8 0	[illegible] 6 0	Narayanganj.
3 10 0	3 12 0	3 5 0	...	...	...	...	...	...	0 5 0	0 5 0	0 5 0	3 10 0	3 9 0	3 8 0	Chittagong.
2 0 0	2 0 0	1 13 0	1 10 9	1 9 9	1 10 6	2 0 0	1 15 0	2 1 6	0 5 0	0 5 0	0 5 4	3 8 0	3 8 0	3 8 0	Patna.
2 14 0	2 14 0	2 12 0	...	...	...	3 10 0	3 10 0	...	...	...	...	3 10 0	3 10 0	3 12 0	Balasore.
...	...	...	...	...	...	...	...	...	...	...	...	3 4 0	3 0 0	3 6 0	Puri.
2 4 0	(Kalai.) 2 0 0	2 14 0	...	...	...	2 6 0	2 7 0	2 4 0	0 8 0	0 8 0	0 8 0	3 5 0	3 0	3 12 0	Cuttack.

Published for general information.

C. E. BUCKLAND,
Secretary to the Govt. of Bengal.

Supplement Table of Rainfall recorded at Stations in Bengal in January 1892.

District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.
CHUTIA NAGPUR ...	Sirguja ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	1·07	Nil
	Jashpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	1·49	Nil
	Gangpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	0·33	Nil
ORISSA TRIBUTARY MEHALS.	Talcher ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	0·25	Nil
	Narsingpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	0·29	Nil
	Angul ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	0·21	Nil
	Dhenkanal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	0·29	Nil
	Bispara ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	0·37	Nil
	Kunjabangar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil
	Baramba ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	?	Nil
DARJEELING ...	Mungpoo ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·03	...	...	...	0·11	1	0·14	0·97	0·11
BRITISH BHUTAN	Pedong ...	...	...	...	...	...	...	...	...	...	...	0·39	0·24	...	0·07	...	...	...	...	...	...	...	...	...	...	...	...	0·27	...	...	...	...	3	0·97	1·60	0·39
SIKKIM	Gnatong ...	...	...	...	...	...	...	...	...	0·10	0·32	0·05	...	...	...	...	...	...	...	...	...	...	...	0·03	0·15	...	...	...	...	...	...	...	3	0·65	?	0·32
CHITTAGONG HILL TRACTS.	Demagiri ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	0·10	0·62	0·10
February 1892.																																				
CHUTIA NAGPUR ...	Sirguja ...	...	...	...	...	...	...	...	...	...	...	0·12	0·23	0·15	0·07	0·70	...	...	...	...	...	...	...	...	...	...	...	...	...	...			4	1·27	0·16	0·70
	Jashpur ...	...	...	...	...	...	...	...	...	...	...	0·16	0·37	0·49	0·57	0·49	...	...	...	...	...	...	0·06	...	...	...	...	...	...	...			5	2·14	0·20	0·57
	Gangpur ...	...	...	...	...	...	...	...	...	...	...	...	...	0·04	0·75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			1	0·79	0·90	0·75
ORISSA TRIBUTARY MEHALS.	Talcher ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			Nil	Nil	0·74	Nil
	Narsingpur	...	...	...	...	...	...	...	...	...	...	...	...	...	0·15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			1	0·15	0·06	0·15
	Angul ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			Nil	Nil	0·84	Nil
	Dhenkanal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			Nil	Nil	0·72	Nil
	Bispara ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			Nil	Nil	0·27	Nil
	Kunjabangar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			Nil	Nil	0·35	Nil
	Baramba ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			Nil	Nil	?	Nil
DARJEELING ...	Mungpoo ...	...	...	...	...	...	...	...	0·18	...	...	...	...	0·36	0·60	2·26	0·93	...	...	...	...	...	...	...	...	...	...	...	...	...			5	4·33	0·72	2·26
BRITISH BHUTAN	Pedong ...	...	...	...	...	...	...	...	...	0·24	0·06	...	...	...	0·05	...	0·93	0·14	...	...	...	...	...	...	...	...	...	...	...	...			3	1·42	0·83	0·93
SIKKIM	Gnatong ...	0·05	...	...	...	...	...	...	1·35	1·31	...	0·30	0·81	0·20	5·07	0·90	...	...	...	0·15	1·15	0·80	...	...	...	...	...	...	...	...			10	12·29	?	5·07
CHITTAGONG HILL TRACTS.	Demagiri ...	...	...	...	...	...	...	...	...	...	...	0·10	...	...	...	...	...	...	...	...	...	...	...	0·06	0·11	2·33	...	...	...	...			3	2·60	1·23	2·33
March 1892.																																				
CHUTIA NAGPUR ...	Sirguja ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	0·57	Nil
	Jashpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	1·50	Nil
	Gangpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	1·07	Nil
ORISSA TRIBUTARY MEHALS.	Talcher ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	0·98	Nil
	Narsingpur	...	...	0·12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	0·12	0·50	0·12
	Angul ...	...	...	...	0·10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	0·10	0·66	0·10
	Dhenkanal	...	...	...	0·21	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	0·21	1·18	0·21
	Bispara ...	...	...	...	0·40	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·30	2	0·70	0·46	0·40
	Kunjabangar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Not recorded.															1·43	
	Baramba ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	?	Nil
DARJEELING ...	Mungpoo ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·88	...	...	0·28	...	...	...	2	2·16	2·12	1·88

British Bhutan ...	Pedong ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·78	...	...	1·01	...	...	...	2	2·79	3·16	1·78
Sikkim ...	Gnatong ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·05	...	...	...	0·20	...	...	...	...	0·97	0·05	...	1·19	...	...	0·80	0·60	5	3·86	?	1·19
Chittagong Hill Tracts.	Demagiri ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·30	...	...	...	1	0·30	3·73	0·30

April 1892.

Chutia Nagpur	Siraguja ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		Nil	Nil	0·28	Nil
	Jashpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		Nil	Nil	0·16	Nil
	Gangpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		Nil	Nil	0·82	Nil
Orissa Tributary Mehals.	Talcher ...	...	...	...	...	...	...	...	...	...	...	...	0·55	...	...	0·23	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		2	0·78	0·61	0·55
	Narsingpur	...	0·10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		1	0·10	0·03	0·10
	Angul ...	0·02	...	...	...	...	...	...	...	...	...	...	...	...	...	0·13	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		1	0·15	0·88	0·13
	Dhenkanal...	...	...	...	...	...	0·02	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		Nil	0·02	0·54	0·02
	Bispara ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·02	...	...	...	...	...	...	...	...	...	...	...	...	...		Nil	0·02	0·41	0·02
	Kunjabangar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Not recorded.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...				1·66	
	Baramba ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		Nil	Nil	?	Nil
Darjeeling ...	Mungpoo ...	...	...	0·20	...	1·06	...	...	0·29	...	...	0·16	...	...	...	1·54	0·35	0·19	0·56	0·17	1·33	1·82	...	...	...	...	0·04	0·36	...	1·29	0·14		14	9·44	4·05	1·82
British Bhutan	Pedong ...	...	...	0·01	0·40	0·74	...	0·08	...	1·35	...	...	0·13	...	...	1·14	...	0·48	0·95	0·07	...	...	1·35	...	...	0·13	0·15	...	0·39	1·20	0·42		11	8·49	4·96	1·35
Sikkim ...	Gnatong ...	0·30	0·10	0·91	0·15	0·05	0·16	0·20	0·80	0·05	1·85	0·16	...	0·01	0·82	0·37	0·41	0·21	0·02	...	1·33	1·80	0·90	0·05	0·81	0·41	0·23	0·35	0·55	0·72	1·64		23	15·38	?	1·85
Chittagong Hill Tracts.	Demagiri ...	...	...	...	...	0·27	...	1·32	...	...	...	...	...	...	...	...	0·17	0·96	1·00	0·38	0·20	...	0·32	0·10	0·43	...	...	1·42	...	2·45	2·14		13	11·16	4·06	2·45

May 1892.

Chutia Nagpur	Sirguja ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·25	...	...	...	...	...	...	...	...	...	1	0·25	0·71	0·25
	Jashpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	1·61	Nil
	Gangpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Nil	Nil	1·12	Nil
Orissa Tributary Mehals.	Talcher ...	...	...	...	...	...	...	...	0·07	...	...	...	...	...	...	...	...	0·11	...	0·34	...	0·08	...	...	...	...	...	...	...	...	...	...	2	0·60	2·08	0·34
	Narsingpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·15	...	...	...	...	1	0·15	1·03	0·15
	Angul ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·04	...	...	0·04	...	...	1·12	...	0·05	...	...	...	...	...	1	1·25	2·03	1·12
	Dhenkanal	...	...	...	...	...	...	...	0·38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·37	...	0·08	...	...	...	0·95	0·01	...	3	1·79	2·25	0·95
	Bispara ...	...	...	1·00	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1·00	[illegible]	1·00
	Kunjabangar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Not recorded.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			3·51	
	Baramba ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·12	0·10	0·10	...	...	0·12	...	...	...	4	0·44	?	0·12
Darjeeling ...	Mungpoo ...	...	...	...	...	0·42	0·93	0·81	0·38	...	0·10	0·16	0·69	0·21	1·40	0·04	0·03	1·03	0·38	2·34	1·57	0·12	0·35	0·26	0·40	0·32	1·19	...	0·31	0·64	0·11	...	22	14·27	9·61	2·34
British Bhutan	Pedong ...	0·15	...	0·12	0·01	0·09	0·48	0·80	0·34	0·64	0·10	...	...	0·47	0·98	0·37	0·91	...	...	1·06	0·65	0·59	0·40	0·11	0·26	0·52	1·25	...	0·83	0·07	1·46	...	21	12·61	8·55	1·46
Sikkim ...	Gnatong ...	0·03	0·21	0·15	0·60	2·03	0·45	1·94	0·60	...	0·60	0·03	0·94	0·33	0·71	1·02	0·58	0·93	1·48	1·70	0·97	0·93	2·10	1·75	0·48	1·31	0·59	0·33	0·95	0·38	0·30	0·43	28	24·95	?	2·10
Chittagong Hill Tracts.	Demagiri ...	0·48	...	...	...	...	...	0·53	0·25	0·63	0·90	1·04	1·61	1·83	...	...	...	...	...	...	...	0·15	3·57	2·19	0·10	0·05	...	0·50	...	...	2·00	2·10	15	18·18	11·41	3·57

June 1892.

Chutia Nagpur ...	Sirguja ...	...	...	...	...	...	...	...	...	1·50	6·70	0·25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2·50	...	...	...		4	10·95	8·77	6·70
	Jashpur ...	0·45	...	0·01	0·15	0·66	0·13	0·05	0·20	0·42	1·23	4·34	0·52	0·05	0·27	...	...	0·01	...	...	...	...	0·10	...	...	...	...	1·50	0·25	...	0·68		14	[illegible]	[illegible]	4·34
	Gangpur ...	...	...	...	...	...	...	...	...	0·80	0·80	2·20	...	...	...	0·20	...	2·10	0·39	...	...	...	...	...	...	...	...	...	3·12	0·30	0·12		9	9·94	8·50	3·12
Orissa Tributary Mehals.	Talcher ...	0·24	...	...	...	...	...	0·12	0·85	2·54	2·14	0·30	...	1·07	0·74	0·58	...	1·55	0·94	0·18	...	0·40	0·38	...	...	...	...	1·07	1·15	1·12	1·07		18	16·47	7·97	2·54
	Narsingpur	...	...	...	...	...	0·85	0·20	1·63	3·75	4·15	0·31	...	[illegible]	0·20	...	...	0·70	...	...	...	...	...	...	...	...	0·94	0·50	0·26	0·25	...		13	13·75	7·84	4·15
	Angul	...	...	...	...	...	...	0·01	0·75	1·84	2·13	0·44	0·43	...	0·37	[illegible]	...	3·61	0·11	0·35	...	...	...	...	...	...	...	...	1·59	0·12	0·01		11	[illegible]	8·95	2·93
	Dhenkanal	1·40	...	...	...	...	...	0·36	1·49	1·22	2·04	...	0·12	0·04	...	...	...	0·80	0·12	...	...	0·10	...	...	...	...	...	...	...	0·38	0·04		10	8·51	[illegible]	2·04
	Bispara	0·80	...	...	...	...	0·52	...	...	4·05	4·50	0·80	0·12	...	0·63	[illegible]	0·10	...	...	...	0·20	...	0·20	...	0·31	...	0·20	1·80	0·90	0·35	0·05		15	[illegible]	9·17	4·50
	Kunjabangar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Not recorded.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...				9·41	
	Baramba ...	0·05	...	...	0·74	...	...	...	2·03	1·35	2·22	2·54	0·05	...	0·41	0·10	...	...	1·00	...	...	...	0·15	...	0·31	...	...	...	...	...	1·74		11	12·69	?	2·54
Darjeeling ...	Mungpoo ...	0·67	...	...	0·72	0·37	0·79	1·69	0·25	...	2·74	0·93	0·90	0·03	0·08	1·35	...	0·84	1·06	0·11	0·99	0·18	0·05	0·26	0·32	0·55	3·90	1·65	1·30	0·19	4·53		23	26·40	28·95	4·53
British Bhutan	Pedong ...	0·28	0·01	...	0·54	0·11	0·03	0·32	0·38	...	0·71	1·64	0·63	0·13	...	0·29	...	2·07	1·43	0·12	0·30	...	0·08	0·03	0·17	0·12	1·92	0·79	0·40	0·19	2·83		21	15·82	16·25	2·83
Sikkim	Gnatong ...	0·27	0·53	...	0·59	0·81	0·48	1·21	0·57	0·61	2·81	2·44	0·08	0·10	1·48	1·35	0·13	1·75	0·49	0·52	0·50	0·43	0·59	0·51	0·26	1·78	1·62	3·81	1·32	1·93	0·22		27	28·79	?	3·81
Chittagong Hill Tracts.	Demagiri ...	...	0·06	0·71	0·33	0·13	2·23	1·93	1·19	0·06	0·03	...	0·11	0·12	...	1·78	0·33	0·59	...	1·14	0·55	...	1·06	0·04	...	0·33	1·00	0·12	0·43	0·17	0·37		20	14·81	19·78	2·23

Meteorological Report of the Province of

STATION OBSERVATIONS.

Meteorological Division.	District.	Representative stations.	Air Pressure.					Wind.		Temperature.						Humidity.	
			Highest, 8 A.M. barometer reading.	Lowest, 8 A.M. barometer reading.	Mean, 8 A.M. reduced to 32°.	Mean reduced to sea level and constant gravity, Lat. 45°.	Variation from normal mean.	Mean direction at 8 A.M.	Mean velocity in miles daily.	Highest of month.	Lowest of month.	Mean daily maximum temperature.	Mean daily minimum temperature.	Mean daily temperature.	Variation from normal mean.	Mean, 8 A.M., humidity.	Variation from normal mean.
Orissa.	Puri	Puri	30·175	30·049	30·105	30·074	—	N2°E	162	83·7	56·6	79·6	60·2	69·9	—	75	—
		Gopalpur	30·17[illegible]	30·037	30·101	30·071	+·041	N23°W	233	84·2	54·5	79·1	57·6	68·4	—1·8	78	—
		False Point	30·188	30·028	30·108	30·082	+·045	N24°W	130	80·4	49·5	77·8*	54·7	66·1	—1·0	84	+3
	Cuttack	Cuttack	30·125	29·973	30·051	30·073	+·052	N83°W	21	83·3	51·9	80·6	56·3	68·5	—1·5	71	—1
	Balasore	Balasore	30·165	29·984	30·074	30·078	+·043	N10°W	50	82·4	47·4	78·7	52·1	65·4	—0·3	61	—
South-West Bengal.	Midnapore	Midnapore	30·016	29·900	29·983	30·087	+·044	N0°W	167	83·3	48·2	79·1	52·5	65·8	—0·8	64	—
	24-Parganas	Calcutta	30·164	[illegible]	[illegible]	30·071	+·039	N18°W	43	78·7	49·2	73·8	5[illegible]·4	64·1	—2·0	82	+3
		Saugor Island	30·16[illegible]	30·015	30·097	30·063	+·042	N4°E	181	77·7	51·7	74·1	56·6	65·4	—1·9	90	+6
	Howrah	.....															
	Hooghly	.....															
	Nadia	Krishnagar	30·141	29·973	30·072	30·071	+·044	N56°W	54	80·2	45·3	76·7	49·8	63·3	—2·4	80	—
	Khulna	.....															
	Jessore	Jessore	30·113	30·003	30·081	30·062	+·040	N27°W	43	79·2	45·4	75·7	52·5	64·1	—2·4	86	+10
	Burdwan	Burdwan	30·0[illegible]8	29·934	30·032	30·083	+·040	N38°W	28	80·5	?	77·3	?	?	?	67	—4
		Raniganj	29·862*	29·699*	29·757*	30·105*	+·033	N52°W	24	?	47·2	?	51·4	?	?	72	—
	Bankura	Bankura	29·878	29·690	29·791	30·062	+·023	N57°W	40	81·1	47·8	77·4	51·8	64·6	—1·3	71	—
	Birbhum	.....															
	Murshidabad	Berhampore	30·131	29·960	30·054	30·073	+·033	N63°W	35	78·6	43·1	76·1	53·7	64·9	—0·9	87	+8
North Bengal.	Pabna	Serajganj	30·121	29·951	30·054	30·052	+·033	N15°W	16	79·9	46·8	76·2	51·5	63·9	—1·3	80	—
	Bogra	Bogra	30·090	29·944	30·031	30·048	+·036	N45°W	23	?	46·2	?	51·3	?	?	84	—
	Rajshahi	Rampur Boalia	30·102	29·942	30·037	30·060	+·044	N28°W	74	?	45·5	?	51·1	?	?	77	—
	Malda	Malda	30·116	29·941	30·047*	30·084*	—	N45°W	83	78·9	?	73·2†	?	?	?	81	—
	Dinajpur	Dinajpur	30·054	29·853	29·988	30·067	+·054	N52°W	33	80·1	45·0	76·2	50·0	63·1	—0·5	84	—
	Rangpur	Rangpur	30·064	29·883	29·90[illegible]	30·076	+·028	N45°E	40	79·6	45·6	75·6	50·4	63·1	—0·3	91	—
	Jalpaiguri	Jalpaiguri	29·882*	29·697*	29·814*	30·068	+·023	N21°E	26	79·4	49·1	75·0	52·7	63·8	+0·3	89	—
	Kuch Bihar	.....															
	Darjeeling	Darjeeling	23·102	22·945	23·041	—	+·014	N60°E	78	45·7	3[illegible]·6	43·2	35·4	3[illegible]·3	—3·6	88	+14
	Sikkim	Gnatong	[illegible]	[illegible]	[illegible]	—	—	S[illegible]8°E	100	4[illegible]·3	[illegible]·2	[illegible]	11·8	[illegible]1·7	—	67	—
East Bengal.	Chittagong	Chittagong	30·08[illegible]	[illegible]	30·014	30·0[illegible]3	+·045	N38°E	44	7[illegible]·2	53·1	[illegible]7·0	55·5	66·3	—1·7	92	+5
	Chittagong Hill Tracts	Demagri	Observations not received.														
	Backergunge	Barisal	30·157	30·009	30·091	30·050	+·053	N45°W	35	80·3	50·1	76·4	53·1	64·8	—1·2	85	—
	Noakhali	Noakhali	30·114	29·950	30·057	30·048	+·019	N11°W	65	81·3	50·4	76·8	52·7	64·8	—1·3	88	—
	Faridpur	Faridpur	30·140	29·991	30·075	30·071	+·051	N	32	78·5	49·0	[illegible]3·7	53·[illegible]	63·4	—1·6	87	—
	Dacca	Dacca	30·140	29·989	30·080	30·051	+·030	N13°W	54	82·1	51·8	77·4	55·6	66·6	—1·2	83	+4
	Tippera	Comilla	30·13[illegible]	29·981	30·070	30·054	+·045	N16°E	27	81·9	53·1	77·7	5[illegible]	65·3	—0·8	88	—
	Mymensingh	Mymensingh	30·108	29·935	30·058	30·056	+·035	N25°E	35	80·2	49·4	75·5	52·8	64·2	—0·6	[illegible]3	—
North Bihar.	Purnea	Purnea	30·076	29·905	29·99[illegible]	30·089	+·012	S40°W	24	79·2	43·3	71·5	46·8	60·7	—2·3	91	+7
	Bhagalpur	Bhagalpur	30·03	29·812	29·955	30·078	+·030	W	7[illegible]	80·8	44·5	76·5*	48·5*	62·7*	+0·4*	70	—
	Darbhanga	Darbhanga	30·025	29·828	29·956	30·087	+·025	S81°W	44	70·3	47·1	74·8	51·0	62·9	[illegible]	[illegible]	[illegible]
	Muzaffarpur	Muzaffarpur	30·017	29·828	29·949	30·094	—	S72°W	48	76·7	44·3	72·4	48·1	60·2	—	80	—
	Champaran	Motihari	29·962	29·750	29·878	30·076	+·031	S81°W	72	79·2	41·0	75·6	44·9	59·9	—1·0	68	—
	Saran	Chapra	30·094	29·818	29·934	30·081	+·036	S60°W	63	78·8	44·7	74·7	49·1	61·9	—0·1	77	—
	Shahabad	Dehri	29·8[illegible]2	29·856	[illegible]	30·097	+·032	S40°W	?	80·9	45·6	75·9	51·7	63·3	?	74	—
		Buxar	29·[illegible]15	29·8[illegible]2	29·8[illegible]	30·1[illegible]9	+·032	S[illegible]8°W	58	79·[illegible]	44·4	75·0	4[illegible]·4	6[illegible]·2	+0·[illegible]	63	—
		Arrah	29·9[illegible]0	29·819	29·13[illegible]	30·087	+·0[illegible]0	N6[illegible]°W	56	80·3	[illegible]	[illegible]	[illegible]	61·7	+0·1	76	—
South Bihar.	Gaya	Gaya	29·805	29·641	29·726	30·060	+·011	S11°W	130*	79·9	45·5	75·7	50·1	63·0	—0·3	66	+2
	Patna	Bankipore	30·012	29·833	29·946	30·092	+·017	S83°W	70	77·8	45·4	73·8	49·9	61·8	—0·7	70	—6
	Monghyr	.....															
	Sonthal Parganas	Naya Dumka	29·668	29·511	29·611	30·092	+·011	N55°W	49	78·6	44·0	75·6	49·1	62·3	—0·8	69	—
Chota Nagpur.	Hazaribagh	Hazaribagh	28·096	27·958	28·048	30·0[illegible]2	+·024	S71°W	131	71·2	44·7	72·5	48·8	60·6	—0·2	56	—10
	Lohardaga	Ranchi	27·974	27·837	27·91[illegible]	30·083	+·051	W	105	[illegible]	44·2	[illegible]	45·9	[illegible]	+0·7	66	—
	Palamau	.....															
	Singhbhum	Chaibassa	29·376	29·242	29·320	30·077	+·035	S60°W	15	82·7	45·0	77·8	49·7	63·8	—0·6	81	—
	Manbhum	.....															
Assam.	Sibsagar	Sibsagar	29·879	29·688	29·806	30·118	+·030	N70°E	36	75·8	45·4	70·9	51·4	61·[illegible]	0	100	+8
	Goalpara	Dhubri	30·073	29·905	30·000	30·0[illegible]7	+·017	N5[illegible]°E	17	7[illegible]·3	50·5	74·7	53·[illegible]	64·0	—0·5	[illegible]3	+4
	Cachar	Silchar	[illegible]·086*	29·928*	30·005	30·0[illegible]*	+·043*	O	23	83·4	50·0	77·0	54·5	65·8	—1·5	87	+5

* Mean of 30 days. † Mean of 24 days.

Bengal for the month of December 1892.

Cloud.			District Observations. Rainfall. Of month.					Since 16th October 1892.					DISTRICT.
Mean cloud amount, 8 A.M.	Variation from normal mean, 8 A.M.	Rainfall.	Mean of district.	Normal mean.	Variation from mean.	Number of rainy days.	Normal mean number of rainy days.	Mean of district.	Normal mean.	Variation.	Mean number of rainy days.	Normal mean number of rainy days.	
0·3 0·3 1·9	— — —0·6	Nil Nil Nil	Nil	0·79	—0·79	0·00	1·04	7·21	6·76	+0·45	9·00	7·23	Puri.
1·0	—0·8	Nil	Nil	0·54	—0·54	0·00	0·83	6·01	4·24	+1·77	10·00	5·76	Cuttack.
0	—	Nil	Nil	0·30	—0·30	0·00	0·51	6·56	2·90	+3·66	8·50	4·35	Balasore.
0·7	—	Nil	Nil	0·33	—0·33	0·00	0·46	7·93	2·99	+4·94	6·00	3·12	Midnapore.
0·3 1·1	—1·7 —1·5	Nil Nil	Nil	0·31	—0·31	0·00	0·54	7·11	2·89	+4·22	6·71	3·70	24-Parganas.
			Nil	0·32	—0·32	0·00	0·58	3·56	2·11	+1·45	6·00	3·24	Howrah.
			Nil	0·28	—0·28	0·00	0·43	7·14	2·07	+5·07	5·67	2·93	Hooghly.
0·9	—	Nil	Nil	0·18	—0·18	0·00	0·26	4·24	2·04	+2·20	4·50	2·73	Nadia.
			Nil	0·32	—0·33	0·00	0·52	6·93	2·78	+4·15	9·00	3·76	Khulna.
0·7	—1·3	Nil	Nil	0·24	—0·24	0·00	0·32	9·18	2·35	+6·83	6·40	3·28	Jessore.
0·7	—1·3	Nil	Nil	0·17	—0·17	0·00	0·25	4·49	2·01	+2·48	5·75	2·47	Burdwan.
0·2 0·9	— —	Nil Nil	Nil	0·27	—0·27	0·00	0·42	4·47	2·08	+2·39	5·75	2·96	Bankura.
			Nil	0·16	—0·16	0·00	0·41	3·24	1·58	+1·66	4·66	2·43	Birbhum.
1·1	—0·5	Nil	Nil	0·17	—0·17	0·00	0·25	1·83	1·72	+0·11	3·34	2·21	Murshidabad.
0·5	—	Nil	Nil	0·14	—0·14	0·00	0·38	1·11	2·24	—1·13	3·00	3·19	Pabna.
0	—	Nil	Nil	0·17	—0·17	0·00	0·30	0·93	2·06	—1·13	2·75	2·12	Bogra.
0·5	—	Nil	Nil	0·13	—0·13	0·00	0·28	0·52	1·43	—0·91	1·67	2·07	Rajshahi.
0	—	Nil	Nil	0·13	—0·13	0·00	0·39	0·79	1·47	—0·68	2·00	1·40	Malda.
0·1	—	Nil	Nil	0·17	—0·17	0·00	0·30	0·43	1·18	—0·75	1·60	1·33	Dinajpur.
0·2	—	Nil	Nil	0·16	—0·16	0·00	0·33	1·10	1·87	—0·77	1·50	1·05	Rangpur.
3·4	—	0·32	0·36	0·09	+0·27	2·00	0·20	1·13	2·94	—1·81	4·00	1·70	Jalpaiguri.
			Nil	0·17	—0·17	0·00	0·41	0·88	2·52	—1·64	1·50	2·25	Kuch Bihar.
4·6 1·2	+1·5 —	0·58 0·[illegible]2	0·72	0·29	+0·43	2·50	0·74	3·41	2·87	+0·54	5·25	2·90	Darjeeling.
2·0	—0·3	Nil	Nil	0·54	—0·54	0·00	0·78	12·78	5·17	+7·61	10·50	5·34	Chittagong.
			Nil	0·56	—0·56	0·00	0·90	6·69	4·59	+2·10	11·00	5·45	Chittagong Hill Tracts.
0	—	Nil	Nil	0·40	—0·40	0·00	0·55	7·85	3·70	+4·15	9·25	4·19	Backergunge.
0	—	Nil	Nil	0·75	—0·75	0·00	0·65	15·43	5·06	+10·37	12·50	4·85	Noakhali.
0·3	—	Nil	Nil	0·14	—0·14	0·00	0·33	7·24	2·18	+5·06	6·00	3·33	Faridpur.
1·2	—0·1	Nil	Nil	0·24	—0·24	0·00	0·48	8·76	2·71	+6·05	7·00	3·73	Dacca.
0·4	—	Nil	Nil	0·37	—0·37	0·00	0·57	8·37	2·71	+5·66	7·75	4·00	Tippera.
1·3	—	Nil	Nil	0·21	—0·21	0·00	0·36	2·85	2·42	+0·44	2·80	3·07	Mymensingh.
0·5	—0·5	Nil	Nil	0·14	—0·14	0·00	0·38	0·02	1·53	—1·51	0·00	1·47	Purnea.
0·6	—		Nil	0·11	—0·11	0·00	0·57	0·53	1·40	—0·87	0·75	1·54	Bhagalpur.
[illegible]	—0·4	Nil	Nil	0·11	—0·11	0·00	0·32	0·01	0·96	—0·95	0·00	1·21	Darbhanga.
0·7	—	Nil	Nil	0·12	—0·12	0·00	0·34	0·04	1·08	—1·04	0·00	1·43	Muzaffarpur.
1·1	—	Nil	Nil	0·21	—0·21	0·00	0·49	Nil	0·53	—0·53	0·00	1·01	Champaran.
0·3	—	Nil	Nil	0·17	—0·17	0·00	0·33	0·03	1·03	—1·00	0·00	1·44	Saran.
0·2 1·[illegible] 0·4	— — —	Nil Nil Nil	Nil	0·33	—0·33	0·00	0·44	0·40	1·60	—1·20	1·00	2·01	Shahabad.
1·5	—0·2	Nil	Nil	0·26	—0·26	0·00	0·36	0·53	1·17	—0·64	1·75	1·76	Gaya.
1·1	—0·6	Nil	Nil	0·16	—0·16	0·00	0·33	0·23	1·45	—1·22	0·75	1·74	Patna.
			Nil	0·09	—0·09	0·00	0·23	1·33	1·35	—0·02	1·33	1·53	Monghyr.
0	—	Nil	Nil	0·14	—0·14	0·00	0·30	1·44	1·47	—0·03	2·84	1·93	Sonthal Parganas.
1·3	—0·6	Nil	Nil	0·28	—0·28	0·00	0·41	3·97	1·26	+2·71	4·95	2·41	Hazaribagh.
0·7	—	Nil	Nil	0·40	—0·40	0·00	0·53	6·15	1·71	+4·44	5·00	3·13	Lohardaga.
0·4	—	Nil	Nil	0·30	—0·30	0·00	0·55	0·57	1·53	—0·95	1·00	2·40	Palamau.
			Nil	0·37	—0·37	0·00	0·70	6·00	1·87	+4·13	6·00	3·05	Singhbhum.
			Nil	0·21	—0·21	0·00	0·40	3·03	1·39	+1·64	5·50	2·34	Manbhum.
4·3	0	1·07											Sibsagar.
1·4	+0·1	Nil											Goalpara.
4·2	+0·7	Nil											Cachar.

Table of Rainfall recorded at station

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ORISSA ..	Puri ...	Puri ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Khurda ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Banpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		False Point ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gop ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Satpara ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Pipli ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cuttack ..	Jagatsingpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Banki ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Cuttack ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kendrapara ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jajpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dharmsalla ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Salipur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Pal Lahara ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Balasore ...	Akhyapada ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chandbali ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bhadrak ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Soro ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Balasore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jollasore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Baripodah ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
SOUTH-WEST BENGAL.	Midnapore ..	Contai ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Tamluk ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Midnapore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ghatal ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kukrahaty ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Garhbeta ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	24 Parganas...	Saugor Island	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Diamond Harbour.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Canning Town	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Alipore (Observatory)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Barrackpore ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dum-Dum ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Barasat ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Basirhat ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Howrah ...	Howrah ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mohesreka ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ulubaria ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hooghly ..	Serampore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Hooghly ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jahanabad ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Nadia ..	Ranaghat ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Krishnagar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chuadanga ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Meherpur ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kushtia ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Khulna .	Satkhira ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bagerhat ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Khulna ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Nakipur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Rampal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Jessore ...	Narail ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jessore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jhenidah ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Magura ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bangaon ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Burdwan ..	Kalna ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Burdwan ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Katwa ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Raniganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mankur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bankura ...	Bankura ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Vishnupur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Maliara ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Khatra ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Indas ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kotalpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Anda ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gangajalghati	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Raipur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sonamukhi ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Birbhum ...	Suri ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Hetampur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Rampur Hát ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bolpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Murarai ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Murshidabad	Kandi ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Berhampore...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Lalbagh ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Azimganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jangipur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Lalgola ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Akhriganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Patkabari ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NORTH BENGAL.	Pabna ...	Pabna ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sirajganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bogra ...	Sherpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Nowkhilla ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bogra ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Panchbibi ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rajshahi	Boalia ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Nator ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Naogaon ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Lalpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Manda ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

in Bengal in December 1892.

21	22	23	24	25	26	27	28	29	30	31	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 16th October 1892 to 31st December 1892.	Average rainfall from 16th October to 31st December.	Station.	District.	Meteorological division.
...	...	...	...	...	...	...	...	...	...	...	Nil	0·90	Nil	0·68	Nil	10·05	7·52	Puri ...	Puri ...	ORISSA.
...	...	...	...	...	...	...	...	...	...	...	Nil	0·90	Nil	0·53	Nil	4·72	5·13	Khurda.		
...	...	...	...	...	...	...	...	...	...	...	Nil	1·45	Nil	1·18	Nil	5·79	6·86	Banpur.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·90	Nil	0·78	Nil	8·24	7·43	False Point.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	8·09	?	*Gop.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	7·88	?	*Satpara.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	5·08	?	*Pipli*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·61	Nil	0·39	Nil	8·40	4·35	Jagatsingpur.	Cuttack.	
...	...	...	...	...	...	...	...	...	...	...	Nil	1·28	Nil	0·76	Nil	3·66	4·78	Banki.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·80	Nil	0·36	Nil	8·49	4·28	Cuttack.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·80	Nil	0·48	Nil	6·09	4·42	Kendrapara.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·90	Nil	0·71	Nil	3·42	3·46	Jajpur.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	3·65	?	*Dharmsala.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	5·18	?	*Salipur.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	2·83	?	Pal Lahara.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	3·19	?	Akhyapada.	Balasore.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·76	Nil	0·62	Nil	4·71	4·28	Chandbali ...		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·55	Nil	0·38	Nil	5·95	3·28	Bhadrak.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·29	Nil	0·14	Nil	6·48	2·77	Soro.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·70	Nil	0·37	Nil	10·02	3·75	Balasore.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·29	Nil	0·11	Nil	4·33	1·45	Jellasore.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·45	Nil	0·20	Nil	7·89	2·13	Baripada.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·55	Nil	0·40	Nil	10·24	5·65	Contai ...	Midnapore .	SOUTH-WEST BENGAL.
...	...	...	...	...	...	...	...	...	...	...	Nil	0·40	Nil	0·26	Nil	5·35	2·90	Tamluk.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·40	Nil	0·37	Nil	7·82	2·49	Midnapore.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·50	Nil	0·29	Nil	8·29	0·92	Ghatal.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	3·51	?	*Kukrahaty.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	3·31	?	*Garhbeta.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·80	Nil	0·35	Nil	14·66	5·36	Saugor Island.	24-Parganas.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·45	Nil	0·28	Nil	6·63	2·87	Diamond Harbour.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	9·24	?	*Canning Town.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·60	Nil	0·35	Nil	4·85	2·64	Alipore (Observatory.)		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·45	Nil	0·30	Nil	7·79	2·14	Barrackpore.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·60	Nil	0·32	Nil	3·78	2·28	Dum-Dum.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·50	Nil	0·31	Nil	5·78	2·51	Barasat.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·40	Nil	0·23	Nil	6·26	2·42	Basirhat.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·55	Nil	0·32	Nil	3·09	2·53	Howrah ..	Howrah.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·60	Nil	0·32	Nil	4·02	1·70	Mohesreka		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	3·86	?	*Ulubaria.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·47	Nil	0·29	Nil	8·63	2·16	Serampore ...	Hooghly.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·45	Nil	0·36	Nil	7·81	1·92	Hooghly.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·37	Nil	0·20	Nil	4·97	2·15	Jahanabad.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·25	Nil	0·23	Nil	5·96	2·03	Rangahat ...	Nadia.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·25	Nil	0·11	Nil	5·96	1·43	Krishnagar.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·30	Nil	0·16	Nil		2·28	Chuadanga.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·30	Nil	0·19	Nil	2·09	1·78	Meherpur.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·20	Nil	0·20	Nil	2·93	2·66	Kushtia.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·40	Nil	0·35	Nil	4·94	2·45	Satkhira ...	Khulna.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·58	Nil	0·28	Nil	8·65	3·26	Bagerhat.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·58	Nil	0·34	Nil	7·20	2·64	Khulna.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	5·44	?	*Nakipur.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	5·66	?	*Rampal.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·32	Nil	0·24	Nil	9·10	2·44	Narail ...	Jessore.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·45	Nil	0·26	Nil	13·72	2·70	Jessore.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·26	Nil	0·18	Nil	8·57	2·37	Jhenidah		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·26	Nil	0·17	Nil	7·06	1·77	Magura.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·30	Nil	0·36	Nil	7·48	2·48	Bangaon		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·25	Nil	0·23	Nil	7·39	1·94	Kalna ...	Burdwan.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·25	Nil	0·22	Nil	5·06	2·40	Burdwan.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·25	Nil	0·11	Nil	3·81	2·14	Katwa.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·35	Nil	0·12	Nil	1·69	1·54	Raniganj.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	1·73	?	*Mankur.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·50	Nil	0·22	Nil	4·50	2·21	Bankura ..	Bankura.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·27	Nil	0·24	Nil	5·42	1·75	Vishnupur.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·40	Nil	0·21	Nil	1·33	1·92	Maliara.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·50	Nil	0·42	Nil	6·59	2·45	Khatra.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	5·42	?	*Indus.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	3·56	?	*Kotalpur.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	4·80	?	*Anda.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	1·50	?	*Gangajalghati.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	8·36	?	*Raipur.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	6·21	?	*Sonamukhi.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·40	Nil	0·15	Nil	1·61	1·93	Suri ..	Birbhum.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·47	Nil	0·14	Nil	4·50	0·96	Hetampur.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·35	Nil	0·19	Nil	3·56	1·87	Rampur Hát.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	2·25	?	*Bolpore.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	0·90	?	*Morarai*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·33	Nil	0·27	Nil	2·41	1·63	Kandi ...	Murshidabad.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·50	Nil	0·17	Nil	1·47	1·78	Berhampore.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·15	Nil	0·17	Nil	3 01	1·65	Lalbagh.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·28	Nil	0·13	Nil	1·54	1·58	Azimganj.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·39	Nil	0·14	Nil	1·40	1·70	Jangipur.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·47	Nil	0·14	Nil	1·15	1·97	Lalgola.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	0·95	?	*Akhrigunj.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	2·30	?	*Patkabari.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·25	Nil	0·14	Nil	1·95	2·03	Pabna ...	Pabna ...	NORTH BENGAL.
...	...	...	...	...	...	...	...	...	...	...	Nil	0·50	Nil	0·14	Nil	0·27	2·43	Sirajganj.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·50	Nil	0·22	Nil	0·75	2·43	Sherpur ...	Bogra.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·43	Nil	0·15	Nil	1·09	2·44	Nowkhilla.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·25	Nil	0·13	Nil	0·90	1·19	Bogra.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·36	Nil	0·19	Nil	0·91	1·39	Panchbibi.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·30	Nil	0·11	Nil	1·22	1·62	Boalia ..	Rajshahi.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·25	Nil	0·11	Nil	0·37	1 99	Nator.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·29	Nil	0·17	Nil	Nil	0·78	*Naogaon.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	0·58	?	*Lalpur.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	0·14	?	*Manda.*		

Table of Rainfall recorded at Stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
NORTH BENGAL—concld.	Malda ...	Malda ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chanchal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gajol	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sibganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dinajpur ...	Mohadebpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Churamon ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Raiganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dinajpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Baloorghat .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Thakurgaon...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rangpur ...	Bhawaniganj (*Gyabanda*).	...	...		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Rangpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kurigram ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bagdogra .. (*Nilphamari*)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ulipur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Jalpaiguri ...	Jalpaiguri .	...	...	...	...	...	0·11	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Alipore Duar	...	...	...	...	...	0·23	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Falacotta ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Debiganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bhagatpur (*Nagrakatta*).	...	...	...	...	0·02	0·02	0·09	0·16	...	...	...	...	...	...	...	...	...	...	...	...
	Kuch Bihar ...	Dinhatta ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kuch Bihar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mekliganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mathabhanga	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Darjeeling ..	Buxa ...	...	...	...	...	...	0·14	0·18	...	0·06	...	...	...	...	...	...	...	...	...	...	...
		Siliguri ...	...	...	...	...	...	0·26	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Darjeeling ...	...	...	...	...	...	0·47	0·15	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kalimpong ...	...	...	...	...	...	0·14	0·39	0·07	...	...	...	...	...	...	...	...	...	...	...	...
		Kurseong ...	...	...	...	...	...	0·16	...	...	...	...	...	...	...	...	...	...	...	...	...	...
EAST BENGAL	Chittagong ...	Cox's Bazar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chittagong ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kutubdia ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Satkanya ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Fenoa ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kodali ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chittagong Hill Tracts.	Rangamati ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bandarban ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Backergunge...	Patuakhali ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Pirojpur ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Barisal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gournaddi ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bhola ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Doulatkhan ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bauphal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Noakhali ...	Noakhali ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Fenny ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Harishpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ramganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Faridpur ...	Madaripur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Faridpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Goalundo ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dacca ...	Munshiganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dacca ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Narainganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Manikganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Joydebpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hill Tippera	Agartola ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Tippera ...	Comilla ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chandpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Brahmanbaria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ramchandrapur.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Nasirnagar...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Daudkandi ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kasba ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Laksham ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Mymensingh..	Kishoreganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Atia (*Tangail*)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mymensingh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jamalpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Netrokona ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Subornakhali	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Durgapur .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sherpur Town	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dewanganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NORTH BIHAR	Purnea ..	Kishanganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Araria ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Purnea ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gondwara (*Korah*).	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Barsoi .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Forbesganj .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kaliaganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bhagalpur ..	Madhipura .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bongaon (Syfabad).	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Supaul ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Protabganj ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bhagalpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ba[illegible] ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kolgong ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Darbhanga ...	Tajpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Darbhanga ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Madhubani ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bahera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Roshera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

in Bengal in December 1892—*continued.*

21	22	23	24	25	26	27	28	29	30	31	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 16th October 1892 to 31st December 1892.	Average rainfall from 16th October to 31st December.	Station.	District.	Meteorological division.
...	...	...	...	...	...	...	...	...	...	...	Nil	0·30	Nil	0·18	Nil	1·32	1·98	Malda ..	Malda ..	NORTH BENGAL *concld.*
...	...	...	...	...	...	...	...	...	...	...	Nil	0·29	Nil	0·08	Nil	0·26	0·95	Chanchal.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	0·34	?	*Gajol.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	0·60	?	*Sibganj.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·25	Nil	0·17	Nil	0·51	1·06	Mohadebpur ..	Dinajpur.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·36	Nil	0·16	Nil	0·29	0·89	Churamon.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·29	Nil	0·15	Nil	0·51	0·68	Raiganj.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·30	Nil	0·11	Nil	0·28	2·11	Dinajpur.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·29	Nil	0·25	Nil	0 55	1·16	Baloorghat.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Thakurgaon.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·26	Nil	0·17	Nil	0·53	1·92	Bhawaniganj (*Gyabanda*).	Rangpur.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·25	Nil	0·10	Nil	2·92	2·84	Rangpur.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·40	Nil	0 17	Nil	0·21	1·32	Kurigram.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·40	Nil	0·21	Nil	0·73	1·40	Bardogra. (*Nilphamari.*)		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Ulipur.*		
...	...	...	0·25	...	...	...	...	...	...	...	2	0·20	0·36	0·09	0·25	1·13	2·94	Jalpaiguri ...	Jalpaiguri.	
...	...	...	...	...	...	...	...	...	...	...	1	?	0·23	?	0·23	1·98	?	*Alipore Duar.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	1·11	?	*Falacotta.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	0·60	?	*Debiganj.*		
...	...	0·33	...	...	...	...	...	...	...	...	2	?	0·62	?	0·33	6·18	?	*Bhagatpur* (*Nagrakatta*).		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·55	Nil	0·23	Nil	0·44	1·89	Dinhatta ...	Kuch Bihar.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·37	Nil	0·11	Nil	1·20	1·86	Kuch Bihar.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·38	Nil	0·18	Nil	0·82	1·73	Mekliganj.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·36	Nil	0 14	Nil	1·03	1·69	Matabhanga.		
...	...	0·33	0·44	...	...	...	...	...	...	...	4	1·35	1·15	0·50	0·44	0·35	5·06	Buxa ..	Darjeeling.	
...	...	...	0·03	...	...	...	...	...	...	...	1	0·43	0·29	0·09	0·26	1·86	0·98	Siliguri.		
...	...	...	...	...	...	...	...	...	...	...	2	0·60	0·62	0 26	0·47	0·92	4·54	Darjeeling.		
...	...	0·19	...	...	...	...	...	...	...	...	3	0·39	0·79	0·30	0 39	1 46	0·87	Kalimpong.		
...	...	...	...	...	...	...	...	...	...	...	1	?	0·16	?	0·16	1·96	?	Kurseong.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·75	Nil	0·38	Nil	13·05	6·30	Cox's Bazar .	Chittagong .	EAST BENGAL.
...	...	...	...	...	...	...	...	...	...	...	Nil	0·80	Nil	0·70	Nil	12 50	4·02	Chittagong.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	19 13	?	*Kutubdia.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	8·80	?	*Satkanya.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	?	?	Fenoa.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	?	?	Kodali.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·90	Nil	0·56	Nil	6·69	4·59	Rangamati ...	Chittagong Hill Tracts.	
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	8·70	?	*Bandarban* ...		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·61	Nil	0·47	Nil	7·94	4·02	Patuakhali ...	Backergunge.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·45	Nil	0 29	Nil	7·86	3·54	Pirojpur.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·50	Nil	0·32	Nil	7 39	3 50	Barisal.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	5·83	?	*Gournaddi.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·62	Nil	0 51	Nil	8·18	3 73	Bhola.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	11·60	?	*Doulatkhan.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	8·49	?	*Bauphal.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·65	Nil	0·59	Nil	16·19	4·41	Noakhali ...	Noakhali.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·64	Nil	0·91	Nil	14·66	5 70	Fenny.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	19·46	?	*Harishpur.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	10·73	?	*Ramganj.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·20	Nil	0·14	Nil	6·09	1·93	Madaripur ..	Faridpur.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·40	Nil	0·15	Nil	10·70	2 37	Faridpur.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·37	Nil	0·14	Nil	4·92	2·23	Goalundo.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·50	Nil	0 33	Nil	7·09	3·13	Munshiganj ..	Dacca.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·45	Nil	0·15	Nil	11·51	1·80	Dacca.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·57	Nil	0·29	Nil	10·00	3·74	Naraingunj.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·39	Nil	0 13	Nil	6·43	2·15	Manikganj		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	3·60	?	*Joydebpur.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·50	Nil	0 37	Nil	6·84	3·41	Agartala ..	Hill Tippera.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·61	Nil	0·44	Nil	8·70	2·55	Comilla ...	Tippera.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·67	Nil	0 39	Nil	7·75	2 39	Chandpur.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·50	Nil	0·28	Nil	10·37	2·46	Brahmanbaria		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	7·97	?	*Ramchandra-pur.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	10·47	?	*Nasirnagar.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	4·45	?	*Daudkandi.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	12 39	?	*Kasba.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	5·83	?	*Laksham.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·35	Nil	0·32	Nil	5·94	2·11	Kishoreganj.	Mymensingh	
...	...	...	...	...	...	...	...	...	...	...	Nil	0 25	Nil	0·10	Nil	2 76	2·24	Atia (*Tangail*).		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·40	Nil	0·18	Nil	0·61	2·64	Mymensingh.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·40	Nil	0 28	Nil	1·74	2 37	Jamalpur.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·43	Nil	0 17	Nil	3·27	2 73	Netrokona.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	0 41	?	*Subornakhali.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	1·64	?	*Durgapur.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	3·26	?	*Sherepur Town.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	0·78	?	*Dewanganj.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·47	Nil	0·15	Nil	0·04	1·35	Kishanganj ..	Purnea ..	NORTH BIHAR.
...	...	...	...	...	...	...	...	...	...	...	Nil	0 37	Nil	0 10	Nil	Nil	1·36	Araria.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·30	Nil	0·16	Nil	0 03	1 86	Purnea.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Gondwara* (*Korah*).		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Barsoi.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Forbesganj.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Kaliaganj.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0 30	Nil	0·09	Nil	Nil	1·53	Madhipura	Bhagalpur.	
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	Bongaon. (Sylabad).		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·37	Nil	0·12	Nil	Nil	1·17	Supaul.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Pratabganj.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·35	Nil	0·10	Nil	0 49	1·25	Bhagalpur ..		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·45	Nil	0·14	Nil	1·61	1·68	Banka.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	1·54	?	*Kotgong.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·20	Nil	0·08	Nil	Nil	0·97	Tajpur ...	Darbhanga.	
...	...	...	...	...	...	...	...	...	...	...	Nil	0·50	Nil	0·17	Nil	0·02	1·06	Darbhanga.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·26	Nil	0·08	Nil	Nil	0·86	Madhubani.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Bahera.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Roshera.*		

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVATIONS TAKEN IN ASSAM, FOR THE MONTH OF DECEMBER 1892.

THE most important features in the meteorology of December have been—

1. There has been an almost complete absence of cold-weather storms of any importance originating in or coming from North-West India, which in most years pass through Bengal in December, particularly in the second half of the month Only one feeble disturbance indeed began to approach Bengal from North-Western India at the close of December. Fine weather with lightly clouded or almost cloudless skies has therefore prevailed over the greater part of Bengal practically throughout the month.

2. The retreat of the south-west monsoon current in the south of the Bay in December has also been unattended with the formation of any cyclonic storms, such as frequently occur, and only one or two small barometric depressions of comparatively little importance have formed in the south of the Bay and have drifted in a westerly direction towards the Madras coast. One of these depressions had formed at the end of November, and on the 1st and 2nd of December it was approaching the Madras coast, but it filled up before passing over the land, and only gave squally weather and in some cases a gale of wind with moderate rain to parts of that coast. A second feeble depression or area of disturbance probably formed on the 14th or 15th, in the centre of the south of the Bay, and drifting in a westerly direction affected the South Madras coast on the 17th. Another period of disturbance commenced in the extreme south of the Bay on the 20th, but scarcely affected the Madras coast at all, and the disturbed conditions probably passed away in a westerly direction over Ceylon. These disturbances were, however, of so feeble a nature and so far south in the Bay, that they had absolutely no effect on the weather conditions in Bengal.

3. Owing, therefore, to the almost entire absence of disturbed weather during December, the rainfall occurring in Bengal has been confined to a few showers in the districts in and near the Darjeeling Hills. Indeed, rainfall has been absent from the entire province except for falls averaging about half an inch in the Darjeeling and Jalpaiguri districts. Rainfall has thus been in defect of the normal in all Divisions

4. The mean pressure for the month has been unusually high, and there has been a general excess of from 0·03" to 0·05". This excess on the whole has been largest at the eastern and southern stations; and in such cases as Cuttack, Barisal, Faridpur, Bogra, and Dinajpur, the excess has been larger than a twentieth of an inch.

5. Temperature, on the other hand, has been in defect of the normal at almost all stations, the defect being very small in the west and north of the province, and comparatively large in the southern districts, where defects of from 2° to 2·5° have occurred at Calcutta, Jessore, and Krishnagar. This defect has, however, been almost entirely confined to the night or minimum temperatures, which in several cases have ranged from 3° to 4° below the normal. Indeed, over the western half of the province the mean day or maximum temperature for the month has been in distinct excess of the normal.

6. Owing to the absence of disturbed weather, the mean cloud proportion for the month has been in rather large defect of the normal, while, on the other hand, humidity has been fully equal to, and in a good many cases in distinct excess of, the normal.

The meteorological changes for the month of December do not call for any detailed account. Throughout the last twenty-five days of November fine settled weather had obtained in Bengal, and the cold weather conditions were indeed throughout this time unusually strongly developed, and these conditions again obtained at the beginning of December, when temperature was generally from 1° to 2° in defect, pressure was in excess of the normal, and a very steady north-westerly wind current prevailed over the province. Early in December, however, there was very squally weather in the centre and south-west of the Bay, due to the passage of a feeble barometric depression in a westerly direction from the centre of the Bay to the Madras coast, but this did not in any way affect the weather in Bengal. This fine, settled and unusually cool weather continued over the whole province up to the 6th, when slightly unsettled weather commenced in the Darjeeling Hills, which gave a few showers of rain in this and the Jalpaiguri districts. From the 9th, however, again a period of absolutely fine and very cool weather set in over Bengal, which lasted up till the 23rd, when two or three showers fell in the Darjeeling and Jalpaiguri districts, but from the 25th again weather became fine. Throughout almost the whole of the month indeed, and up till about the 29th or 30th, except for the two slight disturbances in the hills, weather in Bengal was absolutely settled. Conditions, however, began to change slightly from the 29th, for on the morning of the 30th a very distinct and rather influential barometric depression had appeared over Rajputana and North-Western India generally, which was travelling so rapidly in an easterly direction that on the 30th it had reached the neighbourhood of Bahraich in the North-West Provinces, but it was also rapidly filling up, and on the 1st of January it had practically entirely disappeared. In front of the advancing depression, however, as is usual in such cases, temperature and humidity rose very rapidly, and thus at the close of the month at some of the western stations of Bihar, the mean temperature had

become no less than from 4° to 6° in excess of the normal. The conditions at the close of the month in this respect were thus in rather marked contrast to those of the greater part of December.

Pressure—At the beginning of the month was in distinct excess of the normal. For the week ending the 10th instant, the excess equalled about two-hundredths of an inch. In the following week the excess had increased to about a twentieth of an inch, but in the week ending the 24th instant it had fallen to about 0·03." For the last week, notwithstanding the advancing depression from the North-West Provinces, the excess had again increased and equalled about 0·06." For the whole month, therefore, pressure has been in excess of the normal, the excess averaging about 0·04", and ranging generally from 0·03" to 0·05." The smallest excess pressures have been shown in the west and north of the province and in Assam. Excess pressures of only about 0·02" have been recorded at Hazaribagh, Patna, Darbhanga, Jalpaiguri, and Dhubri, and at Sibsagar an almost normal pressure has been registered. On the other hand, the excess has been larger than 0·05" at Dinajpur, Bogra, Faridpur, Barisal, Cuttack, Arrah, and Chapra.

Temperature.—The mean temperature of the province was 1·7° in defect of the normal at the beginning of the month. In the week ending the 10th, the defect equalled about a degree, but at the end of this period some unusually low night temperatures were recorded, and defects of 7° to 9° were reported on the 9th and 10th at such stations as Barisal, Jessore, Krishnagar, Calcutta, Bankura, Chittagong, and Dehri. In the following week the defect had increased to 2·3°. In the week ending the 24th the defects had become small except in East and South-West Bengal, but even in these districts they were only about a degree; and finally, in the last week of the month the temperature had risen to the normal value. The mean temperature for the whole month has been in defect of the normal, the defects ranging from a few tenths of a degree at the western stations of Bihar to about 2° to 2·5° in South-West Bengal at such stations as Calcutta, Jessore, and Krishnagar. The average day temperatures of the month have been in excess over the western half of the province by about a degree, and in defect over the eastern half by a few tenths of a degree. The minimum temperatures, on the other hand, have been in defect in all districts, the defects averaging from 1° to nearly 4°. In Assam the mean temperature has been in defect by 0·7°.

The general variation of temperature from the normal of the month is best shown by the following table, which gives the variation of the average maximum, minimum and mean temperatures at nine typical stations in different districts of the province, week by week, throughout the month :—

STATIONS.	Week ending 3rd December 1892.			Week ending 10th December 1892.			Week ending 17th December 1892.			Week ending 24th December 1892.			Week ending 31st December 1892.		
	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.
Cuttack	−2·4	−3·2	−2·8	−0·5	−0·8	−0·6	−2·8	−4·7	−3·7	−1·4	−0·7	−1·1	−1·1	−1·2	−1·1
Calcutta	−1·3	−4·2	−2·8	−0·5	−5·5	−3·0	−1·8	−4·9	−3·3	+0·3	−2·3	−1·0	+0·9	−2·2	−0·6
Dacca	−1·8	−2·3	−2·0	−2·3	−2·5	−2·4	−1·7	−1·6	−1·6	−0·8	−1·0	−0·9	+0·5	−1·4	−0·5
Burdwan	−1·1	−1·0	−1·1	−0·9	−2·0	−1·4	−1·9	?	?	+0·2	?	?	+0·9	?	?
Patna	0	−1·8	−0·7	−0·9	−1·5	−1·2	−2·5	−3·3	−3·0	+0·3	+0·5	+0·4	+1·7	+0·1	+0·9
Gaya	−0·4	−1·9	−1·2	+0·3	+0·8	+0·5	−2·3	−3·2	−2·8	+0·3	−0·3	0	+1·4	−0·4	+0·5
Purnea	−0·5	−3·8	−2·2	−3·5	−3·5	−3·4	−2·4	−3·3	−2·9	−1·0	−0·3	−0·6	−0·3	−2·3	−1·3
Hazáribágh ...	−0·7	−3·4	−2·0	+0·3	−2·3	−1·0	+0·2	−3·0	−1·4	+1·1	−0·9	+0·1	+2·2	+0·9	+1·6
Darjeeling ...	−6·1	−2·8	−4·4	−8·8	−2·3	−5·5	−5·7	−1·4	−3·5	−4·5	−0·9	−2·6	−4·0	−0·8	−2·4

Rainfall.—Except for a fall of 0·72 inch in the Darjeeling district and one of 0·36 inch in the Jalpaiguri district, the whole province of Bengal has been rainless throughout the month. In Assam the only rainfall reported has been 1·07 inches at Sibsagar.

The following table gives in a condensed form the summary of the rainfall information in Bengal for the whole year. It gives a comparison between the actual monthly and total rainfall of the year with the normal values in each of the seven meteorological divisions of Bengal, the actual falls being expressed as percentages of the normal amounts. From these figures it will be seen that all the districts, except North Bihar and North Bengal, have

received largely defective falls during the year, and that in South-West Bengal the defects exceed 20 per cent :—

Meteorological Divisions.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Actual rainfall of the year 1892 expressed as a percentage of the normal fall for the period.
Orissa	Nil	26	2	31	50	132	83	70	96	102	72	Nil	85
South-West Bengal	Nil	26	4	99	89	84	89	58	77	91	739	Nil	79
North Bengal ...	Nil	67	118	180	149	75	168	146	51	28	82	7	110
East Bengal ...	Nil	69	34	166	120	79	86	66	77	118	321	Nil	89
North Bihár ...	2	116	50	114	72	109	106	171	46	7	Nil	Nil	99
South Bihár ...	11	170	15	93	36	79	99	121	65	30	25	Nil	86
Chota Nagpur ...	Nil	194	2	23	53	111	96	66	96	116	144	Nil	87

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the month of December 1892 :—

Meteorological Divisions.	Temperature.						Rainfall.							
	Highest observed during month.	Lowest observed during month.	Averages for month.			Average mean of month above or below normal mean of month.	Of month.			Rainy days.			Since 16th Oct. 1892.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in month.	Normal average number in month.	Variation.	Average.	Normal average.
Orissa	84·2	47·4	79·2	56·2	67·7	—1·2	Nil	0·51	—0·51	0·00	0·77	—0·77	6·55	4·37
South-West Bengal	83·3	45·3	76·5	52·8	64·6	—1·7	Nil	0·25	—0·25	0·00	0·40	—0·40	5·56	2·28
North Bengal	80·1	45·0	75·2	51·2	63·5	—0·4	0·01	0·15	—0·14	0·08	0·33	—0 25	0·81	1·74
East Bengal	82·1	49·0	76·4	53·7	65·1	—1·2	Nil	0·35	- 0·35	0·00	0·51	—0·51	7 96	3 25
North Bihár	80·3	41·0	74·7	48·1	61·4	—0 8	Nil	0·14	—0·14	0·00	0·37	—0 37	0·14	1·14
South Bihár	80·9	42·4	75·2	49·5	62·4	—0·3	Nil	0·20	—0·20	0·00	0·34	—0·34	0·80	1·42
Chota Nagpur	82·7	44·2	74·3	49·1	61·7	0	Nil	0·30	—0·30	0·00	0·47	—0·47	4·07	1·45
Assam	83·4	46·4	74·2	53·6	63 9	—0·6								

Meteorological Office, Bengal ;
The 10th January 1893.

A. Pedler,
Meteorological Reporter to the Govt. of Bengal.

Abstract of the results of Meteorological Observations taken at the Alipore Observatory in the month of December 1892.

	Inches.	Date.	Hour.
The mean pressure of the month	30·049		
The average pressure of December from 24 years' registers ...	30·027		
The highest pressure in the month	30·189	28th	10
The lowest pressure in the month	29·901	5th	16
The range of pressure	0·288		
	Hours.		
The total number of hours of bright sunshine during the month	273·7		
The maximum possible number of hours of sunshine ...	332·8		
	°		
The mean temperature of the month	63·2		
The average temperature of December from 24 years' registers	68·0		
The highest temperature in the month	79·5	31st.	
The lowest temperature in the month	49·0	10th & 26th.	
The range of temperature during the month	30·5		
The mean daily range of temperature	23·4		
The greatest range of temperature in one day	26·5	29th.	
	Per cent.		
The mean humidity of the month	71		
The average humidity of December from 24 years' registers ...	71		
	Inches.		
The mean vapour tension of the month	0·400		
The average vapour tension of December from 9 years' registers	0·476		
The mean cloud proportion of the month	0·54		
The average cloud proportion of December from 15 years' registers	1·57		
The total rainfall of the month	Nil.		
The total rainfall indicated by a Beckley's self-registering rain-gauge (mouth of the gauge about 52 feet above the ground)	Nil.		
The average fall of December from 48 years' registers ...	0·23		
The greatest fall in 24 hours	Nil.		
	Days.		
The number of rainy days in the month	Nil.		
The average number of rainy days in December from 24 years' registers	1		
	°		
The mean maximum equilibrium temperature of solar radiation during the month	128·7		
The mean difference of sun and air temperatures	52·8		
The greatest sun temperature	132·5	22nd.	
The greatest excess of sun over air temperature	57·3	22nd.	
The mean temperature of the nocturnal radiation thermometer on woollen cloth	43·6		
The mean depression of the nocturnal radiation thermometer below the minimum air temperature at 4 feet above the ground	9·1		
The greatest depression of the nocturnal radiation thermometer below the minimum air temperature	11·2	12th.	
	Miles.		
The mean movement of the wind per day	43·8		
The greatest movement of the wind in one day	76·0	1st.	
The greatest movement of the wind in one hour	10·0	7th, 1 to 2 P.M.	

The number of hours with winds from each of the 8 points—

N. 284, N.E. 19, E. 2, S.E. 1, S. 0, S.W. 5, W. 76, N.W. 162, Calm 195.

The results of observations at the Alipore Observatory are not rigorously comparable with the registers of past years (at the Park Street Observatory). The barometer is about 3 feet higher at Alipore, and, other things being equal, reads therefore ·003 lower. The diurnal range of temperature is also greater at Alipore, and the mean temperature apparently about 2·3° lower; and, finally, the thermometer which furnished the record of temperature at the Surveyor-General's Office during 20 years and upwards is found to read 0·6 higher than the Kew standard thermometer, which is the standard of reference at the present Observatory.

C. LITTLE,

For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA;

Calcutta, the 9th January 1893.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS. Air Pressure. Mean barometric height 8 A.M. reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. Prevailing direction.	Mean wind velocity.	Temperature. Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri .	30·091	30·040	—	Nly & calm	178	81·1	1st Jan.	59·6	1st Jan.	78·8	62·0	70·4
		Gopalpore	30·098	30·059	+·017	NNW	2.9	82·7	1st ,,	59·0	6th ,,	80·1	61·0	70·5
		False Point	30·100	30·063	+·011	N	130	82·4	1st ,,	55·0	6th ,,	79·0	58·9	68·9
	Cuttack	Cuttack ..	30·043	30·070	+·024	Calm		85·3	1 & 2 ,,	58·8	5 & 6 ,,	82·2	60·2	71·2
	Balasore	Balasore ..	30·0 6	30·071	+·013	NEly		83·4	1st ,,	54·5	6th ,,	79·5	56·5	68·0
South-West Bengal.	Midnapore	Midnapore	29·978	30·082	+·012	N	127	84·3	1st ,,	55·2	4 & 5 ,,	81·2	56·6	68·9
	24-Parganas	Calcutta	30·102	30·070	+·000	Calm & W	38	79·7	1st ,,	52·7	3rd ,,	77·1	54·7	65·9
		Saugor Islan	30·095	30·064	+·010	NE	168	78·7	2nd ,,	56·4	4th ,,	76·7	58·5	67·6
	Howrah													
	Hooghly													
	Nadia ...	Krishnagar	30·080	30·079	+·034	WNW	54	79·4	7th ,,	48·7	3rd ,,	78·4	51·9	65·1
	Khulna													
	Jessore	Jessore ..	30·076	30·057	+·008	Calm	42	78·2	2nd ,,	51·5	2nd ,,	77·2	53·6	65·5
	Burdwan ...	Burdwan .	30·040	30·092	+·022	Calm	10	80·5	1 & 7 ,,	52·7	3rd ,,	79·0	55·2	67·1
		Raniganj ..	29·795	30·111	+·016	Nly	16	80·7	1st ,,	53·7	4th ,,	78·1	56·2	67·2
	Bankura	Bankura ..	29·794	30·062	+·005	Calm	26	81·7	1st ,,	54·3	3rd ,,	79·0	56·5	67·8
	Birbhum													
	Murshidabad	Berhampore	30·066	30·085	+·015	NWly	28	79·1	1st ,,	52·7	3 & 4 ,,	77·2	55·8	66·5
	Pabna	Sirajganj ..	30·070	30·068	+·027	E	16	77·4	5th ,,	49·1	2nd ,,	76·4	52·3	64·4
North Bengal.	Bogra	Bogra .	30·042	30·059	+·027	Calm	19	79·3	7th ,,	40·7	2nd ,,	77·6	52·5	65·1
	Rajshahi	Rampur Boalia.	30·060	30·074	+·031	N	56	?	?	48·7	3rd ,,	?	53·1	?
	Malda	Malda ..	30·054	30·091	—	NW	74	78·0	1st ,,	45·2	3rd ,,	77·2	49·5*	63·3
	Dinajpur	Dinajpur ...	30·008	30·087	+·048	W	28	77·1	6th ,,	47·5	2nd ,,	76·1	51·5	63·8
	Rangpur ...	Rangpur	30·006	30·091	—·010	E	18	76·3	5th ,,	48·3	2nd ,,	75·3	50·8	63·1
	Jalpaiguri	Jalpaiguri	29·834	30·088	—·009	Variable	27	75·4	4th ,,	51·6	4 & 6 ,,	73·8	53·3	63·6
	Kuch Behar													
	Darjeeling	Darjeeling ..	23·030	—	+·010	Calm	84	44·6	6th ,,	34·5	1 & 3 ,,	43·2	35·3	39·2
	Sikkim	Gnatong ..	19·202	—	—	Ely	89	36·4	1 & 5 ,,	8·1	1st ,,	33·2	11·6	22·4
East Bengal.	Chittagong	Chittagong .	30·030	30·069	+·0.3	Calm		79·2	5th ,,	52·1	3rd ,,	77·4	54·5	66·1
	Chittagong Hill Tracts	Demagiri ..	Observations not received.											
	Backergunge	Barisál .	30·099	30·058	+·027	Calm	35	77·8	5 to 7 Jan.	52·6	4th ,,	77·3	54·3	65·8
	Noakhali	Noakhali .	30·084	30·076	+·047	NWly	52	78·3	6th ,,	51·0	4th ,,	77·5	52·7	65·1
	Faridpur	Faridpur ..	30·079	30·075	+·039	Calm	34	74·0	4 & 6 ,,	52·5	2nd ,,	73·6	54·1	63·9
	Dacca	Dacca ..	30·087	30·056	+·008	Ely	57	79·1	5th ,,	53·3	1st ,,	77·7	55·7	66·8
	Tippera .. .	Comilla .	30·080	30·064	+·026	Calm	21	81·4	6th ,,	52·1	1 & 3 ,,	78·6	52·9	65·7
	Mymensingh	Mymensingh	30·054	30·072	+·020	E	37	77·2	6th ,,	50·7	1st ,,	76·2	53·7	65·0
North Bihar.	Purnea	Purnea	30·008	30·097	+·025	Calm	24	76·2	1, 2 & 7 ,,	45·3	2 & 3 ,,	75·5	48·3	61·9
	Bhágalpur	Bhagalpur .	29·9.5	30·097	+·034	Calm	7	79·3	1st ,,	48·0	3rd ,,	76·9	52·7	64·8
	Darbhanga	Darbhanga	29·972	30·102	+·024	Variable	48	75·6	1st ,,	49·1	3 & 4 ,,	74·0	52·4	63·2
	Muzaffarpur	Muzaffarpur..	29·958	30·102	—	NNW	59	76·7	1, & 3 ,,	46·3	3rd ,,	74·0	51·3	63·6
	Champaran	Motihari ..	29·883	30·080	+·021	Variable	91	78·2	1st ,,	44·9	2 & 3 ,,	74·5	48·6	61·6
	Saran	Chapra ..	29·975	30·090	+·045	Calm	55	78·2	1st ,,	50·1	2 & 3 ,,	74·2	51·2	64·3
South Bihar.	Shahabad	Dehri ...	29·760	30·085	—·002	SW	32	80·3	1st ,,	53·4	2nd ,,	75·0	56·7	65·9
		Buxar ..	29·886	30·095	+·019	Variable	67	80·4	1st ,,	51·4	2nd ,,	71·8	55·0	63·4
		Arrah ..	29·934	30·087	+·030	Variable	38	79·1	1st ,,	50·0	2nd ,,	75·1	55·6	65·1
	Gaya	Gaya ...	29·707	30·059	—·023	SEly	132	79·0	1st ,,	53·4	3rd ,,	76·5	55·6	66·1
	Patna	Bankipore .	29·750	30·095	+·017	Variable	64	76·8	1st ,,	50·9	2nd ,,	73·2	55·5	64·4
	Monghyr													
	Sonthal Parganas ..	Naya Dumka	29·619	30·096	+·024	Variable	52	79·6	1st ,,	49·1	3rd ,,	76·6	52·7	64·7
Chota Nagpur.	Hazaribagh	Hazaribagh ..	28·043	30·081	+·006	Calm & S	126	77·2	1st ,,	50·2	3rd ,,	73·0	53·1	63·1
	Lohardaga	Ranchi ..	27·917	30·072	+·019	Calm	83	77·0	1st ,,	50·6	3rd ,,	73·2	53·1	63·2
	Palamau													
	Singhbhum ...	Chaibassa .	29·308	30·055	+·004	Calm & WSW	19	84·0	1st ,,	53·7	5th ,,	79·8	55·9	67·9
	Manbhum													

* Mean of 4 days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 10 rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station district, *i.e.*, from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one of

for the week ending Saturday, the 7th of January 1893.

Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	DISTRICT OBSERVATIONS. Of week. Mean for district.	Of week. Normal mean.	Of week. Average number of rainy days.	Of week. Normal number of rainy days.	Rainfall. Since 1st of month. Mean for district.	Since 1st of month. Normal mean.	Since 1st of month. Variation.	Since 16th October 1892. Mean for district.	Since 16th October 1892. Normal mean.	Since 16th October 1892. Variation.	District.
—	65·9	85	2·3	Nil	Nil	0·03	0·00	0·04	Nil	0·03	−0·03	7·20	6·13	+1·07	Puri.
+1·1	64·9	83	0·7	Nil											
+0·8	64·7	88	2·4	Nil											
−0·2	64·4	79	4·3	Nil	Nil	0·07	0·00	0·08	Nil	0·07	−0·07	6·01	3·92	+2·09	Cuttack.
+2·3	61·5	86	0	Nil	Nil	0·67	0·00	0·15	Nil	0·07	−0·07	6·57	2·73	+3·84	Balasore.
+3·7	62·6	75	1·9	Nil	Nil	0·16	0·00	0·18	Nil	0·16	−0·16	7·93	2·77	+5·16	Midnapore.
+0·6	59·5	89	2·0	Nil	Nil	0·12	0·00	0·13	Nil	0·12	−0·12	7·12	2·54	+4·58	24-Parganas.
+0·7	62·3	95	2·1	Nil											
					Nil	0·08	0·00	0·09	Nil	0·08	−0·08	3·56	1·87	+1·69	Howrah.
					Nil	0·08	0·00	0·16	Nil	0·08	−0·08	7·14	1·65	+5·49	Hooghly.
+0·9	59·0	82	2·4	Nil	Nil	0·04	0·00	0·10	Nil	0·04	−0·04	4·24	1·62	+2·62	Nadia.
					Nil	0·09	0·00	0·15	Nil	0·09	−0·09	6·92	2·43	+4·49	Khulna.
+0·7	59·9	85	2·0	Nil	Nil	0·06	0·00	0·11	Nil	0·06	−0·06	9·19	1·99	+7·20	Jessore.
+1·6	61·0	66	2·6	Nil	Nil	0·05	0·00	0·15	Nil	0·05	−0·05	4·19	1·50	+2·99	Burdwan.
+2·5	65·4	74	1·3	Nil											
+1·9	60·9	73	4·1	Nil	Nil	0·06	0·00	0·15	Nil	0·06	−0·06	4·43	1·64	+2·82	Bankura.
					0·01	0·16	0·00	0·14	0·01	0·16	−0·15	3·23	1·12	+2·11	Birbhum.
+2·2	59·2	90	3·1	0·09	0·03	0·15	0·00	0·17	0·03	0·15	−0·12	1·86	1·04	+0·82	Murshidabad.
+2·1	58·0	93	2·7	Nil	Nil	0·07	0·00	0·18	Nil	0·07	−0·07	1·11	1·55	−0·44	Pabna.
+1·3	57·9	87	1·4	0·04	0·03	0·12	0·00	0·17	0·03	0·12	−0·09	0·95	1·19	−0·24	Bogra.
?	60·6	80	2·4	0·03	0·09	0·14	0·33	0·25	0·09	0·14	−0·05	0·61	1·24	−0·63	Rajshahi.
?	57·1	85	2·3	0·01	0·04	0·14	0·00	0·14	0·04	0·14	−0·10	0·83	1·37	−0·54	Malda.
+2·7	57·4	88	2·1	0·23	0·23	0·09	0·40	0·13	0·23	0·09	+0·14	0·66	0·83	−0·17	Dinajpur.
+1·8	55·2	93	1·1	0·37	0·21	0·14	0·75	0·14	0·21	0·14	+0·07	1·31	1·28	+0·03	Rangpur.
+1·8	57·6	91	5·0	0·03	0·04	0·08	0·00	0·21	0·04	0·08	−0·04	1·17	2·33	−1·16	Jalpaiguri.
					0·01	0·03	0·00	0·11	0·01	0·03	−0·02	0·89	1·03	−0·14	Kuch Bihar.
−0·6	38·5	85	5·4	0·06	0·04	0·10	0·00	0·25	0·04	0·10	−0·06	3·45	2·34	+1·11	Darjeeling.
—	27·7	72	2·9	0·27											Sikkim.
0	60·3	94	1·3	Nil	Nil	0·05	0·00	0·08	Nil	0·05	−0·05	12·78	4·92	+7·86	Chittagong.
					Nil	0·05	0·00	0·10	Nil	0·05	−0·05	6·69	4·32	+2·37	Chittagong Hill Tracts.
+2·2	61·1	88	1·6	Nil	Nil	0·08	0·00	0·14	Nil	0·08	−0·08	7·85	3·63	+4·22	Backergunge.
+1·3	61·5	89	0·1	Nil	Nil	0·18	0·00	0·24	Nil	0·18	−0·18	15·42	4·97	+10·45	Noakhali.
+1·4	59·2	93	0·9	Nil	Nil	0·07	0·00	0·16	Nil	0·07	−0·07	7·23	1·61	+5·62	Faridpur.
+0·7	59·5	89	2·4	Nil	Nil	0·05	0·00	0·12	Nil	0·05	−0·05	8·76	2·29	+6·47	Dacca.
+2·4	60·8	89	0·7	Nil	Nil	0·13	0·00	0·25	Nil	0·13	−0·13	8·37	2·43	+5·94	Tippera.
+2·8	58·1	92	2·0	Nil	Nil	0·09	0·00	0·17	Nil	0·09	−0·09	2·86	1·90	+0·96	Mymensingh.
+1·1	51·7	91	1·9	0·43	0·25	0·09	0·67	0·09	0·25	0·09	+0·16	0·27	1·35	−1·08	Purnea.
+4·4	58·7	83	5·0	0·04	0·28	0·09	0·50	0·22	0·28	0·09	+0·19	0·81	1·14	−0·33	Bhagalpur.
+1·4	57·8	88	4·1	0·67	0·51	0·14	1·00	0·29	0·51	0·14	+0·37	0·52	1·02	−0·50	Darbhanga.
[illegible]	[illegible]	94	4·6	0·94	0·30	0·15	1·00	0·28	0·30	0·15	+0·15	0·34	1·17	−0·83	Muzaffarpur.
+3·0	54·9	92	5·4	0·15	0·10	0·15	0·50	0·29	0·10	0·15	−0·05	0·10	0·69	−0·59	Champaran.
+3·9	57·5	91	8·6	0·23	0·31	0·15	1·67	0·28	0·31	0·15	+0·16	0·34	1·06	−0·72	Saran.
+3·5†	61·2	82	4·3	0·47											
+2·6	58·4	88	7·3	0·28	0·36	0·22	2·00	0·[illegible]6	0·36	0·22	+0·14	0·76	1·62	−0·86	Shahabad.
+5·1	59·0	86	4·4	0·26											
+3·2	58·0	83	4·7	0·02	0·10	0·16	0·25	0·34	0·10	0·16	−0·06	0·63	1·20	−0·57	Gaya.
+3·9	60·1	81	7·9	0·22	0·15	0·16	0·50	0·35	0·15	0·16	−0·01	0·38	1·41	−1·03	Patna.
					0·01	0·11	0·00	0·29	0·01	0·11	−0·10	1·34	1·35	−0·01	Monghyr.
+2·7	57·8	79	1·9	0·08	0·13	0·09	0·50	0·14	0·13	0·09	+0·04	1·58	1·23	+0·35	Sonthal Parganas.
+2·4	58·7	73	7·3	0·12		0·14		0·24		0·14			1·39		Hazaribagh.
+2·7	59·4	78	3·0	0·03		0·13		0·30		0·13			1·89		Lohardaga.
					0·09	0·29	0·00	0·31	0·09	0·21	−0·11	0·66	1·64	−0·98	Palamau.
+3·4	59·3	83	4·7	Nil	Nil	0·15	0·00	0·20	Nil	0·15	−0·15	6·00	1·94	+4·06	Singhbhum.
					Nil	0·14	0·00	0·16	Nil	0·14	−0·14	3·03	1·37	+1·66	Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 7th of January 1893.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 1st.	Monday, 2nd.	Tuesday, 3rd.	Wednesday, 4th.	Thursday, 5th.	Friday, 6th.	Saturday, 7th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rain-fall since 1st of month.	Average total rain-fall from 1st of month.	Total rain-fall since 16th October 1892.	Average rainfall from 16th October to date.
ORISSA	Puri	Puri	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	Nil	10·05	6·83
		Khurda	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·08	4·72	4·64
		Banpur	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	Nil	5·79	5·93
		False Point	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·04	8·24	7·12
		Gop	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·09	?
		Satpara	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	7·88	?
		Pipli	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·08	?
	Cuttack	Jagatsingpore	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·08	8·40	3·82
		Banki	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	3·66	4·06
		Cuttack	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·13	8·49	4·03
		Kendrapara	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·10	6·09	4·17
		Jajpur	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·07	3·42	3·45
		Dharmsala	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·65	?
		Salipore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·18	?
		Pal Lahara	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·83	?
	Balasore	*Akhyapada*	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·19	?
		Chandbali	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	4·71	3·86
		Bhadrak	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	5·95	2·89
		Soro	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	6·18	2·70
		Balasore	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	10·02	3·56
		Jellasore	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·10	4·33	1·51
		Baripodah	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·08	7·89	1·90
SOUTH-WEST BENGAL.	Midnapore	Contai	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·09	10·24	4·91
		Tamluk	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·12	5·35	2·60
		Midnapore	...	...	...	...	...	...	...	Nil	Nil	0·24	Nil	0·24	7·82	2·42
		Ghatal	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·18	8·29	1·07
		Kukrahaty	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·51	?
		Garhbeta	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·31	?
	24-Parganas	Saugor Island	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·11	14·66	4·99
		Diamond Harbour	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·11	6·63	2·61
		Canning Town	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	9·24	?
		Alipore Observatory	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·17	4·85	2·51
		Barrackpore	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·13	7·79	1·76
		Dum-Dum	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·13	3·78	2·03
		Barasat	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·12	5·78	1·98
		Basirhat	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·09	6·26	1·93
	Howrah	Howrah	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·10	3·09	2·22
		Mohesreka	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	4·02	1·52
		Ulubaria	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·86	?
	Hooghly	Serampore	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·10	8·63	1·69
		Hooghly	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·10	7·81	1·75
		Jahanabad	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·03	4·97	1·51
	Nadia	Ranaghat	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·07	5·96	1·80
		Krishnagar	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·03	5·96	1·20
		Chuadanga	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05		1·87
		Meherpore	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·02	2·09	1·49
		Kushtia	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·04	2·93	1·71
	Khulna	Satkhira	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·04	4·94	2·30
		Bagerhat	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·14	8·65	2·42
		Khulna	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·08	7·20	2·56
		Nakipur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·44	?
		Rampal	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·66	?
	Jessore	Narail	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·07	9·10	2·44
		Jessore	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	13·72	2·25
		Jhenidah	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·10	8·57	1·92
		Magura	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·03	7·06	1·55
		Bangaon	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	7·48	1·93
	Burdwan	Kalna	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	7·39	1·58
		Burdwan	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·01	5·06	1·58
		Katwa	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	3·81	1·62
		Raniganj	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·07	1·69	1·24
		Mankur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·73	?
	Bankura	Bankura	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·03	4·50	1·65
		Vishnupur	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	5·42	1·53
		Mallara	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	[illegible]	[illegible]
		Khatra	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·10	6·59	2·13
		Indas	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·42	?
		Kotalpur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·56	?
		Onda	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·80	?
		Gangajalghati	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·80	?
		Raipur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·33	?
		Sonamukhi	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	6·21	?
	Birbhum	Suri	...	...	...	...	...	...	·01	Nil	0·01	0·16	0·01	0·16	1·62	1·43
		Hetampore	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·18	4·50	0·79
		Rampur Hat	...	...	...	...	...	...	0·03	Nil	0·03	0·15	0·03	0·15	3·59	1·14
		Bolpur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·25	?
		Murarai	...	...	...	...	...	...	0·07	Nil	0·07	?	0·07	?	0·97	?
	Murshidabad	Kandi	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·11	2·41	1·21
		Berhampore	...	...	...	...	...	...	0·09	Nil	0·03	0·15	0·09	0·15	1·56	1·14
		Lalbagh	...	...	...	...	...	...	0·04	Nil	0·04	0·04	0·03	0·04	3·04	0·83
		Azimganj	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·16	1·54	1·08
		Jungipur	...	...	...	...	...	...	0·07	Nil	0·07	0·20	0·07	0·20	1·47	0·91
		Lalgola	...	...	...	...	...	...	...	Nil	Nil	0·23	Nil	0·23	1·15	1·04
		Akhriganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·95	?
		Patkabari	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·30	?
NORTH BENGAL.	Pabna	Pabna	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·07	1·05	1·48
		Sirajganj	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·07	0·27	1·65
	Bogra	Sherepore	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·15	0·78	1·44
		Nowkhilla	...	...	...	...	...	...	0·09	Nil	0·09	0·16	0·09	0·16	1·18	1·32
		Bogra	...	...	...	...	...	...	0·04	Nil	0·04	0·08	0·04	0·08	0·94	1·39
		Panchbibi	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·10	0·91	0·58
	Rajshahi	Boalia	...	...	...	...	...	...	0·02	Nil	0·02	0·12	0·02	0·12	1·24	1·25
		Natore	...	...	...	...	...	...	0·02	Nil	0·02	0·20	0·02	0·20	0·39	1·58
		Nauguon	...	...	...	...	...	...	0·23	1	0·23	0·10	0·23	0·10	0·23	0·88
		Lalpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·58	?
		Manda	...	...	...	...	...	...	0·05	Nil	0·05	?	0·05	?	0·19	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 7th of January 1893—contd.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 1st.	Monday, 2nd.	Tuesday, 3rd.	Wednesday, 4th.	Thursday, 5th.	Friday, 6th.	Saturday, 7th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
North Bengal—concld.	Malda	Malda	...	...	...	...	...	...	0·01	Nil	0·01	0·14	0·01	0·14	1·33	1·67
		Chanchal	...	...	...	...	...	...	0·06	Nil	0·06	0·15	0·06	0·15	0·33	1·01
		Gajol	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·34	?
		Sibganj	...	...	...	...	...	...	0·15	1	0·15	?	0·15	?	0·75	?
	Dinajpur	Mohadebpore	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·17	0·51	0·61
		Churaman	...	...	...	...	...	...	0·06	Nil	0·05	0·02	0·06	0·02	0·35	0·45
		Raiganj	...	...	...	...	...	...	0·84	1	0·84	0·13	0·84	0·13	1·35	0·49
		Dinajpur	...	...	...	...	...	...	0·23	1	0·23	0·10	0·23	0·10	0·51	2·05
		Balurghat	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	0·55	0·59
		Thakurgaon	...	...	...	...	...	...	0·21	1	0·21	?	0·21	?	0·21	?
	Rangpur	Bhawanigunge (*Gyabanda*)	...	...	...	...	...	...	0·05	Nil	0·05	0·13	0·05	0·13	0·58	1·46
		Rangpur	...	...	...	...	...	...	0·37	1	0·37	0·13	0·37	0·13	3·29	1·73
		Kurigaon	...	...	...	...	...	...	0·22	1	0·23	0·15	0·22	0·15	0·43	1·09
		Baguagra (*Nilphamari*)	...	...	...	...	...	...	0·19	1	0·19	0·16	0·19	0·16	0·92	0·84
		Ulipore	...	...	...	...	...	...	0·10	1	0·10	?	0·10	?	0·10	?
	Jalpaiguri	Jalpaiguri	...	...	...	...	...	...	0·04	Nil	0·04	0·08	0·04	0·08	1·17	2·33
		Alipore Dooar	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·98	?
		Fallacotta	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·11	?
		Debiganj	...	...	...	...	...	...	0·20	1	0·20	?	0·20	?	0·80	?
		Bhagatpore (Nagrakatta)	...	...	...	...	...	...	0·23	1	0·23	?	0·23	?	6·41	?
	Kuch Bihar	Dinhatta	...	...	...	...	...	...	0·01	Nil	0·01	0·03	0·01	0·03	0·45	0·97
		Kuch Bihar	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·08	1·20	1·37
		Mickliganj	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	Nil	0·82	1·00
		Mathabhanga	...	...	...	...	...	...	0·02	Nil	0·02	0·02	0·02	0·03	1·05	0·81
	Darjeeling	Buxa	...	...	...	...	...	...	0·02	Nil	0·02	0·26*	0·02	0·26	9·37	3·77
		Siliguri	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·01	1·86	0·79
		Darjeeling	...	...	...	...	...	...	0·06	Nil	0·06	0·08	0·06	0·08	0·98	3·88
		Kalimpong	...	...	...	...	...	...	0·08	Nil	0·08	0·03	0·08	0·03	1·54	0·89
		Kurseong	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·96	?
East Bengal	Chittagong	Cox's Bazar	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·07	13·05	6·04
		Chittagong	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·02	12·50	3·75
		Kutubdia	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	19·13	?
		Satkanya	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·80	?
	Chittagong Hill Tracts.	Rangamati	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	6·61	4·33
		Bundarban	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·70	?
	Backergunge	Patuakhali	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	7·94	4·09
		Pirojpur	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·13	7·86	3·33
		Barisal	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·12	7·39	3·57
		Gournaddi	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·83	?
		Bhola	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·03	8·18	3·48
		Daulatkhan	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	11·60	?
		Bauphal	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·49	?
	Noakhali	Noakhali	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·14	16·19	4·25
		Fenny	...	...	...	...	...	...	...	Nil	Nil	0·21	Nil	0·21	14·66	5·66
		Harishpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	19·48	?
		Ramganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	10·73	?
	Faridpur	Madaripur	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·12	[illegible]·09	1·75
		Faridpur	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·03	10·70	1·56
		Goalundo	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	4·[illegible]	1·51
	Dacca	Munshiganj	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	7·09	2·85
		Dacca	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·04	11·51	1·69
		Naryanganj	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	10·00	3·35
		Manikganj	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	6·43	1·59
		Joydebpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·08	?
	Hill Tippera	Agartola	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·09	6·64	2·82
	Tippera	Comilla	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·15	8·70	2·59
		Chaudpore	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	7·75	1·94
		Brahmanbaria	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·20	10·37	2·35
		Ramchandrapore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	7·97	?
		Nasirnagar	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	10·47	?
		Daudkandi	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·45	?
		Kasba	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	12·3[illegible]	?
		Laksham	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·[illegible]	?
	Mymensingh	Kishorganj	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·16	5·94	1·87
		Atia (*Tangail*)	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·08	2·75	1·44
		Mymensingh	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·10	0·61	2·01
		Jamalpur	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·08	1·74	1·88
		Netrakona	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·03	3·27	2·42
		Subornakhally	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·41	?
		Durgapore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·64	?
		Sherepore Town	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·26	?
		Dewanganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·78	?
North Bihar	Purnea	Kishanganj	...	...	...	...	...	...	0·24	1	0·24	0·11	0·24	0·11	0·28	1·29
		Araria	...	...	...	...	...	...	0·09	Nil	0·09	0·13	0·09	0·13	0·09	1·09
		Purnea	...	...	...	...	...	...	0·43	1	0·45	0·03	0·43	0·03	0·48	1·62
		Gondwara (Korah)	...	...	...	...	...	...	0·34	1	0·34	?	0·34	?	0·34	?
		Barsoe										?		?		?
		Forbesganj	...	...	...	...	...	...	0·11	1	0·11	?	0·11	?	0·11	?
		Kaliaganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Bhagalpur	Madhipura	...	...	...	...	...	...	0·33	1	0·35	0·09	0·35	0·09	0·35	1·08
		Bongaon (Sujabad)	...	...	...	...	...	...	0·60	1	0·60	?	0·60	?	0·60	?
		Supaul	...	...	...	...	...	...	0·67	1	0·67	0·06	0·67	0·06	0·67	0·97
		Protabganj	...	...	...	...	...	...	0·16	1	0·16	?	0·16	?	0·16	?
		Bhagalpur	...	...	...	...	...	...	0·04	Nil	0·04	0·10	0·04	0·10	0·53	1·20
		Banka	...	...	...	...	...	...	0·07	Nil	0·07	0·12	0·07	0·12	1·68	1·29
		Colgong	...	...	...	...	...	...	0·40	1	0·40	?	0·40	?	1·94	?
	Darbhanga	Tajpur	...	...	...	...	...	...	0·23	1	0·22	0·19	0·22	0·19	0·22	1·13
		Darbhanga	...	...	...	...	...	...	0·67	1	0·67	0·13	0·67	0·13	0·69	1·04
		Madhubani	...	...	...	...	...	...	0·63	1	0·63	0·10	0·63	0·10	0·63	0·97
		Bahera	...	...	...	...	...	...	0·50	1	0·50	?	0·50	?	0·50	?
		Roshera	...	...	...	...	...	...	0·30	1	0·30	?	0·30	?	0·30	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 7th of January 1893—concld.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 1st.	Monday, 2nd.	Tuesday, 3rd.	Wednesday, 4th.	Thursday, 5th.	Friday, 6th.	Saturday, 7th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BIHAR —concluded.	Muzaffarpur...	Sitamarhi ...	...	...	...	...	0·03	...	0·12	1	0·15	0·11	0·15	0·11	0·15	0·84
		Muzaffarpur	...	...	...	...	...	...	0·56	1	0·58	0·12	0·56	0·12	0·56	1·62
		Hajipur ..	..	...	.	...	...	...	0·20	1	0·20	0·21	0·20	0·21	0·32	1·01
		Paru ...										?		?	0·31	?
		Mahua ...	...	...	...	...	...	...	0·23	1	0·23	?	0·23	?		?
		Siuhar ...	...	...	...	...	...	...	0·10	1	0·10	?	0·10	?	0·10	?
		Pupri ...	...	...	...	...	...	...	0·35	1	0·35	?	0·35	?	0·35	?
	Champaran ...	Motihari .	...	...	...	...	0·03	...	0·12	1	0·15	0·18	0·15	0·18	0·15	0·70
		Bettiah ..	...	...	...	...	0·04	...	...	Nil	0·04	0·13	0·04	0·13	0·04	0·65
		Bagaha ...	...	...	...	...	0·19	...	...	1	0·19	?	0·19	?	0·28	?
		Burhurwa ...	...	...	...	...	0·08	...	0·05	Nil	0·13	?	0·13	?	0·13	?
	Saran ...	Gopalganj ...	...	...	...	...	0·10	...	0·15	2	0·25	0·04	0·25	0·04	0·25	0·42
		Siwan .	...	...	...	0·14	...	...	0·30	2	0·44	0·24	0·44	0·24	0·44	1·46
		Chapra ...	...	...	...	...	...	...	0·23	1	0·23	0·18	0·23	0·18	0·32	1·33
SOUTH BIHAR	Shahabad ...	Buxar ...	...	...	...	0·08	0·10	...	0·10	2	0·28	0·31	0·28	0·31	0·96	1·61
		Dehri ...	...	...	...	..	0·13	...	0·34	2	0·47	0·06	0·47	0·06	0·83	1·54
		Bhabhua ...	...	...	...	0·10	0·14	...	0·13	3	0·37	0·32	0·37	0·32	0·58	1·89
		Sasaram ...	...	...	...	...	0·20	...	0·20	2	0·40	0·14	0·40	0·14	0·63	1·67
		Arrah ...	...	...	...	...	...	...	0·26	1	0·26	0·25	0·26	0·25	0·55	1·34
		Mohanea .										?		?		?
		Khiri ...	...	...	...	...	...	...	0·20	1	0·20	?	0·20	?	0·20	?
		Ageaon ...										?		?		?
		Ramagar ...	...	...	...	...	0·15	...	0·10	2	0·25	?	0·25	?	0·25	?
		Koath ...	...	...	...	...	...	...	0·05	Nil	0·05	?	0·05	?	1·17	?
		Sikroul ...										?		?		?
		Bassowan ...	...	...	...	..	...	...	0·11	1	0·11	?	0·11	?	1·22	?
		Monaharpur	...	...	...	0·16	...	...	0·16	2	0·32	?	0·32	?	0·40	?
	Gaya ...	Aurangabad ...	...	...	...	..	0·01	...	0·27	1	0·28	0·10	0·28	0·10	1·02	0·98
		Gaya ...	...	...	...	...	...	...	0·02	Nil	0·02	0·11	0·02	0·11	0·43	1·33
		Nawadah ...	..	...	..	...	...	...	0·02	Nil	0·02	0·16	0·02	0·16	0·83	1·20
		Jahanabad ..	...	.	...	...	0·04	...	0·04	Nil	0·08	0·26	0·08	0·26	0·24	1·25
		Arwal	...	..	..	...	...	...	.	Nil	Nil	?	Nil	?	0·30	?
		Daudnagar ...	..	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sherghati	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·99	?
		Rajauli .	...	...	...	.	...	...	...	Nil	Nil	?	Nil	?	2·95	?
		Pakri Barawan	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·42	?
	Patna ...	Patna	...	...	...	...	...	...	0·22	1	0·22	0·18	0·22	0·18	0·36	1·42
		Dinapore ...	..	...	...	..	...	...	0·25	1	0·25	0·18	0·25	0·18	0·25	1·34
		Bihar .										0·18		0·18		1·46
		Barh ...	...	...	...	...	...	...	0·05	Nil	0·05	0·11	0·05	0·11	0·50	1·41
		Bickram .	...	...	...	...	...	...	0·08	Nil	0·08	?	0·08	?	0·28	?
		Hilsa	...	...	...	..	...	..	...	Nil	Nil	?	Nil	?	0·27	?
	Monghyr ...	Begusarai ...	...	..	...	...	...	...	...	Nil	Nil	0·12	Nil	0·12	2·20	1·60
		Monghyr ...	...	...	...	...	..	...	.	Nil	Nil	0·08	Nil	0·08	0·95	1·41
		Jamui	...	...	...	...	..	...	0·03	Nil	0·03	0·14	0·03	0·14	0·87	1·94
		Gogri .	...	...	...	...	..	...	...	Nil	Nil	.	Nil	?	0·57	?
		Shaikpura ..	...	...	...	...	..	...		Nil	Nil	?	Nil	?	1·20	?
		Chahai Bamda	...	...	...	...	...	...	0·10	1	0·10	?	0·10	?	1·32	?
	Sonthal Parganas.	Rajmahal ...	...	...	...	...	...	..	...	Nil	Nil	0·01	Nil	0·01	0·68	1·07
		Godda .	...	...	...	...	...	...	0·32	1	0·32	0·04	0·32	0·04	0·80	0·88
		Pakour	..	...	...	...	...	..	0·12	1	0·12	0·04	0·12	0·04	3·50	0·83
		Naya Dumka	...	...	...	...	...	...	0·08	Nil	0·08	0·25	0·08	0·25	1·53	1·54
		Deoghur	...	..	...	...	...	..	0·23	1	0·23	0·10	0·23	0·10	0·73	1·66
		Jamtara ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·10	2·19	1·41
		Belbodda ..	...	..	...	...	...	...	...	Nil	Nil	?	Nil	.	Nil	?
		Nanihat ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·12	?
CHOTA NAGPUR.	Hazaribagh ...	Pachamba (Giridih).	...	...	...	...	...	...	0·13	1	0·13	0·14	0·13	0·14	3·20	1·36
		Hazaribagh	...	...	...	...	...	...	0·12	1	0·12	0·14	0·12	0·14	2·80	1·52
		Semtaguran										0·15		0·15		1·18
		Mahudi Hills										0·13		0·13		1·24
		Jhumra Hill	...	...	..	...	...	...	0·14	1	0·14	0·16	0·14	0·16	1·38	1·56
		Farhi .	...	...	...	...	..	...	0·09	1	0·09	?	0·09	?	1·54	?
		Chatra ...	...	...	...	...	...	...	0·17	1	0·17	?	0·17	?	1·34	?
		Karagdeha	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·27	?
		Ramgar										?		?		?
	Lohardaga ...	Lohardaga ...	...	...	...	...	...	..	0·05	Nil	0·05	0·07	0·05	0·07	6·53	2·09
		Ranchi ...	...	...	...	...	...	...	...	Nil	Nil	0·19	Nil	0·19	3·35	1·60
		Sills ...										?		?		?
	Palamau ...	Palamau (Daltonganj).	...	...	...	...	...	...	0·09	Nil	0·09	0·20	0·09	0·20	0·66	1·64
		Balumath										?		?		?
		Husainabad	..	...	...	...	...	...	0·59	1	0·59	?	0·59	?	1·21	?
		Garhwa	...	...	...	...	...	...	0·08	Nil	0·08	?	0·08	?	1·41	?
	Singhbhum ..	Chaibassa	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·15	6·00	1·94
		Chakardharpur.	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·07	?
		Ghatsila	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·15	?
		Baharagura	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·35	?
	Manbhum .	Purulia ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	4·35	1·28
		Gobindpur	...	...	...	...	..	...	0·01	Nil	0·01	0·22	0·01	0·22	1·71	1·48
		Raghunathpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·69	?
		Barabhum	...	...	...	...	...	...	0·07	Nil	0·07	?	0·07	?	5·24	?
		Jhalda .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	.	1·88	?
		Chas .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·61	?
		Pandra ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·08	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the* 10*th January* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY THE 7TH OF JANUARY 1893.

At the close of the previous week a very considerable barometric depression had crossed the Indus Valley and had moved eastward over Rajputana, where it existed on the 30th instant. The depression had continued to travel eastward very rapidly, and on the morning of the 31st, or the last day of the previous week, it had reached the neighbourhood of Bahraich in the North-West Provinces, but in its advance it had filled up so rapidly that on the 31st it was of comparatively little importance. In front of this depression, however, the usual very rapid increase of temperature and humidity took place, and thus at the close of the previous week temperature and humidity were unusually high in Bengal. On the 1st of January the feebly unsettled conditions left after the depression had filled up continued to give high temperature and rather high humidity with lightly to moderately clouded skies to Bengal, but the only rainfall reported was 0·02 inch at Gnatong, and pressure also continued to fall very slowly over the province on this day. On the 2nd, pressure began to rise moderately over the greater part of the province, the effects of the depression to a great extent disappeared, and temperature and humidity generally fell. The sky began to clear, and again the only rainfall reported was a slight amount at Gnatong. On the 3rd pressure had risen in and near the hills, but it was steady elsewhere, and a further decrease of temperature, humidity and cloud proportions took place, while the whole province on this day was rainless. On the 4th pressure increased at the majority of stations, and became in excess of the normal by about 0·04″ to 0·07″. Temperature, however, began to rise rapidly at the Bihar stations on this day. This was again in connection with the advance of a considerable barometric depression which had appeared over Rajputana on the 3rd, and which advanced in an easterly direction, so that on the 4th it was near Saugor, but it had also rapidly filled up and had almost disappeared. Nevertheless, it gave rather heavily clouded skies at some of the western stations, and two or three light showers were reported in South Bihar. On the 5th the depression had practically ceased to exist, though pressure was falling moderately to rather rapidly over the whole of the province. A further rather rapid increase of temperature had also occurred, while humidity had become exceedingly high, and both were in large excess of the normal. The sky also clouded over rather heavily over a large part of the province, and rainfall was again reported in parts of Bihar. A further rapid fall of pressure, amounting at many stations to nearly a tenth of an inch, took place on the 6th instant, and pressure became rather largely below the normal, while, on the other hand, temperature continued high, the excess equalling from 2° to 4°. Rainfall on this day was, however, absent. On the 7th the pressure changes were generally small but exceedingly irregular, and the distribution of pressure became decidedly abnormal, as the highest pressures were recorded in North-East Bengal, comparatively low readings being reported in the west of the province. Accompanying these disturbed conditions, the mean temperature had become about 4° in excess of the normal, humidity was very high, the sky had clouded over rapidly, and fairly general rain was reported in Bihar and North Bengal, while showers also occurred in parts of South-West Bengal and Chota Nagpur.

Pressure.—The variations of pressure from the normal have been very large during the week, but the mean pressure has averaged about 0·01″ to 0·02″ in excess of the normal. In a few cases, however, slight defects have been registered, and this is the case at Gaya, Dehri, Jalpaiguri, and Rangpur.

Temperature.—The mean temperature of the province for the week has been 2·1° in excess of the normal. This excess has, however, been largest in Bihar and Chota Nagpur, where it has averaged about 3°.

The distribution of temperature for the week in the province generally and its variations from the normal value are clearly seen in the table below, where the average maximum, minimum and mean temperatures at nine typical stations in different districts of the province are compared with their normal values for the period. In this week the excess has been generally most largely developed in the night or minimum temperatures, which at such stations as Gaya and Patna have been from 4° to 6° above the normal:—

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 7th January 1893.

	Normal mean maximum temperature for the week ending 7th January.	Actual mean maximum temperature for the week ending 7th January 1893.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 7th January.	Actual mean minimum temperature for the week ending 7th January 1893.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 7th January.	Actual mean daily temperature for the week ending 7th January.	Variation of actual mean from the normal.
Cuttack	82·8	82·2	—0·6	59·9	60·2	+0·3	71·4	71·2	—0·2
Calcutta	75·6	77·1	+1·5	55·0	54·7	—0·3	65·3	65·9	+0·6
Dacca	76·8	77·7	+0·9	55·2	55·7	+0·5	66·1	66·8	+0·7
Burdwan	76·8	79·0	+2·2	54·4	55·2	+0·8	65·6	67·1	+1·5
Patna	72·1	73·2	+1·1	48·9	55·5	+6·6	60·5	64·4	+3·9
Gaya	74·4	76·5	+2·1	51·2	55·6	+4·4	62·9	66·1	+3·2
Purnea	74·1	75·5	+1·4	47·4	48·3	+0·9	60·8	61·9	+1·1
Hazaribagh	71·2	73·0	+1·8	49·8	53·1	+3·3	60·5	63·1	+2·6
Darjeeling	44·9	43·2	—1·7	34·9	35·3	+0·4	39·9	39·2	—0·7

Rainfall.—The average fall in the Darbhanga district has equalled 0·51 inch; the falls in Bhagalpur, Mazaffarpur, Saran, and Shahabad have been about a third of an inch; those in Rangpur, Dinajpur, Purnea, and Patna from a sixth to a quarter of an inch; and those in Rajshahi, Champaran, and Southal Parganas about a tenth of an inch. In other cases the falls have been less than a tenth of an inch.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 7th of January 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th Oct. 1892.	
			Of highest of each day.	Of lowest of each day.	Of mean of each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	85·3	54·5	73·9	59·7	69·8	+1·0	Nil	0·06	−0·06	0·00	0·09	−0·09	Nil	0·06	6·55	4·04
South-West Bengal ...	8[illegible]	46·7	78·2	55·4	66·8	+1·6	Nil	0·10	−0·10	0·00	0·15	−0·15	Nil	0·10	5·56	1·86
North Bengal	73·3	45·2	76·1	51·9	65·9	+1·9	0·10	0·10	0	0·25	0·17	+0·08	0·10	0·10	0·91	1·21
East Bengal	81·4	50·7	76·9	54·9	65·5	+1·5	Nil	0·09	−0·09	0·00	0·18	−0·18	Nil	0·09	7·96	2·85
North Bihar	79·3	44·9	7[illegible]·9	51·3	63·1	+2·8	0·32	0·13	+0·19	0·89	0·22	+0·67	0·32	0·13	0·46	1·07
South Bihar	80·4	49·1	7[illegible]·7	55·1	64·9	+3·4	0·15	0·14	+0·01	0·68	0·28	+0·40	0·15	0·14	0·95	1·33
Chota Nagpur	84[illegible]	50·2	75·3	54·0	64·7	+2·7	0·10	0·15	−0·05	0·45	0·24	+0·21	0·10	0·15	4·17	1·53

METEOROLOGICAL OFFICE, BENGAL,
The 10th January 1893.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

Abstract of the Results of the Barometric and Thermometric Observations taken at 10 a.m. at the Meteorological Office, Chowringhee, in the month of December 1892.

	Inches.	Date.
The mean pressure at 10 A.M. during the month	30·121	
The mean temperature at 10 A.M. during the month	69·8°	
The highest temperature during the month ...	80·6	31st.
The lowest temperature during the month	48·9	12th.
The absolute range of temperature during the month	31·7	
The mean daily range of temperature during the month ...	24·0	
The greatest range of temperature in one day during the month ...	27·2	29th.
The mean 10 A.M. humidity during the month	% 63	
The mean 10 A.M. vapour tension during the month	Inches. ·460	
The total rainfall of the month	Nil.	
The greatest fall in 24 hours		
The number of rainy days in the month		

C. Little,
For Meteorological Reporter to the Govt. of India.

Meteorological Office, India;
The 9th January 1893.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 1st to 7th January 1893.

Month.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature. Daily mean.	Maximum.	Range.	Minimum.	Hygrometry. Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	Rainfall at 10 A.M. for past 24 hours.
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
January ...	1st ...	30·142	68·6	79·9	22·7	57·2	72·3	65·2	·528	60·5	67	Nil
" ...	2nd ...	·145	66·7	78·4	23·5	54·9	72·6	64·6	·504	59·2	63	"
" ...	3rd ...	·147	65·4	76·9	23·0	53·9	68·6	61·7	·460	56·6	65	"
" ...	4th ...	·154	65·8	76·9	22·2	54·7	70·6	66·6	·600	64·1	80	"
" ...	5th ...	·095	66·9	77·9	22·0	55·9	70·1	65·6	·572	62·7	78	"
" ...	6th ...	·049	67·5	78·9	22·8	56·1	73·1	66·1	·550	61·6	67	"
" ...	7th ...	·051	68·5	78·9	20·8	58·1	72·0	67·6	·617	64·9	78	"

The mean 10 A.M. pressure of the seven days	Inches. 30·112
The mean temperature of the seven days	67·1°
The extreme variation of temperature	26·0
The maximum temperature	79·9
The mean 10 A.M. relative humidity of the seven days	% 71
The total fall of rain from 1st to 7th January 1893 ...	Inches. Nil

The daily mean temperatures are the crude means of maximum and minimum temperatures.

C. Little,
For Meteorological Reporter to the Govt. of India.

Meteorological Office, India,
The 9th January 1893.

Results of the Meteorological Observations taken at the Alipore Observatory from 1st to 7th January 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature.				Hygrometry.				Wind.		Rain.	Weather.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
Jan.	1st	130 4	7 9	30·081	65·9	78 6	22·4	56·2	60·4	0 456	56 4	71	W by N, NNW and calm.	49	Nil	Chiefly clear ⌓, ≡.
"	2nd	130·3	9·0	·082	64·4	76·2	22·7	53·5	58·2	·405	53·1	70	NNW, calm and variable.	33	"	Clear, ⌓.
"	3rd	122·7	8·3	·083	63·1	75 0	22·1	52·9	57·6	·404	53·0	73	ENE and NNE ...	42	"	Clear, ⌓.
"	4th	125·6	7·9	·093	64·1	75 9	22·2	53 7	58·5	·421	54·2	72	NNE and NNW	43	"	Chiefly clear ⌓.
"	5th	128·3	6 9	048	64 6	76·6	22 0	54·6	59·5	·416	55·8	75	NNW and calm	37	"	Partially cloudy, ⌓.
"	6th	129·4	8·6	29 976	65·9	77·7	22·5	55·2	61·9	·472	57·3	76	Calm and variable	32	"	Partially cloudy, ⌓, ≡.
"	7th	131 4	4·7	·986	66·8	77 7	21·1	56·6	63·1	·530	60·6	80	WSW and calm	29	"	Partially cloudy, ⌓, ≡.

	Inches.
The mean pressure of the seven days	30·050
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	30 024
	Hours.
The total number of hours of bright sunshine	53·3
The maximum possible number of hours of sunshine	75·3
	°
The mean temperature of the seven days	65·0
The average temperature of the corresponding period for 24 years, S.-G.'s Office	67·4
The extreme variation of temperature	25·7
The maximum temperature	78·6
	Miles.
The highest velocity of the wind in one hour	7
	lbs.
The highest pressure of wind on one square foot	[illegible]
The mean relative humidity	74
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	71
	Inches.
The total fall of rain from 1st to 7th January 1893 ...	Nil
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·04
The total fall from 1st to 7th January 1893	Nil
The average fall of the corresponding period for 24 years, S.-G.'s Office ..	0·04

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

⌓, dew; ≡, fog.

C. Little,

For Meteorological Reporter to the Govt. of Bengal.

Meteorological Office, Govt. of India;

Calcutta, the 9th January 1893.

PUBLIC WORKS DEPARTMENT, BENGAL.

IRRIGATION BRANCH.

IRRIGATION OPERATIONS FOR THE OFFICIAL YEAR 1892-93.

Areas leased for irrigation up to end of October 1892.

Circle.	District.	Canal.	Estimated full discharge.	Average discharge in month.	Discharge utilised.	Approximate area of land irrigated during the year up to the end of the month.	Approximate area of land under irrigation up to the same date last year.	Details of areas leased. Five years, all crops.	Five years, kharif.	Annual leases. Kharif.	Rabi.	Sugarcane.	Bhadoi.	Hot-weather.	Total.	Grand Total.	Rainfall, 1892-93. During month.	Up to end of month.	Rainfall, 1891-92. During month.	Up to end of month.	Remarks.
			C. ft.	C. ft.	C. ft.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Inches.	Inches.	Inches.	Inches.	
Orissa ...	Cuttack ...	Taldanda, 1st reach ..	1,342	349	120 (1st and 2nd reach)	8,956	10,505	... ..	7,825	351	139	29	......	......	519	8,344	5·25	48·85	1·00	59·65	
		Ditto, 2nd " ...	566	81													7·25	48·41	1·00	52·89	
		Machgong	766	245	187	27,439	28,006	......	25,342	2,572	125	23	......	......	2,720	28,062	6·67	41·92	......	47·38	
		Kendrapara	1,067	853	755	48,903	46,701	......	48,948	......	1,746	38	......	......	1,784	50,732	5·00	37·70	1·22	48·93	
		Gobri	372·82	56	42	2,610	2,992	......	3,287	......	50	......	......	......	50	3,337	6·29	45·48	0·72	57·21	
		Do. Extension	648	84·50	42	3,574	3,633	... ..	3,216	......	13	......	......	......	13	3,229	No rain gauge.				
		Pattamoondi	885	350	268	12,627	13,136	......	11,755	... ..	199	......	......	... ..	199	11,954	7·02	10·32	......	..	
		High Level, Range I ..	608	318	239·6	21,679	20,980	......	21,559	......	276	......	.... .	. ....	276	21,835	2·52	50·82	1·64	40·89	
		Ditto, ditto II ...	727·16	75·58	75·58	2,270	2,732	......	2,329	... ..	45	......	......	......	45	2,374	No rain gauge.				
		Jajpur Canal	700	......	.. ...	791	637	......	307	......	......	......	......	......	.. ...	307	......	.. ...	......	......	
	Balasore ...	High Level, Range III ...	727·16	205·05	199·78	29,790	36,791	......	32,257	......	1	168	......	.. ..	169	32,426	2·34	51·16	2·52	57·26	
		Total ...	......	......	......	158,639	166,113	......	156,825	2,923	2,594	258	... .	. ...	5,775	162,600	......	......	... ..	......	
		Total of the corresponding period of last year ...	......	......	.. ...	......	......	......	175,465	......	3,861	260	......	......	4,121	179,586	......	......	......	....	
South-Western.	Midnapore ...	Midnapore	1,411	687	427	81,449	76,501	......	78,641	13	... ..	......	......	......	13	78,654	2·52	32·86	0·58	54·74	Whole month's discharge.
		Panchkoora	522	92	86	7,266	5,035	......	6,991	......	......	......	.. ...	......	......	6,991	3·39	33·00	0·54	41·05	24 days' discharge.
	Howrah ...	Tidal Reaches, Ranges I-II	......	......	......	835	375	......	634	......	......	......	... ..	. ....	.. ...	634	......	... ..	.....	..	
		Total ...	......	..	... ..	89,550	81,911	... ..	86,266	13	. ...	......	. . .	......	13	86,279	....	......	......	... .	
		Total of the corresponding period of last year ...	......	......	......	. ....	......	......	81,094	......	. ...	......	......	......	......	81,094	......	......	......	.. ...	
Sone ...	Shahabad ...	Western Main	4,342	3,776	298	18,931	23,275	11,174	......	7,596	728	.. ...	......	768	9,092	20,266	0·08 (Western Main and Buxar)	39·60	1·20	18·92	
		Buxar	1,226	928	783	67,130	61,226	48,830	......	15,302	5,557	......	54	3,923	24,836	73,666					
		Arrah	2,000	2,243	2,203	1,10,399	112,309	97,699	......	17,350	. ....	......	103	4,076	21,529	119,228	0·35	34·37	1·45	23·99	
	Patna and Gaya.	Eastern Main	1,466 (Eastern Main and Patna)	1,466	1,408	2,366	1,670	1,770	......	714	100	......	.... .	......	814	2,584	...... (Eastern Main and Patna)	47·39	1·77	34·01	
		Patna				61,148	68,602	48,165	.. ...	17,480	705	......	30	.... .	18,215	66,380					
		Total ...	......	......	.....	259,974	267,082	207,638	... .	58,442	7,090	......	187	8,767	74,486	282,124	. .. .	......	......	......	
		Total of the corresponding period of last year ...	... ..	......	......	......	......	202,409	.. ...	60,101	19,850	1,098	520	9,973	91,542	293,951	......	.... .	......	......	
		Grand Total ...	......	......	....	508,163	515,106	207,638	243,091	61,378	9,684	258	187	8,767	80,274	531,003	......	.. ...	......	......	
		Grand Total of the corresponding period of last year	......	......	......	.... .	......	202,409	257,459	60,101	23,711	1,358	520	9,973	95,663	555,531	......	......	......	......	

CALCUTTA,
The 9th January 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 31st December 1892, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 31st December 1892.			Week ending Saturday, the 2nd January 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	1,965	2,33,200	3,788	1,787	2,21,325	3,441
Jute	338	1,64,300	3,008	74	41,375	729
Firewood	85	52,075	767	125	68,525	1,039
Other articles	891	2,11,475	2,928	933	2,15,755	3,312
Total ...	3,279	6,61,050	10,491	2,919	5,46,980	8,521

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 7th January 1893, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 7th January 1893.			Week ending Saturday, the 9th January 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	2,000	3,07,875	5,348	2,327	4,43,065	7,497
Jute	226	1,03,350	1,775	77	46,900	770
Firewood	104	56,200	841	111	82,960	1,236
Other articles	1,016	1,95,525	2,937	959	2,19,585	3,367
Total ...	3,346	6,62,950	10,901	3,474	7,92,510	12,870

EAST INDIAN RAILWAY.

Statement of Goods Traffic in Staples carried during the four weeks ending 26th November 1892, as compared with the same period of 1891.

STAPLES.	1891.		1892.		INCREASE.		DECREASE.	
	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.
	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.
Cotton, raw	26,272	23,683	60,133	36,173	33,861	12,490	...	...
Cotton twist and yarn—								
1.—European	8,594	7,753	7,481	6,973	...	...	1,113	780
2.—Indian	16,938	10,070	19,612	9,897	2,674	...	...	173
Cotton piece-goods—								
1.—European	1,29,405	1,36,681	1,44,281	1,57,363	14,876	20,682	...	...
2.—Indian	17,315	16,010	15,545	11,844	...	...	1,770	4,166
Drugs and chemicals—								
1.—Intoxicating other than opium	261	113	268	159	7	46	...	...
2.—Non-intoxicating	11,129	11,086	11,093	11,601	...	515	36	...
Dyes and tans—								
1.—Indigo	69,492	93,590	34,079	62,519	...	...	35,413	31,071
2.—Myrabolams	12,501	4,423	8,702	2,862	...	...	3,709	1,561
3.—Aniline dyes	219	229	394	361	175	141	..	...
4.—Cutch	3,142	1,130	2,123	1,151	...	21	1,019	...
5.—Paints and colours	7,956	3,826	8,480	4,149	524	323	...	...
6.—Others	2,847	1,058	1,908	795	...	...	939	263
Grains—								
1.—Wheat	8,61,561	2,27,019	3,76,084	1,40,940	...	...	4,87,477	86,079
2.—Rice	4,89,026	77,126	5,38,354	79,652	49,328	2,526	...	...
3.—Jawar and bajra	7,363	1,123	12,579	2,178	5,216	1,055	...	...
4.—Gram	81,121	17,928	1,98,108	80,469	1,16,987	62,541	...	...
5.—Indigo seed	3,959	831	4,031	1,045	72	214	...	...
6.—Seeds other than oil-seeds	27,828	11,251	71,362	22,286	43,534	11,035	...	...
7.—Others	2,89,304	80,090	4,10,225	1,13,324	1,20,921	38,234	...	...
Hides and skins—								
1.—Hides of cattle	29,604	18,280	33,678	18,831	4,074	551	...	...
2.—Skins of sheep, &c.	12,417	7,303	16,924	9,417	4,507	2,114	...	...
Horns	2,947	1,624	1,976	1,302	...	...	971	322
Jute—								
1.—Raw	1,21,976	24,278	1,49,906	29,734	27,930	5,455	..	...
2.—Gunny bags and cloth	1,08,376	57,929	1,00,394	54,360	...	...	7,982	3,569
Lac—								
1.—Stick	22,014	6,503	24,945	9,114	2,931	2,611	...	...
2.—Shell lac	16,493	13,095	14,354	11,287	...	...	2,109	1,808
Leather—								
1.—Unmanufactured	2,247	849	2,305	3,822	58	2,973	...	...
2.—Manufactured	4,940	6,3,9	4,073	4,928	...	...	867	1,391
Liquors—								
1.—Beer	11,731	7,249	12,369	6,620	638	...	...	589
2.—Wines	2,559	4,525	2,578	4,419	...	...	11	106
3.—Spirits	3,019	2,996	1,703	2,301	...	...	1,316	695
Metals—								
1.—Copper, unwrought	3,267	3,653	3,979	4,420	712	767	...	...
2.—Brass, unwrought	3,487	2,279	4,838	3,500	1,351	1,221	...	...
3.—Brass and copper, wrought	12,917	6,906	14,112	7,586	1,195	680	...	...
4.—Iron	1,57,879	75,158	2,92,783	1,10,087	1,34,904	34,929	...	...
5.—Tin	3,659	3,759	4,049	2,546	390	...	...	1,213
6.—Others	9,767	6,771	12,407	6,348	2,640	2,577	...	...
Oils—								
1.—Castor	2,628	712	3,683	979	1,057	267	...	...
2.—Kerosine	1,01,828	54,214	1,24,976	60,787	23,148	6,573	...	..
3.—Others	9,216	3,635	11,347	5,475	2,131	1,840	...	...
Oil-seeds—								
1.—Linseed	3,08,065	97,891	1,60,825	48,613	...	..	1,47,240	49,278
2.—Rape and mustard	82,52	18,432	1,66,863	40,728	84,372	22,296	...	...
3.—Til or jinjili	10,635	2,421	20,856	5,180	10,223	2,759	...	...
4.—Castor	67,455	16,190	63,962	16,849	...	659	3,491	...
5.—Poppy	60,947	20,247	11,697	3,269	...	...	49,250	16,978
6.—Others	7,432	2,082	5,087	1,011	...	...	2,345	1,071
Opium	51,222	63,315	57,442	58,917	6,220	...	...	4,398
Paper and pasteboard	9,679	5,947	7,793	5,425	...	...	1,886	522
Provisions—								
1.—Ghee	21,232	15,480	35,855	20,857	15,623	5,377	...	...
2.—Dried fruits and nuts	32,646	33,750	26,896	24,568	...	...	5,750	8,182
3.—Coconnuts	10,031	4,017	9,871	2,315	...	...	160	1,702
4.—Turmeric	11,439	9,371	9,792	9,209	...	...	1,638	162
5.—Others	1,04,856	65,581	1,03,340	64,790	...	...	1,516	791
Salt	4,90,463	1,04,969	4,86,812	98,846	...	...	3,651	6,123
Saltpetre, &c.—								
1.—Saltpetre	51,111	20,971	49,286	21,971	...	1,000	1,825	...
2.—Borax	944	476	1,107	693	1·3	217	...	..
3.—Other saline substances	19,9.2	5,324	30,524	7,746	10,5.2	4,4.2	...	...
Silk, raw—								
1.—Foreign	26	1	1	4	...	3	25	...
2.—Indian	981	661	2,152	1,123	1,171	467	...	...
Silk piece-goods—								
1.—Foreign	88	188	17	54	...	...	71	134
2.—Indian	585	567	1,780	830	1,195	263	...	...
Spices—								
1.—Pepper	3,838	4,523	2,324	2,842	...	...	1,514	1,681
2.—Other	12,774	5,925	13,352	7,066	578	1,141	...	...
Sugar—								
1.—Drained	28,373	10,563	15,904	5,838	...	..	12,469	4,665
2.—Undrained	1,34,.69	41,494	2,21,080	64,143	86,511	22,649	.	...
Stone and lime	3,04,018	41,621	2,78,006	45,297	...	1,276	26,012	...
Tea—								
1.—Foreign	3	2	2	1	...	...	1	1
2.—Indian	4,679	4,179	4,577	3,795	...	...	102	384
Timber, &c.—								
1.—Timber	53,855	10,680	69,582	6,362	15,727	...	...	4,318
2.—Firewood	10,250	525	14,777	740	4,527	215	. .	...
Tobacco	34,305	15,464	30,283	13,770	..	...	4,022	1,694
Umbrellas	232	282	196	169	...	...	36	113
Wool—								
1.—Raw	2,029	1,909	815	551	...	...	1,214	1,358
2.—Piece-goods—								
a.—European	2,120	2,440	2,259	1,607	...	...	101	833
b.—Indian	5,754	7,459	5,534	7,354	...	...	420	105
3.—Shawls	2	1	6	8	4	7	..	...
All other articles of merchandise	4,77,532	1,64,856	3,36,124	1,85,094	...	20,148	1,41,408	...
Total ..	51,27,214	18,21,152	50,68,832	18,91,153	...	60,001	1,18,382	5,374
Military stores	19,696	2,113	16,564	16,739	...	...	3,042	...
Coal and coke—								
1.—For public	31,16,026	4,70,168	38,13,456	5,30,412	6,97,430	60,244	...	...
2.— „ Railway	4,97,137	40,589	4,74,288	56,517	...	16,128	22,849	...
Railway Materials—								
1.—For construction and revenue	7,64,995	24,091	16,44,529	63,635	8,79,534	40,544	...	...
Live-stock	...	23,196	...	17,740	...	...	...	5,456
Total ..	95,24,978	24,09,109	1,09,57,669	25,75,196	14,32,691	1,66,087	...	...

T. SIMPSON, *Assistant Auditor.*

TRAFFIC AUDIT OFFICE, GOODS DIVISION, JAMALPUR, *the 7th January* 1893

BENGAL CENTRAL RAILWAY.

Abstract of principal commodities carried over the Bengal Central Railway during the month of October 1892, as compared with the same month of the previous year.

Staples.	1892.		1891.		Total.		Increase.	Decrease.
	Up.	Down.	Up.	Down.	1892.	1891.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal	948	......	844	......	1,471*	1,396*	75	......
Cotton, raw	...	3	.....	......	3	......	3	......
Cotton twist and yarn—								
1.—European								
2.—Indian								
Cotton piece-goods—								
1.—European—								
a.—In bales and bundles	343	.. ..	274	... ..	343	274	69	......
b.—In boxes								
2.—Indian—								
a.—In bales and bundles . ..								
b.—In boxes								
Grains—								
2.—Rice	19	365	59	178	384	237	147	... .
5.—Others	183	97	117	16	280	133	147	......
Hides and skins—								
1.—Hides of cattle—								
a.—Dressed								
b.—Undressed								
2.—Skins of sheep, &c.—	......	27	......	22	27	22	5	......
a.—Dressed								
b.—Undressed								
Jute—								
1.—Raw—								
b.—Unscrewed	......	3,678	8	3,818	3,678	3,826	......	148
2.—Gunny-bags and cloth	16	2	2	......	18	2	16	......
Metals—								
1.—Copper, unwrought								
2.—Brass, unwrought								
3.—Brass and copper, wrought								
4.—Iron	67	8	34	1	75	35	40	......
5.—Tin								
6.—Others								
Oils—								
2.—Kerosine	113	......	101	......	113	101	12	... ..
3.—Others	77	......	58	... ..	77	58	19	......
Oil-seeds—								
1.—Linseed								
2.—Rape and mustard								
3.—Til or gingelly								
4.—Niger	54	22	29	69	76	98	......	22
5.—Castor								
6.—Poppy								
7.—Others								
Provisions—								
2.—Betel-nuts	......	732	......	1,169	732	1,169	.....	417
3.—Others	13	32	16	14	45	30	15	......
Railway plant and rolling-stock	.....	......	... .	......	51†	79†	......	28
Salt	185	......	207	7	185	214	......	29
Sugar—								
1.—Drained								
2.—Undrained	7	246	32	253	253	285	......	32
Tobacco	32	30	20	20	62	40	22	......
All other articles of merchandise—								
1.—Unmanufactured								
2.—Manufactured	388	254	281	420	642	701	......	59
Total ..	2,445	5,516	2,082	5,987	8,535	8,700	570	735

* Includes 523 tons and 552 tons of coal during 1892 and 1891 respectively carried for Revenue, for which no "Up" and "Down" register maintained.

† Railway plant and rolling-stock 51 tons and 79 tons for the years 1892 and 1891, respectively, for which no "Up" and "Down register maintained.

Statement of principal commodities carried on the Bengal Central Railway during the month of September 1892.

DECREASES.

Betel-nuts ... ... 417 tons.

The decrease was principally in despatches from Khulna and the Flotilla stations, other modes of carriage being availed of.
The increases and decreases in all other commodities are due to ordinary fluctuations of traffic and call for no special remarks.

JAMES SHAW,
Joint Auditor and Examiner of Accounts.

CALCUTTA, *the* 22*nd December* 1892.

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 24th December 1892 on 1,615 7/16 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*242,075	*2,89,369 13 0	27,77,843 3	6,52,060 8 0	19,080 9 0	9,60,450 14 0	75,847½	110,536¾	186,384
Or per mile of railway	......	179 1 7	......	403 8 8	11 12 11	594 7 2	......	......	......
For previous 24¾ weeks of half-year	6,323,666	68,27,569 1 0	3,76,25,093 0	1,32,14,993 13 0	4,07,152 13 0	2,04,49,715 11 0	1,821,455½	2,300,808½	4,122,264½
Total for 25¾ weeks ...	6,565,741	71,16,938 14 0	4,04,02,938 30	1,38,66,994 5 0	4,26,233 6 0	2,14,10,166 9 0	1,897,303½	2,411,345	4,308,648½
Comparison.									
Total for corresponding week of previous year ‖	226,840	3,28,859 15 9	26,83,788 20	9,32,822 12 10	—70,654 3 3	11,91,028 9 4	75,755	93,902	169,657
Per mile of railway corresponding week of previous year	......	207 12 7	......	589 6 2	—44 10 3	732 8 6	......	......	......
Total for corresponding 25¾ weeks of previous year ...	6,633,758½	73,53,478 5 8	6,03,73,700 20	1,47,07,592 6 8	3,80,813 14 6	2,25,31,884 10 10	1,895,237	2,421,265	4,316,502

* The decrease is due to figures for the corresponding period of 1891 having included portion of earnings on account of remount special trains run during the second half of 1891, but taken to account by E. B. S. Railway in last 12 days of December of that year.

‖ 7/12 of last period of December 1891, including supplemental. The receipts for this period included Rs. 6,00,932 on account of arrear coal freight charge recovered from State Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 31st December 1892, on 1,610½ miles open.

	Coaching traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	230,717	2,91,037 15 0	29,60,718 0	6,52,093 1 0	80,402 0 0	10,23,533 0 0	74,705½	107,978¾	182,684½
Or per mile of railway	......	180 11 5	......	404 14 5	49 14 9	635 8 7	......	......	......
For previous 25¾ weeks of half-year	6,564,276	71,34,967 14 0	4,05,57,835 30	1,38,72,215 5 0	2,72,327 7 0	2,12,79,510 10 0	1,890,165½	2,416,138¾	4,306,304 ½
Total for 26¾ weeks ...	6,794,993	74,26,005 13 0	4,35,18,553 30	1,45,24,308 6 0	3,52,720 7 0	2,23,03,043 10 0	1,964,871½	2,524,117½	4,488,983¾
Comparison.									
Total for corresponding last 5 days of previous year* ...	162,028½	2,34,899 15 9	19,16,991 20	6,66,392 0 1	—50,467 4 7	8,50,734 11 3	54,111½	67,072½	121,183½
Per mile of railway corresponding period of previous year	......	148 6 7	......	420 15 5	—31 14 2	537 7 10	......	......	......
Total for corresponding 26¾ weeks of previous year ...	6,795,787	75,88,378 5 5	6,22,90,692 0	1,54,63,894 6 9	3,30,346 9 11	2,33,82,619 6 1	1,949,348½	2,488,337½	4,437,685½

* 5/12 of the last period of December 1891, including supplemental. The receipts for this period included Rs. 6,00,932 on account of arrear coal freight charges recovered from State Railways.

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 24th December 1892 on 22½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	15,804	3,975 14 0	12,182 20	569 8 0	11 0 0	4,556 6 0	877	91	968
Or per mile of railway	......	178 11 1	......	25 9 6	0 7 11	204 12 6	......	......	......
For previous 24¾ weeks of half-year	*451,979	*1,11,383 8 0	†1,88,382 10	†8,508 2 0	‡296 0 0	1,20,187 10 0	21,839	1,793	23,632
Total for 25¾ weeks ...	467,783	1,15,359 6 0	2,00,564 30	9,077 10 0	307 0 0	1,24,744 0 0	22,716	1,884	24,600
Comparison.									
Total for corresponding week of previous year § ...	15,806	3,917 12 10	8,240 10	320 14 0	28 11 11	4,276 6 9	894	69	963
Per mile of railway corresponding week of previous year ...	......	176 1 3	......	14 13 3	1 4 8	193 3 2	......	......	......
Total for corresponding 25¾ weeks of previous year ..	463,177	1,13,910 10 4	2,28,636 10	9,103 2 0	732 14 8	1,23,736 11 0	22,817	2,707	25,524

* Added number of passengers 111 and deducted Rs. 12 }
† Ditto maunds 114 and " 1 } on account of difference between the approximate and audited figures for the week ended 19th November 1892.
‡ Ditto " 11 }
§ 7/12 of last period of December 1891, including supplemental.

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 31st December 1892, on 22½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	17,536	4,184 4 0	15,454 0	507 3 0	10 0 0	4,701 7 0	873	95	968
Or per mile of railway	......	188 0 11	......	22 12 9	0 7 2	211 4 10	......	......	.....
For previous $25\frac{2}{7}$ weeks of half-year	*463,871	*1,15,646 6 0	†2,00,664 30	†9,078 10 0	‡310 0 0	1,25,035 0 0	22,716	1,884	24,600
Total for $26\frac{2}{7}$ weeks ...	486,407	1,19,830 10 0	2,16,118 30	9,585 13 0	320 0 0	1,29,736 7 0	23,589	1,979	25,568
Comparison.									
Total for corresponding last 5 days of previous year § ...	11,289½	2,798 6 10	5,890 10	235 8 0	20 8 7	3,054 9 5	638	49	687
Per mile of railway corresponding period of previous year .	......	125 12 4	......	10 9 6	0 14 9	137 4 7	......	......	.....
Total for corresponding $26\frac{2}{7}$ weeks of previous year ...	474,466½	1,16,709 1 2	2,34,526 20	9,338 12 0	743 7 3	1,26,791 4 5	23,455	2,756	26,211

* Added number of passengers 1,088 and Rs. 287 }
† Ditto maunds 100 and " 1 } on account of difference between the approximate and audited figures for the week ended 26th November 1892.
‡ Ditto " 3 }
§ $\frac{5}{12}$ of the last period of December 1891, including supplemental.

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 24th December 1892 on 162 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	16,298	10,398 11 0	66,895 0	9,819 9 0	74 0 0	20,292 4 0	5,537	3,688½	9,225½
Or per mile of railway ..	... .	64 3 0	..... .	60 9 10	0 7 4	125 4 2	... .	......	... .
For previous $24\frac{2}{7}$ weeks of half-year	*406,078	*3,16,918 9 0	†10,64,961 0	†1,77,471 8 0	‡2,312 0 0	4,96,732 1 0	153,505¼	58,447½	211,953¼
Total for $25\frac{2}{7}$ weeks ...	422,376	3,27,317 4 0	11,31,856 0	1,87,291 1 0	2,386 0 0	5,17,024 5 0	159,042¼	62,136	221,178¾
Comparison.									
Total for corresponding week of previous year §	12,663	9,107 7 6	39,093 10	6,585 9 10	700 0 9	16,393 2 1	6,624	1,699	8,323
Per mile of railway corresponding week of previous year .	... .	56 3 6	......	40 10 5	4 5 2	101 3 1	......	......	......
Total for corresponding $25\frac{2}{7}$ weeks of previous year	377,294½	3,02,061 7 8	10,61,099 20	2,13,743 0 2	3,303 5 3	5,19,107 13 1	162,226	41,940	204,166

* Added number of passengers 859 and deducted Rs. 236 }
† Do. maunds 2,476 and " 1,428 } on account of difference between the approximate and audited figures for the week ended 19th November 1892.
‡ Do. " 38 }
§ $\frac{7}{12}$ of last period of December 1891, including supplemental.

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 31st December 1892, on 161⅝ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	12,492	9,786 14 0	52,104 30	9,823 10 0	60 0 0	19,670 8 0	5,588¾	2,770½	8,359
Or per mile of railway	......	60 10 0	......	60 13 10	0 5 11	121 14 0	.. ...	......	.....
For previous $25\frac{2}{7}$ weeks of half-year	*423,060	*3,27,323 4 0	†11,31,994 0	†1,87,177 1 0	‡2,385 0 0	5,16,885 5 0	159,04[illegible]	62,130	221,187½
Total for $26\frac{2}{7}$ weeks ...	435,552	3,37,110 2 0	11,84,098 30	1,97,00[illegible] 11 0	2,445 0 0	5,36,555 13 0	164,631¼	64,900½	229,537½
Comparison.									
Total for corresponding last 5 days of previous year §	9,044½	6,505 5 5	28,570 10	4,704 0 2	500 0 0	11,709 6 1	4,731	1,213½	5,944½
Per mile of railway corresponding period of previous year ...	......	40 4 10	......	29 2 4	3 1 7	72 8 9	... .	......	.....
Total for corresponding $26\frac{2}{7}$ weeks of previous year	386,339	3,08,566 13 1	10,89,659 30	2,18,447 0 4	3,803 5 9	5,30,817 3 2	168,957	13,153½	210,110½

* Added No. of passengers 684 and deducted Rs. 24 }
† Ditto Mds. 128 and deducted " 114 } on account of difference between the approximate and audited figures for the week ended 26th November 1892.
‡ Deducted " 1 }
§ $\frac{5}{12}$ of the last period of December 1891, including supplemental.

EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., DACCA, K.-D., AND ASSAM-BIHAR SECTIONS.)

Approximate Return of Traffic for the week ended 24th December 1892 on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	169,060	86,420 0 0	6,46,905 0	1,42,950 0 0	16,800 0 0	2,46,170 0 0	27,046	35,872	62,918
Or per mile of railway	218	111 0 0	833 0	184 0 0	*3 0 0	298 0 0	......	......	......
For previous 24 weeks of half-year†	3,978,936	17,55,262 0 0	1,77,11,673 0	42,45,477 0 0	4,21,139 0 0	64,21,878 0 0	651,864	910,416	1,562,280
Total for 25 weeks ...	4,147,996	18,41,682 0 0	1,83,58,578 0	43,88,427 0 0	4,37,939 0 0	66,68,048 0 0	678,910	946,288	1,625,198
COMPARISON.									
Total for corresponding week of previous year	155,508	79,441 0 0	7,25,909 0	1,15,303 0 0	57,710 0 0	2,32,454 0 0	25,667	27,293	52,960
Per mile of railway corresponding week of previous year ...	200	102 0 0	934 0	149 0 0	*67 0 0	318 0 0	......	......	......
Total to corresponding date of previous year	4,076,580	18,85,972 0 0	1,73,38,357 0	38,75,789 0 0	4,71,077 0 0	62,32,838 0 0	677,643	911,778	1,589,421

* Excluding steam-boat earnings.
† Audited up to week ending 29th October 1892.

EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., DACCA, K.-D., AND ASSAM-BIHAR SECTIONS.)

Approximate Return of Traffic for the week ended 31st December 1892, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	161,676	82,090 0 0	673,988 0	1,42,470 0 0	34,550 0 0	2,59,110 0 0	27,774	32,076	59850
Or per mile of railway	208	106 0 0	867 0	183 0 0	†26 0 0	315 0 0	......	......	......
For previous 25 weeks of half-year *	4,139,967	18,53,911 0 0	18,373,736 0	43,86,143 0 0	4,42,588 0 0	66,82,642 0 0	681,541	918,711	1,630,252
Total for 26 weeks ...	4,301,643	19,36,001 0 0	19,047,724 0	45,28,613 0 0	4,77,138 0 0	69,41,752 0 0	709,315	980,787	1,690,102
COMPARISON.									
Total for corresponding last 5 days of Dec. of previous year ...	111,178	56,743 0 0	518,507 0	82,359 0 0	41,222 0 0	1,80,324 0 0	18,333	19,496	37,829
Per mile of railway corresponding week of previous year ..	143	73 0 0	667 0	106 0 0	†5 0 0	184 0 0	......	......	......
Total to corresponding date of previous year	4,187,658	19,42,715 0 0	17,856,864 0	39,58,148 0 0	5,12,299 0 0	64,13,162 0 0	751,473	475,777	627 ,250

* Audited up to week ending 12th November 1892.
† Excluding steam-boat earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 24th December 1892 on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	29,453	11,470 0 0	59,636 0	3,370 0 0	240 0 0	15,080 0 0	3,330	2,344	5,674
Or per mile of railway	236	92 0 0	477 0	27 0 0	2 0 0	121 0 0	.	...	...
For previous 24 weeks of half-year*	728,955	2,47,537 0 0	12,94,847 0	1,08,428 0 0	3,880 0 0	3,59,815 0 0	89,956	50,370	140,326
Total for 25 weeks ...	758,408	2,59,007 0 0	13,54,483 0	1,11,798 0 0	4,120 0 0	3,74,925 0 0	93,286	52,714	146,000
COMPARISON.									
Total for corresponding week of previous year	24,357	10,749 0 0	54,253 0	3,131 0 0	286 0 0	14,266 0 0	3,330	2,289	5,619
Per mile of railway corresponding week of previous year ...	195	86 0 0	434 0	25 0 0	3 0 0	114 0 0	...	......	.
Total to corresponding date of previous year	725,269	2,56,973 0 0	13,20,134 0	1,00,379 0 0	5,935 0 0	3,63,287 0 0	93,438	51,822	145,760

* Audited up to week ending 29th October 1892.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 31*st December* 1892, *on* 125 *miles open.*

	Coaching Traffic.				Merchandise and Mineral Traffic.					Other earnings.			Total earnings.			Traffic Train-miles run.		
	Number of passengers.	Receipts.			Weight carried.		Receipts.									Coaching.	Merchandise.	Total.
		Rs.	A.	P.	Mds.	S.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.			
Total traffic for the week	30,738	19,860	0	0	46,153	0	3,490	0	0	660	0	0	15,010	0	0	3,330	2,342	5,672
Or per mile of railway	246	87	0	0	369	0	28	0	0	5	0	0	120	0	0	......	......	......
For previous 25 weeks of half-year	769,109	2,62,273	0	0	1,375,584	0	1,12,365	0	0	4,219	0	0	3,78,857	0	0	92,810	53,218	146,028
Total for 26 weeks ...	799,847	2,73,133	0	0	1,421,737	0	1,15,855	0	0	4,879	0	0	3,93,867	0	0	96,140	55,560	151,700
Comparison.																		
Total for corresponding last 5 days of Dec. of previous year	17,339	7,679	0	0	38,753	0	2,236	0	0	275	0	0	10,190	0	0	2,379	1,635	4,014
Per mile of railway corresponding week of previous year	139	62	0	0	310	0	18	0	0	2	0	0	82	0	0	......	......	......
Total to corresponding date of previous year	742,668	2,64,652	0	0	1,258,887	0	1,02,615	0	0	6,210	0	0	3,7,3477	0	0	95,372	54,402	149,774

* Audited up to week ending 12th November 1892.

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 24*th December* 1892 *on* 86 *miles open.*

	Coaching Traffic.				Merchandise and Mineral Traffic.					Other earnings (estimated).			Total earnings.			Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.			Weight carried.		Receipts.									Coaching.	Merchandise.	Total.
		Rs.	A.	P.	Mds.	S.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.			
Total traffic for the week ...	19,201	6,950	0	0	24,022	0	2,660	0	0	170	0	0	9,780	0	0	2,487	737	3,224
Or per mile of railway	223	81	0	0	279	0	31	0	0	2	0	0	114	0	0	......	......	......
For previous 24 weeks of half-year*	419,310	1,35,345	0	0	5,91,516	0	52,429	0	0	4,895	0	0	1,92,669	0	0	60,108	18,142	78,250
Total for 25 weeks ...	438,511	1,42,295	0	0	6,15,538	0	55,089	0	0	5,065	0	0	2,02,419	0	0	62,595	18,879	81,474
Comparison.																		
Total for corresponding week of previous year	16,857	5,651	0	0	24,927	0	2,068	0	0	—95	0	0	7,624	0	0	2,518	719	3,237
Per mile of railway corresponding week of previous year . . .	196	66	0	0	290	0	24	0	0	—1	0	0	89	0	0	......	......	......
Total to corresponding date of previous year	429,639	1,41,403	0	0	5,43,922	0	42,989	0	0	4,186	0	0	1,88,578	0	0	72,846	21,097	94,543

* Audited up to week ending 29th October 1892.

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 31*st December* 1892, *on* 86 *miles open.*

	Coaching Traffic.				Merchandise and Mineral Traffic.					Other earnings (estimated).			Total earnings.			Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.			Weight carried.		Receipts.									Coaching.	Merchandise.	Total.
		Rs.	A.	P.	Mds.	S.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.			
Total traffic for the week ...	18,492	6,210	0	0	20,165	0	1,690	0	0	250	0	0	8,150	0	0	2,487	737	3,224
Or per mile of railway	215	72	0	0	234	0	20	0	0	3	0	0	95	0	0	......	......	......
For previous 25 weeks of half-year*	437,212	1,42,353	0	0	6,08,591	0	54,950	0	0	5,002	0	0	2,02,305	0	0	62,595	18,879	81,474
Total for 26 weeks ...	455 704	1,48,563	0	0	6,28,751	0	56,640	0	0	5,252	0	0	2,10,455	0	0	65,082	19,616	81,698
Comparison.																		
Total for corresponding last 5 days of Dec of previous year...	12,043	4,035	0	0	17,817	0	1,406	0	0	—67	0	0	5,374	0	0	1,797	514	2,311
Per mile of railway corresponding week of previous year ...	140	47	0	0	207	0	16	0	0	—1	0	0	62	0	0	......	......	......
Total to corresponding date of previous year	441,682	1,45,438	0	0	5,61,739	0	44,395	0	0	4,119	0	0	1,93,952	0	0	74,643	22,211	96,854

* Audited up to week ending 12th November 1892.

BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

Approximate Return of Traffic for the week ending 24th December 1892 *on* 755 *miles open*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 755 miles open	75,220	31,910	3,75,850	50,950	10,220	93,080	12,270	14,645	26,915
Or per mile of railway	99·63	42·26	497·81	67·48	13·54	123·28	......	......	......
For previous 24¾ weeks of half-year*	2,179,320	8,62,736	66,93,294	8,99,904	2,26,997	19,89,637	328,884	368,401	697,285
Total for 25¾ weeks .	2,254,540	8,94,646	70,69,144	9,50,854	2,37,217	20,82,717	341,154	383,046	724,200
Comparison.									
Total for corresponding week of previous year on 739 miles open	79,906	37,556	2,35,971	20,173	33,527	91,256	11,522	14,681	26,203
Per mile of corresponding week of previous year	108·13	50·82	319·31	27 30	45·37	123·49	......	......	.....
Total to corresponding date of previous year	2,219,232	8,86,660	70,29,075	8,23,800	2,68,008	19,78,468	330,262	360,221	690,483

* Includes audited figures up to 12th November 1892.

BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

Approximate return of traffic for the week ending 31*st December* 1892, *on* 755 *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 755 miles open	61,920	32,590	4,01,630	50,230	10,990	93,810	12,438	12,497	27,935
Or per mile of railway	82·01	43·16	531·96	66·53	14·56	124·25	.....	...	......
For previous 25¾ weeks of half-year	2,254,540	8,94,646	70,69,144	9,50,854	2,37,217	20,82,717	341,154	383,046	724,200
Total for 26¾ weeks ...	2,316,460	9,27,236	74,70,774	10,01,084	2,48,207	21,76,527	353,592	398,543	752,135
Comparison.									
Total for corresponding week of previous year on 739 miles open	57,076	26,825	1,68,550	14,409	23,943	65,183	8,231	10,486	18,717
Per mile of corresponding week of previous year	77·23	36·30	228·08	19·50	32·40	88 20	......	......	......
Total to corresponding date of previous year	2,276,308	9,13,485	71,97,625	8,38,209	2,91,957	20,43,651	338,493	370,707	709,200

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 24th December 1892	12,963	0	0
Corresponding period of 1891	7,174	0	0
Increase	5,789	0	0
Receipts per mile for the week ending 24th December 1892	254	2	10
Corresponding period of 1891	140	10	8
Increase	113	8	2
Receipts from 1st July to 24th December 1892	3,07,988	0	0
Corresponding period of 1891	3,07,964	0	0
Increase	24	0	0

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[REGISTERED No. 29.]

No. 3 of 1893.



SUPPLEMENT TO
The Calcutta Gazette.

WEDNESDAY, JANUARY 18, 1893.

OFFICIAL PAPERS.

Non-Subscribers to the GAZETTE *may receive the* SUPPLEMENT *separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

CONTENTS.

DISTRICT ROAD FUND.

No. 157R.C.

GOVERNMENT OF BENGAL—PUBLIC WORKS DEPARTMENT.

Road Cess.

Dated Calcutta, the 12th January 1893.

RESOLUTION.

READ—

Letter from the Accountant-General, Bengal, No. 771L.F., dated 31st December 1892, submitting an abstract of receipts and expenditure of the several District Road Committees in Bengal for the quarter ending 30th September 1892.

RESOLUTION.—The Lieutenant-Governor directs that the accounts of the receipts and expenditure of the several District Road Committees in Bengal for the second quarter of the year 1892-93 be published in the *Calcutta Gazette* and circulated to the officers concerned.

ORDER.—Ordered that a copy of this Resolution, together with a copy of the abstract of receipts and expenditure, be published in the Supplement to the *Calcutta Gazette.*

Ordered also that a copy of this Resolution and of the abstract referred to be forwarded to the Commissioners of the Rajshahi, Bhagalpur, Chittagong, and Chota Nagpur Divisions; to the Superintending Engineers of the Northern and Western Circles; to the Inspector of Works, Eastern Circle; and to the Financial Department of this Government, for information.

By order of the Lieutenant-Governor of Bengal,

F. J. JOHNSTONE,

Secretary to the Government of Bengal.

DISTRICT

Statement of Receipts and Expenditure of the several District Road

RECE

Districts.	Balance in treasury on 1st July 1892.	Provincial Rates.				Interest on arrears of road cess collections.	Public Works.			Irrigation.	Miscel		
		Cess on lands.	Cess on mines and railways.	One per cent. road cess.	Total.		Road tolls.	Ferry tolls.	Total.	Canal tolls.	Rent of serais and staging-bungalows.	Fees, fines and forfeitures.	Miscellaneous.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.	Rs.	Rs.	Rs.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Cess Districts.													
Darjeeling ...	21,130 5 5	1,800 5 2	36 10 6	......	1,836 15 8	......	......	......	......	......	......	......	50 0 0
Hazaribagh ...	20,545 3 11	2,008 7 4	299 0 0	......	2,307 7 4	103 13 10	......	......	......	......	13 8 0	19 4 0	42 13 0
Lohardaga ...	13,474 0 3	53 15 6	2 11 5	......	55 10 11	......	......	......	......	......	......	155 12 0	−65 13 3
Manbhum ...	5,187 13 7	4,136 1 2	610 0 8	......	4,746 10 10	7 7 4	......	......	......	......	468 1 6	......	158 2 9
Palamau ...	4,714 2 1	598 15 0	......	......	598 15 0	9 8 9	......	......	......	......	30 0 0	16 8 0	12 0 0
Total ...	65,051 9 3	8,596 12 2	948 15 7	......	9,545 11 9	120 13 11	......	......	......	......	511 9 6	191 8 0	197 2 6
Non-cess Districts.													
Chittagong Hill Tracts ...	10,961 5 6	......	......	......	......	......	......	......	......	......	......	......	......
Santhal Parganas ...	31,014 2 6	......	......	......	......	......	......	......	......	......	238 4 0	4 0 0	368 15 9
Singhbhum ...	2,054 0 9	......	33 2 9	......	33 2 9	......	......	......	......	......	4 0 0	64 12 0	131 2 9
Total ...	44,029 8 9	......	33 2 9	......	33 2 9	......	......	......	......	......	242 4 0	68 12 0	500 2 6
Grand Total ...	1,09,081 2 0	8,596 12 2	982 2 4	......	9,578 14 0	120 13 11	.....	......	......	......	753 13 6	260 4 0	697 5 0

EXPEN

Districts.	Refunds.			Provincial Rates.	Administration.			Stationery.	Public					
	Cess.	Other receipts.	Total.	Establishment and contingencies of office of collection.	Establishment and contingencies of Committee's office.	Percentage cost of establishment for offices of account and control.	Total.	Stationery and printing.	Original works.	Repairs.	Establishment.	Tools and plant.	Toll and ferry establishment and contingencies.	Establishment of Divisional Superintendent of Works.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs.
Cess Districts.														
Darjeeling ...	......	......	......	382 1 8	270 12 4	......	270 12 4	68 14 4	......	2,179 7 3	140 0 0	......	...	......
Hazaribagh ...	......	93 8 0	93 8 0	373 6 5	366 7 5	......	366 7 5	75 7 2	310 1 3	7,414 6 11	2,563 14 0	399 10 3	...	......
Lohardaga ...	......	......	......	663 9 5	230 5 6	......	230 5 6	43 9 9	290 3 0	9,726 14 1	1,982 0 1	3 0 0	...	......
Manbhum ...	......	......	......	788 4 3	476 4 11	......	476 4 11	70 4 6	......	4,929 0 8	2,347 1 2	......	...	......
Palamau ...	......	......	......	297 14 0	......	......	......	88 1 6	......	......	775 0 0	......	...	......
Total ...	......	93 8 0	93 8 0	2,505 3 9	1,343 14 2	......	1,343 14 2	346 5 3	600 4 3	24,249 12 11	7,867 15 3	402 10 3	...	......
Non-cess Districts.														
Chittagong Hill Tracts ...	......	......	......	......	......	......	......	......	768 11 3	1,555 6 9	874 2 0	......	...	......
Santhal Parganas ...	......	......	......	......	332 7 0	......	332 7 0	3 6 0	3,675 11 1	10,871 1 9	1,928 9 4	552 11 9	...	......
Singhbhum ...	......	......	......	......	194 7 6	......	194 7 6	82 4 11	937 7 9	219 5 2	775 5 6	42 1 0	...	......
Total ...	......	......	......	......	526 14 6	......	526 14 6	85 10 11	5,381 14 1	12,645 13 8	3,578 0 10	594 12 9	...	......
Grand Total ...	......	93 8 0	93 8 0	2,505 3 9	1,870 12 8	......	1,870 12 8	432 0 2	5,982 2 4	36,895 10 7	11,386 0 1	997 7 0	...	......

Fort William,
The 21st December 1892.

ROAD FUNDS.

Committees for the Second Quarter ending 30th September 1892.

IPTS.

LANEOUS. Total.	Grant from Government.	Suspense Account. Advance.	Suspense Account. Deposit.	Suspense Account. Total.	Provident Fund receipts.	Savings Bank investment withdrawals.	Total receipts.	Balance of imprest in hands of Engineers and others decreased.	Balance of uncashed cheques increased.	Total receipts, including balance.	Outlay.	Balance in treasury on 30th Sept. 1892.
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
50 0 0	335 6 6	1,906 10 7	......	1,906 10 7	......	...	4,129 0 9	.... ..	56 11 1	25,316 1 3	4,702 14 3	20,613 3 0
75 9 0	2,634 12 3	569 9 9	......	569 9 9	24 6 0	...	5,715 10 2	26 8 0	1,310 1 0	27,597 7 1	14,521 7 8	13,075 15 5
89 14 9	.....	1,470 6 9	483 0 0	1,953 6 9	... ..	..	2,099 0 5	...	... ..	15,573 0 8	14,862 14 4	710 2 4
626 4 3	250 0 0	192 10 9	110 10 0	303 4 9	110 10 0	...	6,044 5 2	17 13 6	......	11,230 0 8	9,664 8 3	1,585 8 0
58 8 0	......	56 10 0	......	56 4 0	......	...	723 3 9	......	......	5,437 5 10	1,335 7 6	4,101 14 4
900 4 0	3,220 2 9	4,195 9 10	593 10 0	4,780 3 10	135 0 0	...	18,711 4 3	44 5 6	1,366 12 1	85,173 15 1	45,087 4 0	40,086 11 1
......	......	100 0 0	......	100 0 0	......	...	100 0 0	......	519 12 9	11,581 2 3	3,198 4 0	8,382 14 3
611 3 9	......	2,132 6 10	......	2,132 6 10	.. ...	...	2,743 10 7	......	425 12 9	34,183 9 10	19,329 13 11	14,853 11 11
199 14 9	53 11 1	......	......	...	......	...	986 12 7	100 0 0	4 13 6	3,145 10 10	3,357 3 7	—211 8 9
811 2 6	753 11 1	2,232 6 10	... ..	2,232 6 10	......	...	3,830 7 2	100 0 0	950 7 0	48,910 6 11	25,885 5 6	23,025 1 5
1,711 6 6	3,973 13 10	6,428 0 8	593 10 0	7,021 10 8	135 0 0	...	22,541 11 5	144 5 6	2,317 3 1	1,34,084 6 0	70,972 9 6	63,111 12 6

DITURE.

WORKS. Total.	IRRIGATION. Canal toll establishment and contingencies.	MISCELLANEOUS. Staging-bungalow establishment and contingencies.	MISCELLANEOUS. Staging-bungalow petty construction and repairs.	MISCELLANEOUS. Miscellaneous.	MISCELLANEOUS. Total.	Provident Fund contributions.	Contributions to Provincial Government.	Suspense Account. Advance.	Suspense Account. Deposit.	Suspense Account. Total.	Provident Fund withdrawals.	Savings Bank investment deposits.	Total expenditure.	Balance of imprest in hands of Engineers and others increased.	Balance of uncashed cheques decreased.	Total outlay.
Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.
2,319 7 3	...	......	... ..	19 4 8	19 4 8	......	...	1,642 6 0	......	1,642 6 0	...	......	4,702 14 3	...	......	4,702 14 3
10,688 0 5	...	27 0 0	......	......	27 0 0	36 9 0	...	2,861 1 3	......	2,861 1 3	...	... ..	14,521 7 8	...	......	14,521 7 8
12,002 1 2	...	24 0 0	344 4 6	43 0 0	411 4 6	......	...	150 0 0	1,362 0 0	1,512 0 0	...	....	14,862 14 4	...	......	14,862 14 4
7,276 1 10	...	......	100 4 0	60 7 10	160 11 10	73 12 0	...	110 0 0	157 8 0	267 8 0	...	221 4 0	9,334 3 4	...	330 4 11	9,664 8 3
775 0 0	...	25 0 0	......	......	25 0 0	......	...	149 8 0	......	149 8 0	...	......	1,335 7 6	...	......	1,335 7 6
33,060 10 8	...	76 0 0	444 8 6	122 12 6	643 5 0	110 5 0	...	4,912 15 3	1,519 8 0	6,432 7 3	...	221 4 0	44,756 15 1	...	330 4 11	45,087 4 0
3,198 4 0	...	......	......	......	......	......	...	......	......	......	...	......	3,198 4 0	...	......	3,198 4 0
17,028 1 11	...	48 0 6	22 6 6	......	70 7 0	......	...	1,457 8 0	238 0 0	1,695 8 0	...	......	19,129 13 11	200	......	19,329 13 11
1,974 3 5	...	75 0 0	82 3 7	430 5 11	587 9 6	46 14 0	...	471 12 3	......	471 12 3	...	......	3,357 3 7	...	......	3,357 3 7
22,200 9 4	...	123 0 6	104 10 1	430 5 11	658 0 6	46 14 0	...	1,929 4 3	238 0 0	2,167 4 3	...	......	25,685 5 6	200	......	25,885 5 6
55,261 4 0	...	199 0 6	549 2 7	553 2 5	1,301 5 6	157 3 0	...	6,842 3 6	1,757 8 0	8,599 11 6	...	221 4 0	70,442 4 7	200	330 4 11	70,972 9 6

O. T. BARROW,

Accountant-General, Bengal.

MALPRACTICES IN CONNECTION WITH EXAMINATIONS.

GENERAL DEPARTMENT—EDUCATION.

Calcutta, the 17th January 1893.

RESOLUTION No. 149.

As it has come to the notice of Government that forged certificates have sometimes been used for the purpose of gaining admission to an examination, or of being admitted as a student at a Government place of education, the Lieutenant-Governor deems it expedient, for the purpose of preventing this and other serious malpractices, to lay down the following rule, which will come into force from the date of its publication:—

Persons detected in the use of forged certificates or in other serious malpractices at examinations held under the authority of Government or of a Municipal or local body, or in order to obtain admission to an Educational Institution, or to gain any improper advantage in the examination, will be considered disqualified for entering the service of Government or of any Municipal or local body.

ORDER.—Ordered that the Resolution be pulished in the *Calcutta Gazette*.

By order of the Lieutenant-Governor of Bengal,

C. E. BUCKLAND,

Secretary to the Government of Bengal.

LIBERALITY OF CERTAIN ZAMINDARS IN THE GIRIDIH SUB-DIVISION.

No. 194Med., dated Calcutta, the 16th January 1893.

From—H. H. RISLEY, ESQ., Secy. to the Govt. of Bengal, Municipal Dept.,
To—The Commissioner of the Chota Nagpur Division.

I AM directed to acknowledge the receipt of your letter No. 147T.J., dated the 5th January 1893, in which you report the liberality of Babu Sarada Narain Singh of Serampur, Babu Toral Narain Singh of Gawan, and Babu Poresh Nath Singh of Palganj, in contributing Rs. 2,000, Rs. 1,500, and Rs. 500, respectively, towards the cost of establishing the dispensary at Giridih, which was opened by His Honour the Lieutenant-Governor on the occasion of his visit to that place on the 2nd November 1892. You also report that Babu Sarada Narain Singh has liberally undertaken to bear the cost of maintenance of the dispensary until such time as some public body may come forward to take over the charge of its maintenance.

2. In reply, I am directed to say that the Lieutenant-Governor has much pleasure in acknowledging the liberality of the donors, especially of Babu Sarada Narain Singh, and to request that an expression of His Honour's thanks may be conveyed to them for their generosity and public spirit. Sir Charles Elliott is also pleased to note your commendations of Mr. W. Rattray, the Sub-divisional Officer by whose exertions the institution was founded.

3. This letter will be published in the *Calcutta Gazette*.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 14th January, 1893.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.				
BURDWAN DIVN.	1	Burdwan Jan. 14, '93 Kalna ... Katwa ... Raniganj ...	Nil Nil Nil Nil	Weather—cool and clear. State and prospects of crops good, except in the Sadar subdivision. Prices of common rice:— Srs. Burdwan ... ... 10 to 13 } Kalna ... ... 11 to 13 } per rupee. Katwa ... ... 13½ } Raniganj ... ... 13 }
	2	Bankura „ 14, '93 Vishnupur ...	0·02 Nil	Weather—seasonable. Threshing of *aman* paddy going on. *Rabi* crops doing well. Fodder and water sufficient. Prices of common rice:— Srs. Sadar ... ... 12½ } per rupee. Vishnupur ... ... 11½ }
	3	Birbhum „ 14, '93 Rampur Hát ...	0·04 0·03	Weather—seasonable. Prices of rice still 12 to 14 seers per rupee. Fodder and water plentiful.
	4	Midnapore „ 14, '93	Nil	Weather—cool and dry. Rice harvest finished some time ago. Prices of common rice:— Srs. Sadar ... ... 11 } Contai ... ... 10 to 14 } per rupee. Tamluk ... ... 13 } Garhbeta ... ... 12 to 13 }
	5	Hooghly „ 14, '93 Serampore ... Jahanabad ...	Nil Nil Nil	Weather—very cold. *Aman* harvest in progress; outturn in Sadar and north of the Tarakeswar Railway in Serampore not much over 3 annas; south of the Tarakeswar Railway it is about 12 annas. *Rabi* doing pretty well, but in the Sadar subdivision, although extensively planted, it is, except the *biri kalai*, a light crop. Difficulty of obtaining drinking water increasing in Pandua and Dwarbasini. Prices of common rice:— Srs. Sadar ... ... 9 to 10 } Serampore ... ... 10½ } per rupee. Jahanabad ... ... 11 }
	6	Howrah „ 14, '93 Ulubaria ...	Nil Nil	Weather—seasonable. Harvesting of *aman* crop nearly completed. Spring crops doing well. Condition of cattle good. Fodder and water-supply sufficient, except that tanks are drying up too quickly in Howrah Municipality. Price of rice 10 to 11 seers per rupee.
PRESIDENCY DIVN.	7	24-Parganas „ 14, '93	Nil	Weather—seasonable. Foggy mornings; somewhat warmer. Harvesting of *aman* completed in nearly all parts of the district. Prospects of *rabi* continue favourable. Cattle-disease reported from Barasat subdivision. There is no present lack of fodder and water.
	8	Nadia „ 14, '93 Kushtia ... Meherpur ... Chuadanga ... Ranaghat ...	Nil Nil Nil Nil Nil	Weather—cold and seasonable. Prospects of *rabi* crops good. Some of them are being harvested. Common rice selling at 13 seers per rupee. Health of cattle good, and fodder and water-supply sufficient.
	9	Khulna „ 14, '93 Bagerhat ... Satkhira ...	Nil Nil Nil	Weather—seasonable. Harvesting of *chhotan* paddy over, that of *boran* paddy continues; outturn good except in Paickgacha. Common rice selling at from 12 to 14 seers per rupee. Prospects of *rabi* fair. Fodder and water sufficient.
	10	Jessore „ 14, '93 Jhenida ... Magura ... Narail ... Bangaon ...	Nil Nil Nil Nil Nil	Weather—cool. Harvesting of *aman* not yet finished. Mustard being reaped. Prospects of *rabi* crops fair. No cattle-disease. Fodder and drinking-water sufficient. Prices of rice stationary.
	11	Murshidabad „ 14, '93	Nil	Weather—seasonable. Harvesting of *aman* and *kalai* finished. Prospect of *rabi* crops appears to be favourable. No cattle-disease reported, and fodder sufficient. Coarse rice selling at 14 seers per rupee.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and State and prospects of the crops.
BENGAL—*concld.*				
CHITTAGONG DIVN.	12	Chittagong ...	...	Report not received.
	13	Noakhali Jan. 14, '93	Nil	Weather—seasonable. *Aman* paddy almost harvested with an outturn of 16 annas. Sowing of *rabi* crops continues. No cattle-disease except in Companiganj and Sundip. Price of rice 14 seers per rupee.
	14	Tippera „ 14, '93	Nil	Weather—seasonable. Harvesting of *aman* almost completed. Mustard and chillies thriving. Prices of grain high chiefly on account of exportation. Large profits being realized for jute by cultivators.
	15	Chittagong Hill Tracts. „ 13, '93	Nil	Weather—seasonable. Vegetables doing well. Sugarcane being pressed. Mustard in flower. No cattle-disease reported. Common rice selling at 10 seers per rupee.
DACCA DIVN.	16	Dacca „ 14, '93	Nil	Weather—very cold. *Rabi* crops thriving, but in Nawabganj the state of these crops is reported to be bad. *Kalai* being gathered. Fodder available. No cattle-disease. Common rice selling at from 11 to 14 seers per rupee.
	17	Faridpur „ 14 '93	Nil	Weather—seasonable. *Rabi* crops fair. *Boro* paddy being sown. Common rice sells at 13 seers per rupee at Sadar, Goalundo, and Madaripur. Cattle in good condition and get fodder.
	18	Backergunge „ 14, '93	Nil	Weather—seasonable. Prospects of crops good. Common rice sells at from 10 to 15 seers per rupee. Fodder and water sufficient in all places except thanas Backergunge and Mendiganj, where fodder is reported not sufficient.
	19	Mymensingh „ 14, '93	Nil	Weather—seasonable. Prospects of standing crops good. Harvesting of *aman* paddy nearly completed. Rice selling at from 12 to 14 seers per rupee. There is no cattle-disease. Fodder and water sufficient.
RAJSHAHI DIVN.	20	Dinajpur „ 14, '93 Thakurgaon ...	0·21 0·21	Weather—cool. Standing crops doing very well. Harvesting of winter rice still going on in places. Outturn of mustard is estimated to be 14 annas and that of *haimanti* rice 16 annas. Pressing of sugarcane continues. Land being prepared for *bhadoi* and jute. Price of rice unchanged. Condition of cattle good. Supply of fodder and drinking water sufficient.
	21	Rajshahi „ 14, '93 Nator ... Naugaon ...	Nil Nil 0·23	Weather—seasonable. On an average, a full 12 annas *aman* rice crop has been reaped in the district. Cold-weather crops also are giving a very fair outturn, or are coming up nicely. There is no cattle-disease. Fodder and water plentiful except in the Barind. Price of common rice ranges from 12 to 17 seers per rupee.
	22	Rangpur „ 14, '93 Kurigaon ... Gaibanda ... Nilphamari ... Ulipur ...	0·43 0·22 0·05 0·37 0·30	Weather—seasonable. Prospect of *rabi* crops good. Mustard is ripe in some places. Price of common rice unchanged.
	23	Bogra „ 14, '93	0·04	Weather—seasonable. Harvesting of *aman* rice practically over; outturn about 16 annas on the whole. *Rabi* crops doing well. *Maskalai* and *mug* have been harvested with an estimated outturn of 14 annas. Price of common rice 15 to 16½ seers per rupee. Cattle-disease is no longer reported. Fodder and water sufficient.
	24	Pabna .. 14, '93	Nil	Weather—seasonable. *Aman* rice harvested. Prospects of *rabi* crops continue to be good. Common rice is selling at Pabna at 13½ seers per rupee. Condition of cattle good. Fodder and water-supply sufficient.
	25	Darjeeling „ 14, '93 Siliguri ..	Nil 0·14	Weather—cool. *In the hills*:—Wheat, barley and *tori* progressing favourably; potatoes coming to maturity; *marua* being harvested. *In the terai*:—Paddy and potatoes are still being harvested; mustard ripening; state and prospects of crops good. Prices of coarse rice:— Srs. Hills ... . 11 } per rupee. Terai ... ... 12 }
	26	Jalpaiguri „ 14, '93	0·05	Weather—cold and cloudy at times. Harvesting of *haimanti* paddy nearly completed. Prospects of tobacco and potato continue good. Common rice sells at 13 seers per rupee on an average. No cattle-disease. Fodder and water sufficient.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
Bhagalpur Divn.	27	Monghyr Jan. 14, '93 Begusarai ... Jamui ...	Nil Nil 0·03	Weather—cold and dry. Harvesting of rice has been completed. Prospects of the *rabi* crops are favourable. Poppy and indigo are doing well. No cattle-disease. Plenty of fodder. Prices of common rice:— Srs. Sadar ... ... 13 to 16 per rupee. Begusarai ... ... 15 per rupee. Jamui ... ... 14½ per rupee.
	28	Bhagalpur „ 14 '93 Banka ...	Nil Nil	Weather—seasonable. Harvesting of paddy approaching completion. Price of common rice stationary. Rain wanted for *rabi*. Indigo in good condition. Common rice 15 seers 2 chitaks per rupee.
	29	Purnea „ 14, '93 Kishanganj ... Araria ...	0·52 0·24 0·09	Weather—cold and foggy in the mornings. There was a slight shower last Saturday (7th). Harvesting of *aghani* nearly over. *Rabi* crops doing well. The recent rain will benefit these crops. Harvesting of mustard and tobacco has commenced in some places. Pressing of sugarcane has begun here and there. No cattle-disease. Fodder and water plentiful. Prices of rice stationary.
	30	Malda „ 14, '93 Chanchal ... Shibganj ...	0·06 0·16 0·15	Weather—generally cold; mornings foggy. Harvesting of winter rice nearly over. *Kalai* and mustard still being reaped with good outturn. Other *rabi* crops doing well. Common rice sells at from 12 to 16 seers per rupee. Fodder and water ample.
	31	Sonthal Parganas „ 14, '93 Deoghur ... Godda ... Jamtara ... Pakur ... Rajmahal ...	Nil 0·23 Nil Nil 0·12 0·07	Harvesting and threshing of paddy nearly over. *Rabi* crops doing well. Fodder and water sufficient.
Patna Division.	32	Patna „ 14, '93 Bihar ... Dinapore ... Barh ...	Nil Nil 0·25 Nil	Weather—cool and clear. Harvesting and threshing of paddy almost finished. *Rabi* crops generally in ear. Prospects fair. Poppy in flower. Common rice selling at the following rates:— Srs. Sadar ... ... 17 per rupee. Bihar ... ... 17 per rupee. Dinapore ... ... 13 per rupee. Barh ... ... 13 per rupee.
	33	Gaya „ 14, '93 Nawada ... Jahanabad ... Aurangabad ...	Nil Nil Nil 0·27	Weather—clear and cold. Harvesting of paddy crop approaching completion; threshing in progress. *Rabi* crops are in good condition. Pressing of sugarcane nearly finished. Common rice sells at 14 seers per rupee at Sadar. Prices stationary. Fodder and water for cattle sufficient.
	34	Shahabad „ 14, '93 Sasaram ... Bhabhua ... Buxar ...	Nil 0·20 0·27 0·10	Weather—seasonably cool with light breezes; very cold at night and heavy dews. Harvesting of rice nearly over. Prospects of *rabi* favourable, but more rain wanted in the subdivisions of Bhabhua and Sasaram. Opium crop being weeded. Sugarcane being pressed. Fodder and water sufficient. Prices stationary.
	35	Darbhanga „ 14, '93 Samastipur ... Madhubani ...	Nil 0·22 0·63	Weather—cool. Threshing of winter rice approaching completion. The late rain has greatly benefited the *rabi* crops. Poppy is doing well. Condition of cattle good. Prices of common rice varying from 14 to 15 seers per rupee.
	36	Muzaffarpur „ 14, '93 Hajipur ... Sitamarhi ...	Nil 0·20 0·12	Weather—cool and seasonable. Threshing of paddy still going on. State of *rabi* crops good. More rain would do good. Fodder and water plentiful.
	37	Saran „ 14, '93 Siwan ... Gopalganj ...	Nil 0·30 0·15	The rain has cleared off and the weather is again fine and clear. *Rabi* and opium prospects are good. Sugarcane is being pressed. Prices of common rice:— Srs. c. Chapra ... ... 14 8 per rupee. Siwan ... ... 13 2 per rupee. Gopalganj ... ... 13 0 per rupee.
	38	Champaran „ 14 '93	Nil	Weather—cold; sometimes cloudy. Paddy is being threshed. *Rabi* and poppy doing well. Weeding going on. Lands are being ploughed for indigo sowing. Prices steady. Cattle are in good condition. Fodder and water sufficient.
ORISSA.				
Orissa Divn.	39	Cuttack „ 14, '93	Nil	Weather—cold. Harvesting of late *sarad* not yet completed and that of winter crops going on. Ample supply of water and fodder for cattle. Prices of rice:— Srs. c. Srs. Sadar ... ... 10 8 to 18 per rupee. Jajpur ... ... 15 12 to 21 per rupee. Kendrapara ... ... 15 0 to 20 per rupee. Banki ... ... 17 per rupee.
	40	Puri „ 12, '93 Khurda ... Banpur ...	Nil Nil Nil	Weather—seasonable. *Sarad* being harvested. Sowing of *dalua* still going on. *Rabi* crops doing well. Rice sells at from 15 seers 12 chitaks to 18 seers 6 chitaks per rupee.
	41	Balasore „ 14, '93	Nil	Weather—normal. Rice harvest practically over. Outturn of *biri*, *mug* and mustard estimated at 13 to 14 annas.

	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
CHOTA NAGPUR.					
South-West Frontier Agency.					
Chota Nagpur Divn.	42	Hazaribagh	Jan. 14, '93	Nil	Weather—bright and cold. Crops are generally in good condition. Common rice selling at from 12 to 16 seers per rupee. Cattle-disease reported in parts of the district.
	43	Lohardaga	" 14, '93	Nil	Weather—cold. Reaping of *serguja* commenced. Prospect of *rabi* continues favourable. Common rice selling at 14 seers per rupee. Fodder and water sufficient.
	44	Palamau	" 13, '93	0·09	Weather—cloudy at first with a slight shower of rain; now clear and cold. There was a very slight fall of rain in most parts of the district, which has freshened up the *rabi* a little, but has been insufficient to cause any great benefit. Paddy harvest finished. Sugarcane being cut. Cattle-disease reported in a few villages. Average price of rice about 15 seers per rupee.
	45	Singhbhum	" 14, '93	Nil	Weather—clear and cold. *Rabi* crops doing well; probable outturn 12 to 16 annas. Common rice selling at from 12 to 16 seers per rupee in the district. Water and fodder ample.
	46	Manbhum	" 14, '93	0·15	Weather—much colder than last week. *Rabi* crops doing well. Rice selling at from 10 to 14 seers per rupee. Fodder and water-supply plentiful.
		Gobindpur	...	Nil	

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 17th January, 1893.

C. E. BUCKLAND,
Secy. to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 8th to 14th January 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Temperature. Maximum.	Temperature. Range.	Temperature. Minimum.	Hygrometry. Mean wet bulb.	Hygrometry. Vapour tension.	Hygrometry. Dew point.	Hygrometry. Humidity.	Wind. Prevailing direction.	Wind. Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
Jan.	8th	129·1	7·5	30·013	66·7	76·5	17·1	59·4	62·5	0 511	59·6	79	NNE and calm ...	62	Nil	Chiefly clear, △, ≡.
"	9th	124·7	9·4	·037	63·0	70·9	15·6	55·3	56·7	·379	51·3	67	N and NNW ...	73	"	Clear, △.
"	10th	127·1	9·1	·044	60·0	72·1	23·6	48·5	53·5	·327	47·2	66	NNW ...	52	"	Clear, △.
"	11th	126·3	9·4	29 982	59·9	72 0	22·3	49·7	53·7	·334	47·8	68	NNW ...	59	"	Clear, △.
"	12th	128·0	9·3	·931	60 2	73·5	24·8	48·7	54·5	·355	49·5	71	NNW and calm .	36	"	Clear, △, ≡.
"	13th	127 2	9·2	·902	61·5	74·9	24·9	50·0	55·6	·366	50·3	67	WNW and calm...	31	"	Clear, △, ≡.
"	14th	131·4	9·4	·883	62·8	76·7	25·6	51·1	57·2	·396	52·5	69	W and calm ...	59	"	Clear, △, ≡.

	Inches.
The mean pressure of the seven days	29·970
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	30·023
	Hours.
The total number of hours of bright sunshine	63·3
The maximum possible number of hours of sunshine	75·7
	°
The mean temperature of the seven days	62·0
The average temperature of the corresponding period for 24 years, S.-G.'s Office	66·8
The extreme variation of temperature	28·2
The maximum temperature	76·7
	Miles.
The highest velocity of the wind in one hour	10
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	70
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	70
	Inches.
The total fall of rain from 8th to 14th January 1893 ...	Nil
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·07
The total fall from 1st to 14th January 1893	Nil
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·11

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

△, dew ; ≡ , fog.

C. LITTLE,

For Meteorological Reporter to the Govt. of Bengal.

METEOROLOGICAL OFFICE, GOVT. OF INDIA ;

Calcutta, the 16th January 1893.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS.											
			Air pressure.			Wind.		Temperature.						
			Mean barometric height, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri ...	30·026	29·975	—	N	161	80·6	9th Jan.	50·5	12th Jan.	78·0	58·7	68·3
		Gopalpore ..	30·030	29·991	—·051	NNW	240	79·2	9 & 10 ,,	52·5	13th ,,	78·1	57·5	67·9
		False Point ...	30·031	29·992	—·052	NNW	161	78·4	9th ,,	49·5	12th ,,	75·9	54·9	65·4
	Cuttack	Cuttack ...	29·973	30·000	—·043	Calm	23	83·3	9th ,,	51·9	12th ,,	73·9	55·7	67·8
	Balasore	Balasore ...	29·999	30·004	—·051	N	74	79·3	8 & 14 ,,	48·4	11 & 12 ,,	77·7	52·5	65·1
South-West Bengal.	Midnapore	Midnapore ...	29·907	30·012	—·056	N	176	80·3	8 & 14 ,,	48·2	10th ,,	78·1	52·1	65·1
	24-Parganas	Calcutta ...	30·027	29·995	—·063	Calm & N	51	77·7	8th ,,	48·7	10 & 12 ,,	74·0	51·8	63·0
		Saugor Island	30·021	29·992	—·055	NEly	189	75·7	9th ,,	50·7	11th ,,	73·4	54·0	63·7
	Howrah													
	Hooghly													
	Nadia	Krishnagar ...	29·936	29·999	—·042	WNW	71	77·9	8th ,,	44·5	10th ,,	74·4	48·4	61·4
	Khulna													
	Jessore	Jessore ...	30·005	29·986	—·061	Calm	50	76·7	8th ,,	47·4	10 & 11 ,,	73·3	51·0	62·2
	Burdwan ...	Burdwan ...	29·956	30·009	—·056	Calm	21	79·5	8th ,,	47·3	10th ,,	75·3	51·6	63·4
		Raniganj ...	29·714	30·031	—·060	NW	45	78·7	8th ,,	47·2	10 & 12 ,,	74·9	50·8	63·2
	Bankura	Bankura ...	29·722	29·990	—·062	NWly	40	79·1	8th ,,	47·4	10th ,,	76·0	51·6	63·8
	Birbhum													
	Murshidabad	Berhampore...	29·978	29·998	—·068	NWly	41	75·6	9th ,,	48·0	9th ,,	73·7	51·4	62·6
	Pabna	Sirajganj ...	29·978	29·977	—·068	N	19	74·5	14th ,,	45·8	10th ,,	73·3	48·8	61·1
North Bengal.	Bogra	Bogra ...	29·961	29·978	—·053	Calm	34	76·3	8th ,,	46·2	10th ,,	73·5	48·8	61·2
	Rajshahi	Rampur Boalia.	29·959	29·982	—·056	N	83	73·4	14th ,,	44·1	10th ,,	72·2	48·4	60·3
	Malda	Malda ...	29·962	29·999	—	NW	81	74·8	14th ,,	?	?	71·8	?	?
	Dinajpur	Dinajpur ...	29·920	29·999	—·039	W	45	74·1	14th ,,	45·5	10th ,,	71·0	48·2	59·6
	Rangpur — ...	Rangpur ...	29·904	29·990	—·087	Calm	27	72·4	12th ,,	47·0	10th ,,	70·1	47·9	59·0
	Jalpaiguri	Jalpaiguri .	29·731	29·990	—·085	Calm	23	72·9	14th ,,	47·1	9th ,,	69·3	48·0	59·1
	Kuch Bihar													
	Darjeeling	Darjeeling ...	22·914	—	—·100	Variable	120	43·0	13 & 14 ,,	30·7	10th ,,	40·8	32·4	36·6
	Sikkim	Gnatong ...	19·104	—	—	E-B	104	43·3	13th ,,	4·1	8th ,,	35·8	10·6	23·3
East Bengal.	Chittagong	Chittagong ...	29·933	29·972	—·072	Calm	46	78·7	9th ,,	49·6	11th ,,	76·0	52·5	64·3
	Chittagong Hill Tracts	Demagiri ...	Observations not received.											
	Backergunge	Barisál ...	30·009*	29·968*	—·062*	Calm	37	79·3	8th Jan.	47·1	10th ,,	75·6	51·0	63·3
	Noakhali	Noakhali* ...	29·968	29·960	—·068	N	66	77·9	8th ,,	47·0	10, 11, 12 ,,	74·4	49·1	61·8
	Faridpur	Faridpur ...	29·907	29·993	—·052	N	41	74·0	8th ,,	48·5	10th ,,	72·7	52·0	62·4
	Dacca	Dacca ...	30·002	29·973	—·074	NWly	57	78·6	8th ,,	48·7	10th ,,	75·1	52·5	63·8
	Tippera	Comilla ...	29·990	29·974	—·063	Calm	33	77·4	9th ,,	46·1	11th ,,	75·8*	49·7	62·4*
	Mymensingh	Mymensingh	29·960	29·979	—·073	Variable	43	73·9	13th ,,	46·5	11th ,,	72·5	48·9	60·7
North Bihar.	Purnea	Purnea ...	29·917	30·006	—·065	Calm	33	73·2	14th ,,	43·3	10th ,,	70·9	47·6	59·3
	Bhágalpur	Bhágalpur ...	29·875	29·996	—·062	Calm	15	74·3	9th ,,	44·0	10th ,,	71·6	47·0	59·3
	Darbhanga	Darbhanga ...	29·880	30·012	—·065	WSW	63	73·0	8th ,,	47·4	10th ,,	70·7	50·2	60·5
	Muzaffarpur	Muzaffarpur...	29·871	30·017	—	WSW	70	75·2	12th ,,	44·3	10 & 11 ,,	70·5	47·4	59·0
	Champaran	Motihari ...	29·712	29·991	—·068	WSW	98	73·2	8, 13 14 ,,	40·0	10th ,,	71·6	44·8	58·2
	Saran	Chapra ...	29·863	30·011	—·036	SW	80	72·8	8th ,,	41·9	10th ,,	70·5	46·9	58·7
South Bihar.	Shahabad	Dehri ...	29·691	30·022	—·062	SW	62	72·7	14th ,,	45·0	10th ,,	70·9	50·1	60·6
		Buxar ...	29·800	30·012	—·066	Variable	158	68·9	11, 13 14 ,,	43·9	10th ,,	68·5	47·5	58·0
		Arrah ..	29·853	30·009	—·042	W	53	71·9	13th ,,	44·7	10th ,,	70·5	47·1	58·8
	Gaya	Gaya ...	29·637	29·993	—·086	Variable	127	74·9	8th ,,	45·1	11th ,,	72·4	49·0	60·7
	Patna	Bankipore ...	29·871	30·018	—·06	Wly	81	70·8	8th ,,	43·9	10th ,,	68·6	47·9	58·3
	Monghyr													
	Sonthal Parganas ...	Naya Dumka	29·536	30·019	—·053	WNW	66	75·0	14th ,,	43·5	10th ,,	72·4	47·6	60·0
Chota Nagpur.	Hazaribagh	Hazaribagh ..	27·965	30·023	—·067	W	184	72·2	13th ,,	43·1	9th ,,	69·3	45·9	57·6
	Lohardaga	Ranchi ...	27·840	30·011	—·061	W	131	71·5	8th ,,	41·1	12th ,,	69·8	46·2	58·0
	Palamau													
	Singhbhum	Chaibassa ...	29·242	29·999	—·055	Calm	19	79·8	6th ,,	45·4	11th ,,	77·4	49·7	63·6
	Manbhum													

* Mean of 6 days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 10 rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station district, *i.e.* from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one on

for the week ending Saturday, the 14th of January 1893.

					DISTRICT OBSERVATIONS.										
					Of week.				Rainfall.						
									Since 1st of month.			Since 16th October 1892.			
Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.	District.
—	62·6	81	1·1	Nil	Nil	0·07	0·00	0·12	Nil	0·10	—0·10	7·20	6·20	+1·00	Puri.
—1·7	61·9	79	0	Nil											
—3·1	61·0	85	0·3	Nil											
—2·8	60·1	72	1·4	Nil	Nil	0·02	0·00	0·03	Nil	0·09	—0·09	6·01	3·94	+2·07	Cuttack.
—1·5	58·2	79	0	Nil	0·04	0·02	0·17	0·05	0·04	0·09	—0·05	6·61	2·75	+3·86	Balasore.
—0·6	57·7	70	0·4	Nil	Nil	0·03	0·00	0·10	Nil	0·19	—0·19	7·93	2·80	+5·13	Midnapore.
—2·7	56·6	87	0	Nil	Nil	0·04	0·00	0·09	Nil	0·16	—0·16	7·12	2·58	+4·54	24-Parganas.
—3·6	57·6	91	1·1	Nil											
					Nil	0·09	0·00	0·09	Nil	0·17	—0·17	3·56	1·96	+1·60	Howrah.
					Nil	0·05	0·00	0·11	Nil	0·13	—0·13	7·14	1·70	+5·44	Hooghly.
—2·2	55·5	84	0·4	Nil	Nil	0·05	0·00	0·13	Nil	0·09	—0·09	4·24	1·67	+2·57	Nadia.
					Nil	0·09	0·00	0·14	Nil	0·18	—0·18	6·92	2·52	+4·40	Khulna.
—3·0	56·2	89	1·0	Nil	Nil	0·07	0·00	0·15	Nil	0·13	—0·13	9·19	2·06	+7·13	Jessore.
—2·9	55·3	71	0·4	Nil	Nil	0·04	0·00	0·14	Nil	0·09	—0·09	4·49	1·54	+2·95	Burdwan.
—2·5	56·4	69	0	Nil											
—0·6	56·1	72	0·6	0·02	0·10	0·02	0·25	0·07	0·10	0·08	+0·02	4·56	1·66	+2·90	Bankura.
					0·01	0·07	0·00	0·24	0·02	0·23	—0·21	3·24	1·19	+2·05	Birbhum.
—2·5	54·1	92	0·3	Nil	Nil	0·08	0·00	0·23	0·03	0·23	—0·20	1·86	1·12	+0·74	Murshidabad.
—1·8	54·1	93	0·1	Nil	Nil	0·11	0·00	0·24	Nil	0·18	—0·18	1·11	1·66	—0·55	Pabna.
—3·5	54·2	86	0·7	Nil	0·03	0·08	0·25	0·24	0·06	0·20	—0·14	0·98	1·27	—0·29	Bogra.
—1·8	56·1	87	0·7	Nil	Nil	0·09	0·00	0·21	0·09	0·23	—0·14	0·61	1·33	—0·72	Rajshahi.
?	53·3	86	1·4	0·06	0·08	0·11	0·50	0·23	0·12	0·25	—0·13	0·91	1·48	—0·57	Malda.
—2·1	54·3	87	1·7	0·24	0·12	0·16	0·50	0·19	0·35	0·25	+0·10	0·78	0·99	—0·21	Dinajpur.
—2·4	53·2	91	0·3	0·43	0·15	0·12	0·50	0·18	0·36	0·26	+0·10	1·46	1·40	+0·06	Rangpur.
—2·5	53·2	92	4·9	0·08	0·05	0·12	0·00	0·11	0·09	0·20	—0·11	1·22	2·45	—1·23	Jalpaiguri.
					0·16	0·14	1·00	0·19	0·17	0·17	0	1·05	1·17	—0·12	Kuch Bihar.
—4·7	35·0	85	5·3	0·03	0·10	0·23	0·50	0·32	0·14	0·33	—0·19	3·55	2·57	+0·98	Darjeeling.
—	27·8	73	0·6	0·26											Sikkim.
—1·6	58·9	80	0·1	Nil	Nil	0·24	0·00	0·30	Nil	0·29	—0·29	12·78	5·16	+7·62	Chittagong.
					Nil	0·13	0·00	0·20	Nil	0·18	—0·18	6·69	4·45	+2·24	Chittagong Hill Tracts.
—0·2	57·8	87	0	Nil	Nil	0·07	0·00	0·18	Nil	0·15	—0·15	7·85	3·70	+4·15	Backergunge.
—2·8	57·5	89	0	Nil	Nil	0·04	0·00	0·09	Nil	0·23	—0·22	15·42	5·01	+10·41	Noakhali.
—0·7	56·1	90	1·4	Nil	Nil	0·06	0·00	0·10	Nil	0·13	—0·13	7·23	1·67	+5·56	Faridpur.
—2·3	56·1	87	1·3	Nil	Nil	0·06	0·00	0·12	Nil	0·11	—0·11	8·76	2·35	+6·41	Dacca.
—1·7*	57·3	87	0	Nil	Nil	0·10	0·00	0·19	Nil	0·23	—0·23	8·37	2·53	+5·84	Tippera.
—2·1	53·7	93	0·6	drops	Nil	0·06	0·00	0·19	Nil	0·15	—0·15	2·86	1·96	+0·90	Mymensingh.
—2·3	49·2	90	0·7	0·09	0·03	0·17	0·09	0·26	0·28	0·26	+0·02	0·30	1·52	—1·22	Purnea.
—2·2	52·8	83	1·4	Nil	Nil	0·16	0·00	0·33	0·28	0·25	+0·03	0·81	1·30	—0·49	Bhagalpur.
—1·6	53·7	89	1·6	Nil	Nil	0·14	0·00	0·22	0·51	0·28	+0·23	0·52	1·16	—0·64	Darbhanga.
—	51·0	93	0·4	Nil	Nil	0·14	0·00	0·23	0·30	0·29	+0·01	0·34	1·31	—0·97	Muzaffarpur.
—1·6	50·8	92	0	Nil	Nil	0·15	0·00	0·20	0·10	0·30	—0·20	0·10	0·84	—0·74	Champaran.
—2·5	50·8	92	0	Nil	Nil	0·13	0·00	0·30	0·31	0·28	+0·03	0·34	1·19	—0·85	Saran.
?	54·0	91	0	Nil											
—3·6	53·2	81	0·3	Nil	Nil	0·14	0·00	0·37	0·36	0·36	0	0·76	1·76	—1·00	Shahabad.
—1·8	54·2	87	0·1	Nil											
—2·2	52·1	86	0·9	Nil	Nil	0·15	0·00	0·31	0·10	0·31	—0·21	0·63	1·35	—0·72	Gaya.
—2·7	54·5	82	0	Nil	Nil	0·12	0·00	0·30	0·15	0·28	—0·13	0·38	1·53	—1·15	Patna.
					Nil	0·19	0·00	0·26	0·01	0·30	—0·29	1·34	1·54	—0·20	Monghyr.
—2·8	52·1	81	0	Nil	0·01	0·11	0·00	0·22	0·14	0·20	—0·06	1·59	1·34	+0·25	Sonthal Parganas.
—3·7	52·9	73	1·4	Nil	Nil	0·09	0·00	0·19	0·06	0·23	—0·17	4·03	1·43	+2·55	Hazaribagh.
—2·5	54·2	66	1·4	0·08	0·04	0·17	0·00	0·32	0·18	0·30	—0·12	6·34	2·05	+4·29	Lohardaga.
					Nil	0·19	0·00	0·37	0·09	0·39	—0·30	0·66	1·83	—1·17	Palamau.
—1·9	53·6	80	1·3	Nil	Nil	0·11	0·00	0·30	Nil	0·26	—0·26	6·00	2·05	+3·95	Singhbhum.
					0·08	0·09	0·50	0·29	0·08	0·23	—0·15	3·11	1·46	+1·65	Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 14th of January 1893.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 8th.	Monday, 9th.	Tuesday, 10th.	Wednesday, 11th.	Thursday, 12th.	Friday, 13th.	Saturday, 14th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th October 1892.	Average rainfall from 16th October to date.
ORISSA	Puri ...	Puri ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·08	10·05	6·91
		Khurda ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·11	4·72	4·67
		Banpur ...	...	0·01	...	...	...	...	...	Nil	0·01	Nil	0·01	Nil	5·80	5·93
		False Point ...	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·20	8·24	7·28
		Gop ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·00	?
		Satpara ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	7·88	?
		Pipli ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·08	?
	Cuttack ...	Jagatsingpore	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·11	8·40	3·85
		Banki	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·06	3·66	4·07
		Cuttack ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·13	8·49	4·03
		Kendrapara ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·14	6·09	4·21
		Jajpur ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·07	3·42	3·45
		Dharmsala ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·65	?
		Salipore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·18	?
		Pal Lahara ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·83	?
	Balasore ...	*Akhyapada* ...	...	0·21	...	...	...	...	...	1	0·21	?	0·21	?	3·40	?
		Chandbali ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·06	4·71	3·86
		Bhadrak ...	...	0·21	...	...	...	...	...	1	0·21	Nil	0·21	0·05	6·16	2·89
		Soro ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·10	6·48	2·75
		Balasore ..	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·10	10·02	3·61
		Jellasore ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·10	4·33	1·51
		Baripodah	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·08	7·89	1·90
SOUTH-WEST BENGAL.	Midnapore	Contai ...	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·10	10·24	4·92
		Tamluk ..	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·15	5·35	2·63
		Midnapore ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·30	7·82	2·48
		Ghatal ..	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·19	8·29	1·08
		Kukrahaty .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·51	?
		Garhbeta ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·31	?
	24-Parganas ...	Saugor Island	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·13	14·66	5·01
		Diamond Harbour .	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·19	6·63	2·69
		Canning Town	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·24	?
		Alipore Observatory ...	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·18	4·55	2·52
		Barrackpore ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·19	7·79	1·82
		Dum-Dum ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·17	3·78	2·07
		Barasat .	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·14	5·78	2·00
		Basirhat ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·12	6·26	1·96
	Howrah ...	Howrah	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·17	8·09	2·29
		Mohesreka ...	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·17	4·02	1·63
		Ulubaria ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·86	?
	Hooghly .	Serampore ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·15	6·63	1·74
		Hooghly ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·16	7·81	1·81
		Jahanabad	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·07	4·97	1·55
	Nadia ...	Ranaghat	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·13	5·96	1·86
		Krishnagar ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·07	5·96	1·24
		Chuadanga .	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·09	?	1·91
		Meherpore ...	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·09	2·09	1·56
		Kushtia	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·06	2·93	1·73
	Khulna ..	Satkhira	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·14	4·94	2·40
		Bagerhat .	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·18	8·65	2·45
		Khulna .	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·20	7·29	2·08
		Nakipur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·44	?
		Rampal ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·66	?
	Jessore ...	Narail	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·20	9·10	2·57
		Jessore .	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·15	13·74	2·34
		Jhenidah .	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·15	8·57	1·97
		Magura .	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·05	7·06	1·57
		Bangaon	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·13	7·48	2·00
	Burdwan .	Kalna .	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·10	7·39	1·63
		Burdwan ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·05	5·06	1·62
		Katwa ..	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·11	3·81	1·67
		Raniganj ..	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·09	1·69	1·26
		Mankur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·73	?
	Bankura .	Bankura ...	0·02	...	...	...	...	...	...	Nil	0·02	0·03	0·02	0·06	4·52	1·68
		Vishnupur ...	0·03	...	...	...	...	...	...	Nil	0·03	Nil	0·03	0·06	5·45	1·53
		Mahara ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·10	1·33	1·28
		Khatra ...	0·33	...	...	...	...	...	...	1	0·33	0·01	0·33	0·11	6·92	2·14
		Indas ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·42	?
		Kotalpur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·56	?
		Onda	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·80	?
		Gangajalghati	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·80	?
		Raipur .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·36	?
		Sonamukhi ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	6·21	?
	Birbhum ...	Suri .	0·04	...	...	...	...	...	...	Nil	0·04	0·03	0·05	0·19	1·66	1·46
		Hetampore ..	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·28	4·50	0·89
		Rampur Hat ...	...	...	...	...	...	...	...	Nil	Nil	0·07	0·03	0·22	3·59	1·21
		Bolpur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·25	?
		Murarai ...	...	...	...	...	...	...	...	Nil	Nil	?	0·07	?	0·97	?
	Murshidabad	Kandi ...	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·22	2·41	1·32
		Berhampore ...	...	...	...	...	...	...	...	Nil	Nil	0·10	0·09	0·25	1·56	1·24
		Lalbagh ...	...	...	...	...	...	...	...	Nil	Nil	0·09	0·03	0·13	3·04	0·92
		Azimganj ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·20	1·54	1·12
		Jangipur ..	...	...	...	...	...	...	...	Nil	Nil	0·10	0·07	0·30	1·47	1·01
		Lalgola ...	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·30	1·15	1·11
		Akhriganj ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·95	?
		Patkabari ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·30	?
NORTH BENGAL.	Pabna ...	Pabna ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·13	1·95	1·48
		Sirajganj ...	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·22	0·27	1·80
	Bogra ...	Sherepore ...	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·28	0·78	1·57
		Nowkhilla ...	...	...	...	...	...	...	...	Nil	Nil	0·14	0·09	0·20	1·18	1·36
		Bogra ...	...	...	...	...	...	...	...	Nil	Nil	0·07	0·04	0·15	0·94	1·46
		Panchbibi ...	0·11	...	...	...	...	...	...	1	0·11	0·07	0·11	0·17	1·02	0·65
	Rajshahi ...	Boalia ...	...	...	...	...	...	...	...	Nil	Nil	0·05	0·02	0·17	1·24	1·30
		Nator ...	...	...	...	...	...	...	...	Nil	Nil	0·04	0·02	0·24	0·39	1·62
		Naugaon ...	...	...	...	...	...	...	...	Nil	Nil	0·17	0·23	0·27	0·23	1·05
		Lalpore ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·56	?
		Manda ...	...	...	...	...	...	...	...	Nil	Nil	?	0·05	?	0·19	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 14th of January 1893—*contd.*

Meteorological Division.	District.	Station.	Rainfall. Sunday, 8th.	Monday, 9th.	Tuesday, 10th.	Wednesday, 11th.	Thursday, 12th.	Friday, 13th.	Saturday, 14th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BENGAL—*concld.*	Malda ..	Malda ...	0·06	...	...	...	...	...	...	Nil	0·06	0·06	0·07	0·20	1·39	1·73
		Chanchal ...	0·10	...	...	...	...	...	...	1	0·10	0·16	0·16	0·31	0·42	1·17
		Gajol ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·34	?
		Sibganj ...	...	...	...	...	...	...	...	Nil	Nil	?	0·15	?	0·75	?
	Dinajpur ...	Mohadebpore	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·25	0·51	0·69
		Churaman ...	0·25	...	...	...	...	...	...	1	0·25	0·23	0·31	0·25	0·60	0·68
		Raiganj ...	...	...	...	...	...	...	...	Nil	Nil	0·23	0·84	0·36	1·35	0·72
		Dinajpur ...	0.21	...	...	...	...	...	...	1	0·21	0·14	10·44	0·24	0·72	2·19
		Balurghat ...	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·17	0·55	0·71
		Thakurgaon	...	...	...	...	...	...	...	Nil	Nil	?	0·21	?	0·21	?
	Rangpur ..	Bhawanigunge (*Gyabanda*)	...	...	...	...	...	...	...	Nil	Nil	0·02	0·05	0·15	0·58	1·48
		Rangpur ..	0·43	...	...	...	...	...	...	1	0·43	0·14	0·80	0·27	3·72	1·87
		Kurigaon ...	...	...	...	...	...	...	...	Nil	Nil	0·15	0·22	0·30	0·43	1·24
		Bagdogra (*Nilphamari*)	0·18	...	...	...	...	...	...	1	0·18	0·16	0·37	0·32	1·10	1·00
		Ulipore ...	0·20	...	...	...	...	...	...	1	0·20	?	0·30	?	0·30	?
	Jalpaiguri ...	Jalpaiguri ...	0·05	...	...	...	...	...	...	Nil	0·05	0·12	0·09	0·20	1·22	2·45
		Alipore Dooar	...	...	...	...	...	...	..	Nil	Nil	?	Nil	?	1·98	?
		Fallacotta ...	0·13	...	...	...	...	...	...	1	0·13	?	0·13	?	1·24	?
		Debiganj ...	...	...	...	...	...	...	...	Nil	Nil	?	0·20	?	0·80	?
		Bhagatpore (Nagrakatta)	0·13	0·21	...	...	...	...	...	2	0·34	?	0·57	?	6·75	?
	Kuch Bihar	Dinhatta ..	0·12	...	...	...	...	...	...	1	0·12	0·17	0·13	0·20	0·57	1·14
		Kuch Bihar ..	0·21	...	...	...	...	...	...	1	0·21	0·10	0·21	0·18	1·41	1·37
		Mickliganj ...	0·21	...	...	...	...	...	...	1	0·21	0·14	0·21	0·14	1·03	1·14
		Mathabhanga	0·10	...	...	...	...	...	...	1	0·10	0·14	0·12	0·16	1·15	0·95
	Darjeeling ..	Buxa ...	...	0·23	...	...	...	...	...	1	0·23	0·29	0·25	0·55	9·60	4·06
		Siliguri ...	0·14	...	...	...	...	...	...	1	0·14	0·22	0·14	0·23	2·00	1·01
		Darjeeling ...	...	...	...	...	...	...	...	Nil	Nil	0·14	0·06	0·22	0·98	4·02
		Kalimpong ...	0·15	0·04	...	...	...	...	...	1	0·19	0·26	0·27	0·29	1·73	1·15
		Kurseong ...	0·20	...	...	...	...	...	...	1	0·20	?	0·20	?	2·16	?
EAST BENGAL	Chittagong ..	Cox's Bazar ...	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·24	13·05	6·21
		Chittagong ...	...	...	...	...	...	...	...	Nil	Nil	0·30	Nil	0·32	12·50	4·05
		Kutubdia ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	19·13	?
		Satkanya ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·80	?
	Chittagong Hill Tracts.	Rangamati ...	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·18	6·60	4·45
		Bundarban ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·70	?
	Backergunge	Patuakhali ...	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·12	7·94	4·16
		Pirojpur ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·21	7·86	3·41
		Barisal ...	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·24	7·39	3·69
		Gournaddi ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·83	?
		Bhola ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·03	8·18	3·46
		Doulatkhan ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	11·60	?
		Bauphal ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·49	?
	Noakhali ...	Noakhali ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·22	16·19	4·33
		Fenny ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·21	14·66	5·65
		Harishpore ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	19·46	?
		Ramganj ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	10·73	?
	Faridpur ..	Madaripur ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·22	6·09	1·65
		Faridpur ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·06	10·70	1·59
		Goalundo ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·10	4·02	1·56
	Dacca ...	Munshiganj ...	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·13	7·09	2·62
		Dacca ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·10	11·51	1·75
		Naryanganj ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·11	10·00	3·41
		Manikganj ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·11	6·43	1·55
		Joydebpore ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·66	?
	Hill Tippera	Agartola ...	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·23	6·64	2·96
	Tippera ...	Comilla ...	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·29	8·70	2·73
		Chandpore ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·06	7·75	1·94
		Brahmanbaria	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·33	10·37	2·49
		Ramchandrapore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	7·97	?
		Nasirnagar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	10·47	?
		Daudkandi ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·45	?
		Kasba ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	12·39	?
		Laksham ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·86	?
	Mymensingh ..	Kishorganj ...	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·29	5·94	2·00
		Atia (*Tangail*)	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·14	2·76	1·50
		Mymensingh ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·10	0·61	2·01
		Jamalpur ..	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·17	1·74	1·77
		Netrakona ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·06	3·27	2·45
		Subornakhally	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·41	?
		Durgapore ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·64	?
		Sherepore Town	0·06	...	...	...	...	...	...	Nil	0·06	?	0·06	?	3·32	?
		Dewanganj ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·78	?
NORTH BIHAR	Purnea ...	Kishanganj ...	...	...	...	...	...	...	...	Nil	Nil	0·13	0·24	0·24	0·28	1·42
		Araria ...	...	...	...	...	...	...	...	Nil	Nil	0·16	0·09	0·29	0·09	1·25
		Purnea ..	0·09	...	...	...	...	...	...	Nil	0·09	0·21	0·52	0·24	0·55	1·83
		Gondwara (Korah) ...	0·02	...	...	...	...	...	...	Nil	0·02	?	0·36	?	0·36	?
		Barsoe ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Forbesganj ...	...	...	...	...	...	...	...	Nil	Nil	?	0·11	?	0·11	?
		Kaliaganj ...	0·05	...	...	...	...	...	...	Nil	0·05	?	0·05	?	0·05	?
	Bhágalpur ...	Madhipura ...	...	...	...	...	...	...	...	Nil	Nil	0·19	0·35	0·28	0·35	1·27
		Bongaon (Syfabad) ...	...	...	...	...	...	...	...	Nil	Nil	?	0·60	?	0·60	?
		Supaul ...	...	...	...	...	...	...	...	Nil	Nil	0·16	0·07	0·22	0·67	1·13
		Protabganj ...	...	...	...	...	...	...	...	Nil	Nil	?	0·16	?	0·16	?
		Bhagalpur ..	...	...	...	...	...	...	...	Nil	Nil	0·15	0·04	0·25	0·53	1·35
		Banka ...	...	...	...	...	...	...	...	Nil	Nil	0·15	0·07	0·27	1·68	1·44
		Colgong ...	...	...	...	...	...	...	...	Nil	Nil	?	0·40	?	1·94	?
	Darbhanga ...	Tajpur ...	...	...	...	...	...	...	...	Nil	Nil	0·12	0·22	0·31	0·22	1·25
		Darbhanga ...	...	...	...	...	...	...	...	Nil	Nil	0·13	0·67	0·26	0·69	1·17
		Madhubani ...	...	...	...	...	...	...	...	Nil	Nil	0·16	0·63	0·26	0·63	1·13
		Bahera ...	...	...	...	...	...	...	...	Nil	Nil	?	0·50	?	0·50	?
		Roshera ...	...	...	...	...	...	...	...	Nil	Nil	?	0·30	?	0·30	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 14th of January 1893—concld.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 8th.	Monday, 9th.	Tuesday, 10th.	Wednesday, 11th.	Thursday, 12th.	Friday, 13th.	Saturday, 14th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BIHAR—concluded.	Muzaffarpur...	Sitamarhi ...	...	...	...	...	...	...	...	Nil	Nil	0'12	0'15	0'23	0 15	0'95
		Muzaffarpur	...	...	...	...	...	...	...	Nil	Nil	0'18	0'56	0'3)	0 56	1'80
		Hajipur ..	...	...	...	...	...	...	...	Nil	Nil	0'12	0'29	0'33	0'32	1'13
		Paru ...	...	...	...	...	...	...	...	Nil	Nil	?		?	0'31	?
		Mahua ...	...	...	...	...	...	...	...	Nil	Nil	?	0'23	?		?
		Sinhar ...	...	...	...	...	...	...	...	Nil	Nil	?	0'10	?	0'10	?
		Pupri ...	...	...	...	...	...	...	...	Nil	Nil	?	0'35	?	0'35	?
	Champaran ...	Motihari ...	...	...	...	...	...	...	...	Nil	Nil	0'17	0'15	0'33	0'15	0'87
		Bettiah ...	...	...	...	...	...	...	...	Nil	Nil	0'13	0'04	0'26	0'04	0'78
		Bagaha ...	...	...	...	...	...	...	...	Nil	Nil	?	0 19	?	0'28	?
		Burhurwa ...	...	...	...	...	...	...	...	Nil	Nil	?	0'13	?	0'13	?
	Saran ...	Gopalganj ...	...	...	...	...	...	...	...	Nil	Nil	0'12	0'25	0'16	0'25	0'54
		Siwan .	...	...	...	...	...	...	...	Nil	Nil	0'16	0'44	0'40	0'44	1'62
		Chapra ...	...	...	...	...	...	...	...	Nil	Nil	0'12	0 23	0'30	0'32	1'45
SOUTH BIHAR	Shahabad ...	Buxar ...	...	...	...	...	...	...	...	Nil	Nil	0'13	0'28	0'44	0'96	1'74
		Dehri ...	...	...	...	...	...	...	...	Nil	Nil	0'23	0'47	0'29	0'83	1'77
		Bhabhua ...	...	...	...	...	...	...	...	Nil	Nil	0'11	0'37	0'43	0'38	2'00
		Sasuram ...	...	...	...	...	...	...	...	Nil	Nil	0'12	0'40	0'26	0'63	1'79
		Arrah ...	...	...	...	...	...	...	...	Nil	Nil	0'09	0'26	0'34	0'55	1'43
		Mohanea ..								Nil	Nil	?	Nil	?	Nil	?
		Khiri ...	...	...	...	...	...	...	...	Nil	Nil	?	0'20	?	0'20	?
		Ayeaon ...								Nil	Nil	?	Nil	?	Nil	?
		Ramagar ...	...	...	...	...	...	...	...	Nil	Nil	?	0'25	?	0'25	?
		Koath ...	...	...	...	...	...	...	...	Nil	Nil	?	0'05	?	1'17	?
		Sikroul ...								Nil	Nil	?	Nil	?	Nil	?
		Bassowan ...	...	...	...	...	...	...	...	Nil	Nil	?	0'11	?	1'22	?
		Monaharpur	...	...	...	...	...	...	...	Nil	Nil	?	0'34	?	0'40	?
	Gaya ...	Aurangabad ...	...	...	...	...	...	...	...	Nil	Nil	0'19	0'28	0'29	1'02	1'17
		Gaya ...	...	...	...	...	...	...	...	Nil	Nil	0'14	0 02	0'25	0'43	1'47
		Nawadah ...	...	...	...	...	...	...	...	Nil	Nil	0'15	0'02	0'31	0 83	1'35
		Jahanabad ...	...	...	...	...	...	...	...	Nil	Nil	0'12	0'08	0'38	0 24	1'37
		Arwal	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0'30	?
		Daudnagar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sherghati ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0'95	?
		Rajauli ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2 95	?
		Pakri Barawan	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0'42	?
	Patna ...	Patna ..	...	...	...	...	...	...	...	Nil	Nil	0'09	0'22	0'27	0'33	1'51
		Dinapore ...	...	...	...	...	...	...	...	Nil	Nil	0'10	0'25	0'28	0'25	1'44
		Bihar ...								Nil	Nil	0'18		0'36		1 64
		Barh ...	...	...	...	...	...	...	...	Nil	Nil	0'12	0'05	0'23	0'50	1'58
		Bickram ...	...	...	...	...	...	...	...	Nil	Nil	?	0'08	?	0'28	?
		Hilsa ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0'27	?
	Monghyr ...	Begusarai ...	...	...	...	...	...	...	...	Nil	Nil	0'21	Nil	0'33	2'29	1'81
		Monghyr ...	...	...	...	...	...	...	...	Nil	Nil	0'15	Nil	0'33	0 95	1'59
		Jamui ..	...	...	...	...	...	...	...	Nil	Nil	0'22	0'03	0'36	0'87	1'26
		Gouri ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0'57	?
		Shaikpura ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1'20	?
		Chahai Bamda	...	...	...	...	...	...	...	Nil	Nil	?	0'10	?	1'32	?
	Sonthal Parganas.	Rajmahal ...	0'07	...	...	...	...	...	...	Nil	0'07	0'07	Nil	0'08	0'75	1'14
		Godda ..	...	...	...	...	...	...	...	Nil	Nil	0'12	0'32	0'16	0 80	1'00
		Pakour	...	...	...	...	...	...	...	Nil	Nil	0'14	0'12	0'18	3'50	0'97
		Naya Dumka	...	...	...	...	...	...	...	Nil	Nil	0'12	0'08	0'37	1'53	1'66
		Deoghur ..	...	...	...	...	...	...	...	Nil	Nil	0'14	0'23	0'24	0'73	1'80
		Jamtara ...	...	...	...	...	...	...	...	Nil	Nil	0'08	Nil	0'18	2'19	1'49
		Belbodda ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Nanihat ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0'12	?
CHOTA NAGPUR.	Hazaribagh ...	Pachamba (Giridih). ...	...	...	...	...	...	...	...	Nil	Nil	0'05	0'13	0'19	3'20	1'41
		Hazaribagh	...	...	...	...	...	...	...	Nil	Nil	0'11	0'12	0'25	2'80	1'63
		Sumtagurah	...	...	...	...	...	...	...	Nil	Nil	0 09	0'03	0 24	3'22	1'27
		Mahudi Hills	...	...	...	...	...	...	...	Nil	Nil	0'17	Nil	0'30	5'05	1'41
		Jhumra Hill	...	...	...	...	...	...	...	Nil	Nil	0 02	Nil	0'18	5'30	1 58
		Tarhi ...	...	...	...	...	...	...	...	Nil	Nil	?	0 14	?	1'38	?
		Chatra ...	...	...	...	...	...	...	...	Nil	Nil	?	0'09	?	1'54	?
		Karangdeha	...	...	...	...	...	...	...	Nil	Nil	?	0 17	?	1'34	?
		Ramgar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3'27	?
	Lohardaga ...	Lohardaga ...	0'08	...	...	...	...	...	...	Nil	Nil	0'26	0'23	0'33	6'05	2'35
		Ranchi ...	...	...	...	...	...	...	...	Nil	0'08	0 08	0'13	0'27	6'61	1'74
		Silli ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3'35	?
	Palamau ...	Palamau (Daltonganj).	...	...	...	...	...	...	...	Nil	Nil	0'19	0'09	0'39	0'66	1'83
		Palumath	...	...	...	...	...	...	...	Nil	Nil	?	0'05	?	3'64	?
		Husainabad	...	...	...	...	...	...	...	Nil	Nil	?	0'39	?	1'21	?
		Garhwa	...	...	...	...	...	...	...	Nil	Nil	?	0'08	?	1'41	?
	Singhbhum ...	Chaibassa .	...	...	...	...	...	...	...	Nil	Nil	0'11	Nil	0'26	6'00	2 06
		Chakardharpur.	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	6'97	?
		Ghatsila .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4'15	?
		Baharagura	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4'35	?
	Manbhum	Purulia ...	0'15	...	...	...	...	...	...	1	0'15	0'10	0'15	0'16	4'30	1'38
		Gobindpur	...	...	...	...	...	...	...	Nil	Nil	0 07	0'01	0'29	1'71	1'52
		Raghunathpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1'69	?
		Barahabhum	...	...	...	...	...	...	...	Nil	Nil	?	0'07	?	5'24	?
		Jhalda ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1'88	?
		Chas ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2'61	?
		Pandra ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1'08	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0'1 inch of rain has fallen.

CALCUTTA, *the* 17*th January* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 14TH OF JANUARY 1893.

At the close of the previous week the weather conditions in Bengal had become slightly disturbed, and on the 7th the distribution of barometric pressure over Bengal was distinctly abnormal, the sky had clouded over rather rapidly in the north and west of the province, and fairly general rain was reported in Bihar and North Bengal, while showers had also occurred in parts of South-West Bengal and Chota Nagur. On the 8th, or the first day of the present week, pressure rose at almost all stations, the increase being rapid in the western districts and small in East and North Bengal, and though pressure was still below the normal, the distribution was much less irregular than it had been on the previous day. Skies also began to clear, and the only general rainfall reported was in and near the hills of North Bengal, while also a few isolated showers of little or no importance fell in other districts. Temperature over the greater part of the province, however, except at the north-eastern stations, continued rather largely in excess of the normal. Winds also generally on this day had become of the normal north-westerly character. On the 9th the barometric changes were small, and pressure had become in slight excess in South Bengal, while it was in moderate excess over the north and centre of the province. A wave of low temperature following after the disappearance of the low pressure area, however, commenced to make itself felt on the 9th in the west of the province, where at some stations the mean temperature became from 3° to 5° below the normal, though over the remainder of the province the defects were small. On the 10th the pressure changes were unimportant, but the wave of low temperature had spread over the whole province, and the general temperature became about 4° to 6° below the normal of the day. The general changes on the 11th were rather unimportant, but on the 12th a rapid fall of pressure occurred which ranged from a twentieth to nearly a tenth of an inch, and pressure became in defect of the normal by nearly 0 01″ over a large part of the province. With the falling pressure temperature commenced to rise, and the defect from the normal on the 12th only equalled from 2° to 4°. On the 13th a further fall of pressure and slow increase in temperature occurred, and on this day pressure was about 0·013″ below the normal, and temperature was still 2° to 3° in defect. On the 14th, or the last day of the week, a further slight decrease of pressure had occurred, and temperature had again risen and was only 1° to 2° in defect of the normal.

It will therefore be seen that the strongly pronounced cold weather conditions, which established themselves after the disappearance of the barometric depression and the consequent disturbed weather which had existed at the close of the previous week, have been slowly but steadily changing. Temperature rose steadily during the second half of the week, and pressure fell moderately to rapidly, and with the unusually low pressure which existed at the close of the week, conditions were again becoming abnormal and pointed to the probable commencement of slightly disturbed weather, while the unusually low temperature had also to a great extent disappeared, and conditions were favourable for increasing temperature.

Pressure.—The mean pressure for the week has been in very considerable defect of the normal. This defect has generally equalled from 0·05″ to 0·07″, and has been tolerably equally distributed except at some of the northern stations such as Rangpur, Jalpaiguri, and Darjeeling, where defects exceeding 0·08″ have been recorded.

Temperature.—The general features of the temperature changes have been already described, and the mean temperature of the province for the week has been in defect of the normal by 2·2°. This defect has been spread very evenly over the province, and in all divisions the defect has slightly exceeded 2° except in East Bengal, where it has only equalled 1·4°.

The distribution of temperature for the week in the province generally and its variation from the normal value are clearly seen in the table below, where the average maximum, minimum and mean temperatures at nine typical stations in different districts of the province are compared with their normal values for the period. Both day and night temperatures, it will be seen, have been very decidedly in defect of the normal:—

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 14th January 1893.

	Normal mean maximum temperature for the week ending 14th January.	Actual mean maximum temperature for the week ending 14th January 1893.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 14th January.	Actual mean minimum temperature for the week ending 14th January 1893.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 14th January.	Actual mean daily temperature for the week ending 14th January 1893.	Variation of actual mean from the normal.
Cuttack	84 1	79·9	—4·2	59·6	55·7	—3·9	71·9	67 8	—4·1
Calcutta	76·4	74·0	—2·4	55·0	51·8	—3·2	65·7	63·0	—2·7
Dacca	77 7	75 1	—2 6	54 5	52 5	—2·0	66·2	63·8	—2·4
Burdwan	77·9	75·3	—2·6	54 8	51·6	—3·2	66·3	63·4	—2·9
Patna	72 2	68 6	—3·6	49 6	47·9	—1 7	60·9	58·3	—2·6
Gaya	75 2	72·4	—2 8	50 5	49 0	—1·5	62·9	60·7	—2·2
Purnea	74 7	70·9	—3 8	48 1	47 6	—0·5	61·4	59·3	—2·1
Hazaribagh	72 2	69·3	—2·9	50·2	45·9	—4 3	61·2	57·6	—3·6
Darjeeling	46·3	40·8	—5·5	36 1	32·4	—3·7	41·2	36·6	—4·6

Rainfall.—The amounts of rain which have fallen during the week have been exceedingly small, and in no division does the fall average as much as a tenth of an inch. The largest fall indeed has only averaged 0·08 inch in North Bengal, and the falls in Chota Nagpur, Orissa, and South-West Bengal have only equalled one or two-hundredths of an inch. In the case of the smaller districts a few have received as much as a tenth of an inch and upwards, and this has been the case in Bankura, Dinajpur, Rangpur, Kuch Bihar, and Darjeeling.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 14th of January 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th Oct. 1892.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	83·3	48·4	77·9	55·9	66 9	−2·3	0·01	0·03	−0·02	0·07	0·06	+0·01	0·01	0·09	6·56	4·07
South-West Bengal ...	80·3	44·5	74·8	51·4	63·1	−2·3	0·01	0·05	−0·04	0·02	0·13	−0 11	0·01	0 15	5·57	1·91
North Bengal	76·3	44 1	71·6	48·5	60·1	−2·4	0·08	0·12	−0·04	0·40	0·20	+0·20	0·18	0·22	0·99	1·33
East Bengal	79 3	46 1	74·6	50·8	62·8	−1 6	Nil	0·08	−0·08	0·00	0·17	−0·17	Nil	0 17	7·96	2·93
North Bihar	75·2	40·0	71·0	47·3	59·2	−2·0	Nil	0·15	−0·15	0·00	0·26	−0·26	0·32	0·28	0·46	1·22
South Bihar	75·0	48·5	70·6	48·2	59·4	−2·6	Nil	0·14	−0·14	0·00	0·29	−0·29	0·15	0·28	0·95	1·47
Chota Nagpur	79·8	43·1	72·2	47·3	59·7	−2·7	0·02	0·11	−0·09	0·09	0·27	−0·18	0·12	0·26	4·19	1·64

METEOROLOGICAL OFFICE, BENGAL,
The 17th January 1893.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 8th to 14th January 1893.

Month	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature.				Hygrometry.					Rainfall at 10 A.M. for past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
January ...	8th ...	30·094	68·7	77·9	18·5	59·4	69·6	67·6	·650	66·4	88	Nil
" ...	9th ...	·112	63 4	71·9	17·0	54·9	65·6	58·7	·404	53·0	64	"
" ...	10th ...	·111	61 0	72·9	23·8	49·1	66 6	58·7	·390	52·0	60	"
" ...	11th ...	·071	61·2	73·4	24·5	48·9	65·6	57·7	·373	51·8	59	"
" ...	12th ...	·032	62·1	74·9	25·6	49·3	66 6	59·7	·422	54·2	61	"
" ...	13th ...	29·996	62·5	75·9	26·8	49 1	67·4	59·2	·396	52·4	59	"
" ...	14th ...	·981	65 4	78·9	27·0	51·9	70·6	64·6	·530	60 6	71	"

	Inches.
The mean 10 A.M. pressure of the seven days	30·057
	°
The mean temperature of the seven days	63·5
The extreme variation of temperature	30·0
The maximum temperature	78·9
	%
The mean 10 A.M. relative humidity of the seven days	66
	Inches.
The total fall of rain from 8th to 14th January 1893	Nil

The daily mean temperatures are the crude means of maximum and minimum temperatures.

C. LITTLE,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 16th January 1893.

PUBLIC WORKS DEPARTMENT,—BENGAL.

IRRIGATION BRANCH.

Statement showing heights over mean sea-level and low-water in the Rivers Ganges, Bhagirathi, Jalangi, and Brahmaputra, for the month of December 1892.

Date.	River Ganges. Mirzapur.		Benares.		Buxar.		Dinapore.		Monghyr.		Sahibganj.		Rampur Boalia.		Goalundo.		River Bhagirathi. Berhampore.		River Jalangi. Sarupganj.		River Brahmaputra. Gowhatty.	
Distance. Miles.	From Allahabad ... 86		From Allahabad ... 134	From Mirzapur ... 48	From Benares 90		From Benares 177	From Buxar ... 87	From Benares 287	From Dinapore 110	From Benares 381	From Monghyr 94	From Benares 471	From Sahibganj ... 90	From Benares 591	From Rampur Boalia ... 120						
	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.
1st	5·17	211·39	2·83	199·63	3·08	172·13	9·40	143·63	3·08	104·93	2·83	70·83	3·23	45·23	4·83	13·77	6·08	39·82	5·42	9·72	1·50	150·26
2nd	5·00	211·22	2·67	199·47	3·08	172·13	9·30	143·53	3·00	104·85	2·83	70·83	3·12	45·12	4·75	13·69	5·96	39·70	5·58	9·88	1·40	150·16
3rd	4·92	211·14	2·50	199·30	3·08	172·13	9·25	143·48	2·92	104·77	2·75	70·75	3·00	45·00	4·67	13·61	5·83	39·57	5·83	10·13	1·20	149·96
4th	4·75	210·97	2·46	199·26	3·00	172·05	9·10	143·33	2·83	104·68	2·75	70·75	2·87	44·87	4·50	13·44	5·75	39·49	5·96	10·26	1·10	149·86
5th	4·67	210·89	2·42	199·22	2·92	171·97	9·00	143·23	2·71	104·56	2·67	70·67	2·81	44·81	4·50	13·44	5·67	39·41	5·75	10·05	1·00	149·76
6th	4·58	210·80	2·37	199·17	2·83	171·88	8·95	143·18	2·58	104·43	2·67	70·67	2·73	44·73	4·42	13·36	5·54	39·32	5·58	9·88	0·90	149·66
7th	4·50	210·72	2·25	199·05	2·75	171·80	8·85	143·08	2·42	104·27	2·67	70·67	2·62	44·62	4·33	13·27	5·50	39·24	4·92	9·22	0·80	149·56
8th	4·42	210·64	2·17	198·97	2·67	171·72	8·70	142·93	2·33	104·18	2·58	70·58	2·54	44·54	4·17	13·11	5·42	39·16	5·00	9·30	0·70	149·46
9th	4·33	210·55	2·00	198·80	2·58	171·63	8·65	142·88	2·25	104·10	2·58	70·58	2·48	44·48	4·00	12·94	5·33	39·07	4·58	8·84	0·60	149·36
10th	4·25	210·47	1·83	198·63	2·50	171·55	8·60	142·83	2·12	103·97	2·50	70·50	2·39	44·39	3·83	12·77	5·25	38·99	4·25	8·55	0·50	149·26
11th	4·17	210·39	1·75	198·55	2·42	171·47	8·50	142·73	2·08	103·93	2·50	70·50	2·29	44·29	3·58	12·52	5·17	38·91	4·17	8·47	0·40	149·16
12th	4·00	210·22	1·67	198·47	2·33	171·38	8·40	142·63	2·00	103·85	2·42	70·42	2·17	44·17	3·33	12·27	5·03	38·82	4·08	8·38	0·30	149·06
13th	3·92	210·14	1·58	198·38	2·25	171·30	8·30	142·53	1·92	103·77	2·42	70·42	2·04	44·04	3·08	12·02	5·00	38·74	4·00	8·30	0·30	149·06
14th	3·83	210·05	1·50	198·38	2·17	171·22	8·20	142·43	1·83	103·68	2·33	70·33	1·92	43·92	3·08	12·02	4·96	38·70	3·98	8·28	0·25	149·01
15th	3·75	209·97	1·42	198·22	2·08	171·13	8·10	142·33	1·62	103·47	2·33	70·33	1·81	43·81	3·08	12·02	4·92	38·66	4·00	8·30	0·20	148·96
16th	3·67	209·89	1·37	198·17	2·00	171·05	8·00	142·23	1·50	103·35	2·25	70·25	1·73	43·73	3·08	12·02	4·87	38·61	4·00	8·31	0·10	148·86
17th	3·50	209·72	1·33	198·13	1·92	171·97	8·00	142·23	1·42	103·27	2·25	70·25	1·64	43·64	3·08	12·02	4·83	38·57	4·00	8·30	0·10	148·86
18th	3·42	209·64	1·25	198·05	1·83	170·88	8·00	142·23	1·33	103·18	2·17	70·17	1·59	43·58	3·08	12·02	4·79	38·53	4·00	8·30	0·05	148·81
																					Below zero.	
19th	3·33	209·55	1·17	197·97	1·75	170·80	7·90	142·13	1·25	103·10	2·08	70·08	1·52	43·52	3·00	11·94	4·75	38·69	4·00	8·30	0·10	148·66
20th	3·25	209·47	1·08	197·88	1·67	170·72	7·85	142·08	1·21	103·06	2·00	70·00	1·44	43·44	3·00	11·94	4·71	38·45	3·75	8·05	0·15	148·61
21st	3·17	209·39	1·08	197·88	1·58	170·63	7·80	142·03	1·17	103·02	2·00	70·00	1·37	43·37	2·92	11·86	4·67	38·41	3·75	8·05	0·10	148·66
22nd	3·17	209·39	1·04	197·84	1·50	170·55	7·75	141·98	1·12	102·97	1·92	69·92	1·29	43·29	2·92	11·86	4·62	38·36	3·58	7·88	0·10	148·66
23rd	3·08	209·30	0·92	197·72	1·50	170·55	7·65	141·88	1·08	102·93	1·83	69·83	1·23	42·23	2·92	11·86	4·58	38·32	3·50	7·80	0·10	148·66
24th	3·00	209·22	0·83	197·63	1·42	170·47	7·60	141·83	1·04	102·89	1·83	69·83	1·17	43·17	2·83	11·77	4·54	38·28	3·50	7·80	0·20	148·56
25th	3·00	209·22	0·79	197·59	1·42	170·47	7·60	141·83	1·00	102·85	1·75	69·75	1·10	43·10	2·75	11·69	4·50	38·24	3·50	7·80	0·20	148·56
26th	3·00	209·22	0·75	197·55	1·33	170·38	7·50	141·73	0·92	102·77	1·75	69·75	1·04	43·04	2·67	11·61	4·46	38·20	3·50	7·80	0·20	148·56
27th	2·92	209·14	0·71	197·51	1·33	170·38	7·50	141·73	0·83	102·68	1·67	69·67	0·98	42·98	2·58	11·52	4·42	38·16	3·25	7·55	0·20	148·56
28th	2·92	209·14	0·67	197·47	1·25	170·30	7·45	141·68	0·79	102·64	1·67	69·67	0·92	42·92	2·50	11·44	4·37	38·11	3·17	7·47	0·25	148·51
29th	2·83	209·05	0·63	197·42	1·25	170·30	7·40	141·63	0·75	102·60	1·58	69·58	0·87	42·87	2·42	11·36	4·33	38·07	3·17	7·47	0·25	148·51
30th	2·83	209·05	0·58	197·38	1·17	170·22	7·30	141·53	0·71	102·56	1·30	69·50	0·83	42·83	2·33	11·27	4·29	38·03	3·25	7·55	0·30	148·46
31st	2·83	209·05	0·50	197·30	1·17	170·22	7·20	141·43	0·67	102·52	1·50	69·50	0·79	42·79	2·25	11·19	4·25	37·99	3·25	7·55	0·30	148·46

CALCUTTA,
The 16th January 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 14th January 1893, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 14th January 1893.			Week ending Saturday, the 16th January 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	1,602	3,98,534	6,771	1,635	4,15,635	6,928
Jute	174	92.125	1,625	57	44,300	707
Firewood	84	61,025	894	102	63,150	1,004
Other articles	821	1,43,200	2,2[illegible]6	968	2,32,485	3 327
Total ...	2,681	6,94 884	11,496	2,762	7,55,570	11,966

EASTERN BENGAL STATE RAILWAY.

Abstract of principal commodities carried over the Eastern Bengal State Railway during the month of October 1892, as compared with the same month of the previous year.

STAPLES.	1892.		1891.		Total.		Increase.	Decrease.
	Up.	Down.	Up.	Down.	1892.	1891.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal	2,705	2,047	3,134	1,592	10,398*	11,890*	......	1,492
Cotton, raw	70	183	74	250	253	324	......	71
Cotton twist and yarn—								
1.—European								
2.—Indian								
Cotton piece-goods—								
1.—European—								
a.—In bales and bundles	3,000	141	2,663	120	3,141	2,783	358	......
b.—In boxes								
2.—Indian—								
a.—In bales and bundles								
b.—In boxes								
Grains—								
2.—Rice	5,951	720	2,652	1,947	6,671	4,599	2,072	......
5.—Others	1,893	1,118	1,520	1,954	3,011	3,474	......	463
Hides and skins—								
1.—Hides of cattle—								
a.—Dressed								
b.—Undressed								
2.—Skins of sheep, &c.—	11	453	7	503	464	510	......	46
a.—Dressed								
b.—Undressed								
Jute—								
1.—Raw—								
a.—Screwed	26	16,122	......	10,180	16,148	10,180	5,968	......
b.—Unscrewed	236	43,193	2	35,783	43,429	35,785	7,644	......
2.—Gunny-bags and cloth	189	1,529	149	1,613	1,718	1,762	......	44
Metals—								
1.—Copper, unwrought								
2.—Brass, unwrought								
3.—Brass and copper, wrought	755	170	769	75	925	844	81	......
4.—Iron								
5.—Tin								
6.—Others								
Oils—								
2.—Kerosine	4,480	9	1,322	13	4,489	1,335	3,154	......
3.—Others	224	37	182	50	261	232	29	......
Oil-seeds—								
1.—Linseed								
2.—Rape and mustard								
3.—Til or gingelly								
4.—Niger	350	594	240	1,338	944	1,578	......	634
5.—Castor								
6.—Poppy								
7.—Others								
Provisions—								
2.—Betel-nuts	91	741	136	1,068	832	1,204	......	372
3.—Others	516	372	442	182	888	624	264	......
Railway plant and rolling-stock	......	......	......	......	7,239†	7,389†	......	150
Salt	2,396	42	4,161	33	2,438	4,194	......	1,756
Sugar—								
1.—Drained	707	250	754	250	957	1,004	......	47
2.—Undrained								
Tea—								
1.—Foreign	1	3,618	2	2,932	3,619	2,934	685	......
2.—Indian								
Wood—								
1.—Timber	124	124	228	113	248	341	......	93
2.—Firewood	1,683	......	1,946	......	1,683	1,946	......	263
Tobacco	59	1,359	87	990	1,418	1,077	341	......
All other articles of merchandise—								
1.—Unmanufactured	2,895	1,484	1,991	1,959	4,379	3,950	429	......
2.—Manufactured								
Hay, straw, and wooloo (C. & S.-E. Sections)...	749	......	616	......	749	616	133	......
Total ...	29,111	74,306	23,077	62,945	116,302	100,575	21,158	5,431

* Includes 5,646 tons and 7,164 tons of coal during 1892 and 1891, respectively, carried for Revenue, for which no "Up" and "Down" register maintained.

† Railway plant and rolling-stock, 7,239 tons and 7,389 tons for the years 1892 and 1891, respectively, for which no "Up" and "Down" register maintained.

Comparative Statement of principal commodities carried on the Eastern Bengal State Railway during the month of October 1892.

INCREASES.

	Tons.
Rice	2,072
The traffic in 1891 was abnormally low.	
Jute, screwed	5,968
Forbesganj, Saidpur, Nilphamari, Haldibari, Kaoraid, Postgollah and Shamnagar show increases under this head.	
Jute, unscrewed	7,644
The principal increase is in despatches from Pangsa, Kushtia, Atrai, Rauinagore, Darwani, and Domar, due to good crop and favourable market.	
Kerosine oil	3,154
Due to the prohibition of carriage by boat within certain limits of the port of Calcutta.	

DECREASES.

	Tons.
Coal	1,492
Ordinary fluctuation.	
Salt	1,756
The decrease was in upward despatche from Chitpur, said to be due to less demand at up-country stations and to Calcutta prices having been high.	

JAMES SHAW,
Examiner of Accounts.

CALCUTTA, *the* 22*nd December* 1892.

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 7th January 1893, on 1,610½ miles open.

	Coaching Traffic. Number of passengers.	Coaching Traffic. Receipts.	Merchandise and Mineral Traffic. Weight carried.	Merchandise and Mineral Traffic. Receipts.	Other earnings (estimated).	Total earnings.	Traffic Train-miles run. Coaching.	Traffic Train-miles run. Merchandise.	Traffic Train-miles run. Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*238,902	*2,94,118 11 0	28,27,602 10	5,97,247 3 0	18,875 6 0	9,10,241 4 0	74,824	112,370½	187,194½
Or per mile of railway	......	182 10 0	......	370 13 7	11 11 6	565 3 1	......	......	......
For previous weeks of half-year	......	.. ...	......	......	......	......	......	......	......
Total for 1 week ...	238,902	2,94,118 11 0	28,27,602 10	5,97,247 3 0	18,875 6 0	9,10,241 4 0	74,824	112,370½	187,194½
Comparison.									
Total for first 9 days of previous year	296,692½	3,37,964 13 4	32,85,020 0	7,70,476 9 9	14,967 10 8	11,23,409 1 9	93,808	125,834	219,642
Per mile of railway corresponding period of previous year ...	......	213 8 4	......	486 12 6	9 7 4	709 12 2	......	......	......
Total for corresponding period of previous year	296,692½	3,37,964 13 4	32,85,020 0	7,70,476 9 9	14,967 10 8	11,23,409 1 9	93,808	125,834	219,642

* The increase in coaching (after deducting 2 days' average receipts from corresponding period) is due to the running of a special train for His Excellency the Commander-in-Chief from Howrah to Ghaziabad, and to a remount special train from Chitpur to Saharanpur.

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 7th January 1893, on 22¼ miles open.

	Coaching Traffic. Number of passengers.	Coaching Traffic. Receipts.	Merchandise and Mineral Traffic. Weight carried.	Merchandise and Mineral Traffic. Receipts.	Other earnings (estimated).	Total earnings.	Traffic Train-miles run. Coaching.	Traffic Train-miles run. Merchandise.	Traffic Train-miles run. Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	18,225	4,624 15 0	9,618 0	407 14 0	15 0 0	5,047 13 0	873	95	968
Or per mile of railway	......	207 13 10	.....	18 5 4	0 10 9	226 13 11	......	......	......
For previous weeks of half-year	......	......	......	... ..	......	......	......	......	...
Total for 1 week ...	18,225	4,624 15 0	9,618 0	407 14 0	15 0 0	5,047 13 0	873	95	968
Comparison.									
Total for first 9 days of previous year	23,276	5,709 5 3	13,733 0	531 9 0	16 12 6	6,257 10 9	1,145	109	1,254
Per mile of railway corresponding period of previous year ..	......	256 9 7	. . ..	23 14 3	0 12 1	281 3 11	.....	......	.....
Total for corresponding period of previous year	23,276	5,709 5 3	13,733 0	531 9 0	16 12 6	6,257 10 9	1,145	109	1,254

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 7th January 1893, on 161⅝ miles open.

	Coaching Traffic. Number of passengers.	Coaching Traffic. Coaching receipts.	Merchandise and Mineral Traffic. Weight carried.	Merchandise and Mineral Traffic. Receipts.	Other earnings (estimated).	Total earnings.	Traffic Train-miles run. Coaching.	Traffic Train-miles run. Merchandise.	Traffic Train-miles run. Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs A. P.			
Total traffic for the week ...	15,321	9,424 3 0	39,839 10	7,870 3 0	66 0 0	17,360 6 0	5,138	3,536	8,674
Or per mile of railway	......	58 6 3	.....	48 12 2	0 6 7	107 9 0	......	......	......
For previous weeks of half-year	......	.. ...	.....	......	......	......	......	......	......
Total for 1 week ...	15,321	9,424 3 0	39,839 10	7,870 3 0	66 0 0	17,360 6 0	5,138	3,536	8,674
Comparison.									
Total for first 9 days of previous year	16,118	11,447 6 6	54,762 0	10,084 12 0	81 11 6	21,613 14 0	7,482	2,428	9,910
Per mile of railway corresponding period of previous year ...	......	70 14 10	......	62 7 9	0 8 1	133 14 8	......	......	......
Total for corresponding period of previous year	16,118	11,447 6 6	54,762 0	10,084 12 0	81 11 6	21,613 14 0	7,482	2,428	9,910

EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., DACCA, K.-D., AND ASSAM-BIHAR SECTIONS.)

Approximate Return of Traffic for the week ended 7th January 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	213,215	84,790 0 0	6,56,455 0	1,15,630 0 0	14,670 0 0	2,15,090 0 0	27,912	32,192	60,104
Or per mile of railway	274	109 0 0	845 0	140 0 0	*2 0 0	260 0 0	......	......	......
For previous weeks of half-year	......	......	......	......	......	......	......	......	......
Total for 1 week ...	213,215	84,790 0 0	6,56,455 0	1,15,630 0 0	14,670 0 0	2,15,090 0 0	27,912	32,192	60,104
COMPARISON.									
Total for corresponding first 9 days of previous year	229,557	98,403 0 0	6,74,008 0	1,09,416 0 0	14,423 0 0	2,22,242 0 0	33,836	36,163	70,004
Per mile of railway corresponding period of previous year ...	295	127 0 0	867 0	141 0 0	*2 0 0	270 0 0	......	......	......
Total to corresponding date of previous year	229,557	98,403 0 0	6,74,008 0	1,09,416 0 0	14,423 0 0	2,22,248 0 0	33,836	36,168	70,004

* Excluding steamer earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 7th January 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic or the week ...	33,729	11,820 0 0	45,587 0	3,080 0 0	50 0 0	14,950 0 0	3,929	1,743	5,672
Or per mile of railway ...	270	95 0 0	365 0	25 0 0	......	120 0 0	......	......	......
For previous weeks of half-year	......	......	......	......	......	......	......	...	......
Total for 1 week ...	33,729	11,820 0 0	45,587 0	3,080 0 0	50 0 0	14,950 0 0	3,929	1,743	5,072
COMPARISON.									
Total for corresponding first 9 days of previous year	38,095	13,781 0 0	72,037 0	4,109 0 0	152 0 0	18,042 0 0	4,614	2,713	7,327
Per mile of railway corresponding period of previous year ...	305	110 0 0	576 0	33 0 0	1 0 0	141 0 0	......	......	......
Total to corresponding date of previous year	38,095	13,781 0 0	72,037 0	4,109 0 0	152 0 0	18,042 0 0	4,614	2,713	7,327

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 7th January 1893, on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	16,987	6,160 0 0	17,451 0	1,810 0 0	150 0 0	8,120 0 0	2,487	737	3,224
Or per mile of railway	198	71 0 0	203 0	21 0 0	2 0 0	94 0 0	......	......	......
For previous weeks of half-year	......	......	......	......	......	......	......	......	......
Total for 1 week ...	16,987	6,160 0 0	17,451 0	1,810 0 0	150 0 0	8,120 0 0	2,487	737	3,224
COMPARISON.									
Total for corresponding first 9 days of previous year	22,902	7,491 0 0	11,696 0	1,243 0 0	116 0 0	8,850 0 0	3,191	927	4,116
Per mile of railway corresponding period of previous year ...	266	87 0 0	136 0	15 0 0	1 0 0	103 0 0	......	......	......
Total to corresponding date of previous year	22,902	7,491 0 0	11,696 0	1,243 0 0	116 0 0	8,850 0 0	3,191	927	4,118

BENGAL AND NORTH-WESTERN RAILWAY.

(Includes the Tirhut State Railway.)

Approximate return of traffic for the week ending 7th January 1893, on 755 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	81,370	32,530	4,14,100	54,360	11,370	98,260	12,534	17,906	30,440
Or per mile of railway	107·63	43·03	547·75	71·90	15·04	129·97	......	. ...	......
For previous nil weeks of half-year	.....	......	......	......	......	......	......	......	......
Total for 1 week ...	81,370	32,530	4,14,100	54,360	11,370	98,260	12,534	17,906	30,440
Comparison.									
Total for corresponding week of previous year on 737 miles open	86,797	37,344	3,34,004	42,293	10,405	90,042	16,804	17,400	34,204
Per mile of corresponding week of previous year	117·77	50·67	453·19	57·38	14·12	122·17	......	......	...—
Total to corresponding date of previous year	86,797	37,344	3,34,004	42,293	10,405	90,042	16,804	17,400	34,204

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 7th January 1893	7,695	0	0
Corresponding period of 1892	7,064	0	0
Increase	631	0	0
Receipts per mile for the week ending 7th January 1893	150	14	1
Corresponding period of 1892	138	8	2
Increase	12	5	11
Receipts from 1st to 7th January 1893	7,695	0	0
Corresponding period of 1892	7,064	0	0
Increase	631	0	0

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No. 4 of 1893.



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CONTENTS.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 21st January, 1893.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.			
Burdwan Divn.			
1	Burdwan Jan. 21, '93 Kalna ... Raniganj ...	0·08 Nil 0·02	Weather—cloudy. Prospects of *rabi* crops and sugarcane fair. Condition of cattle tolerably good. Prices of common rice:— Srs. Burdwan ... ... 11 to 13; Kalna ... ... 11 to 13; Raniganj ... ... 13 — per rupee.
2	Bankura ,, 21, '93 Vishnupur ...	0·64 0·13	Weather—cool and cloudy. Prospects of *rabi* crops good. Fodder and water plentiful. Prices of common rice:— Srs. Sadar ... ... 12½; Vishnupur ... ... 11½ — per rupee.
3	Birbhum ,, 21, '93 Rampur Hát ...	0·13 0·04	Weather—occasionally cloudy. *Rabi* crops doing well. Price of rice 13 to 14 seers per rupee. Fodder and water plentiful.
4	Midnapore ,, 21, '93	Nil	Weather—cloudy and cold, threatening rain. The rice harvest is ended. Prices of common rice:— Srs. Sadar ... ... 11½; Contai ... ... 12 to 15; Tamluk ... ... 12 to 15; Garhbeta ... ... 12½ to 13 — per rupee.
5	Hooghly ,, 21, '93 Serampore ... Jahanabad ...	0·04 0·06 0·04	Weather—fairly cold, cloudy, occasionally threatening rain. No material change in condition of crops. *Aman* harvest almost over. Potatoes, sugarcane and pulses doing well. Want of fodder and water felt in Pandua and Dwarbasini. Cattle-disease rather frequent in Sadar subdivision. Prices of common rice:— Srs. Sadar ... ... 9 to 10; Serampore ... ... 10; Jahanabad ... ... 10½ to 13 — per rupee.
6	Howrah ,, 21, '93 Ulubaria ...	Nil Nil	Weather—cloudy. Harvesting of *aman* paddy nearly completed. Spring crops doing well. Condition of cattle good. Fodder and water-supply sufficient, except that tanks in Howrah Municipality are drying up too quickly. Price of rice 11 to 12 seers per rupee.
Presidency Divn.			
7	24-Parganas ,, 21, '93	Nil	Weather—cloudy during the latter part of the week. Prospects of *rabi* crops fair. Common rice sells at from 10½ to 13 seers per rupee. Condition of cattle good. Fodder and water sufficient.
8	Nadia ,, 21, '93 Kushtia ... Meherpur ... Chuadanga ... Ranaghat ...	0·02 0·04 Nil Nil Nil	Weather—seasonable and cloudy. Prospects of *rabi* crops good. Common rice selling at 13 seers per rupee. Health of cattle good except in thanas Chapra and Krishnaganj, where cow-pox prevails. Fodder and water-supply sufficient.
9	Khulna ,, 21, '93 Bagerhat ... Satkhira ...	Nil Nil Nil	Weather—seasonable. Harvesting of *aman* continues; outturn good except in Paikgacha. Prospect of *rabi* crops fair. Sowing of *boro* paddy has been commenced. Common rice selling at from 12 to 14 seers per rupee. Fodder and water sufficient.
10	Jessore ,, 21, '93 Jhenida ... Magura .. Narail ... Bangaon ...	0·26 0·06 0·02 0·21 Nil	Weather—cool and cloudy. Harvesting of *aman* nearly completed. Mustard being reaped. Prospects of *rabi* crops fair. Condition of cattle good. Fodder and water sufficient.
11	Murshidabad ,, 21, '93	0·24	Weather—seasonable; cloudy at times. Prospect of *rabi* crops appears to be favourable except that of wheat in some parts of Jangipur subdivision. *Aman* has been harvested. Fodder and water sufficient for cattle. Coarse rice selling at 14 seers per rupee.

Division	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and State and prospects of the crops.
BENGAL—*concld.*					
CHITTAGONG DIVN.	12	Chittagong	Jan. 21, '93	0·03	Weather—seasonable. Prospect of crops good. *Rabi* cultivation in progress. Prices stationary. Condition of cattle generally good. Supply of fodder sufficient.
	13	Noakhali	„ 21, '93	0·47	Weather—cloudy especially in the evenings, and foggy in the mornings. Recent rain has done great good to *rabi* crops. Harvesting of *aman* over; outturn seems to be about three annas below the average. Cattle-disease reported from Hatia, Sandip and Companiganj. Price of common rice 13 seers per rupee.
	14	Tippera	„ 21, '93	0·23	Weather—a little cloudy. Harvesting of *aman* paddy is now complete. Among winter crops mustard is almost ripe for being harvested, and chillies growing luxuriantly. Prices of edibles are stationary with a tendency to rise for constant exportation.
	15	Chittagong Hill Tracts.	„ 20, '93	..	Weather—cloudy and rainy during the last part of the week. Mustard ripening. Prospect of vegetables good. No cattle-disease reported. Prices of common rice: Srs. Rangamati ... ... 12 } Bandarban ... ... 11 } per rupee. Manicksury ... ... 18 }
DACCA DIVN.	16	Dacca	„ 21, '93	0·23	Weather—cold and cloudy at intervals. *Rabi* crops thriving. Prospects good. Harvesting of mustard commenced. *Boro* paddy being sown. Fodder available. No cattle-disease. Common rice selling at from 10¼ to 14 seers per rupee.
	17	Faridpur Goalundo Madaripur	„ 21, '93	Nil Nil Nil	Weather—cool and cloudy, but occasionally bright. Prospects of *rabi* crops fair. *Mug* and *kalai* are still being harvested. *Boro* paddy is being sown. Common rice sells at 12 seers per rupee at Sadar, 13 seers at Goalundo, and 13½ seers at Madaripur. No cattle-disease reported. Fodder and water sufficient.
	18	Backergunge	„ 21, '93	Nil	Weather—seasonable. State and prospects of crops good. Ordinary rice sells at about 12 seers per rupee. Fodder and water sufficient.
	19	Mymensingh	„ 21, '93	0·06	Weather—very cold. Harvesting of *aman* completed. Prospect of mustard and *rabi* crops good. *Boro* paddy being planted. Water and fodder sufficient. Common rice sells at from 11 to 14 seers per rupee.
RAJSHAHI DIVN.	20	Dinajpur Thakurgaon	„ 21, '93 ...	Nil Nil	Weather—cool and cloudy. Standing crops continue good. Pressing of sugar-cane going on. Harvesting of winter rice almost over. Land being prepared for *bhadoi* and jute. Price of rice both at Sadar and Thakurgaon stationary. Condition of cattle good. Supply of fodder and drinking water plentiful.
	21	Rajshahi Nator Naugaon	„ 21, '93	0·06 0·40 Nil	Weather—seasonable. Harvesting of mustard and other cold-weather crops commenced; they are expected to yield a fair outturn. No cattle-disease reported. Water and fodder sufficient. Price of common rice almost stationary.
	22	Rangpur Kurigaon Gaibanda Nilphamari Ulipur	„ 21, '93	Nil Nil Nil Nil Nil	Weather—seasonable. Harvesting of *aman* nearly finished. Mustard is being gathered in some places. *Rabi* crops doing well. Price of common rice varying from 10 to 14 seers per rupee.
	23	Bogra Sherpur Naukhila	„ 21, '93	Nil 0·27 Nil	Weather—seasonably cool. Prospects of *rabi* continue favourable. Price of rice stationary. Lands being ploughed for *aus*, jute and sugarcane. Fodder and water sufficient.
	24	Pabna	„ 21, '93	0·29	Weather—seasonable. *Aman* paddy is still being reaped in some places; in most places it has been harvested. Prospects of *rabi* crops good. Common rice selling at Pabna 13½ seers per rupee and at Sirajganj Rs. 3 to Rs. 4 per maund. Condition of cattle good. Water-supply and fodder sufficient.
	25	Darjeeling Siliguri	„ 21, '93 ...	0·03 0·19	Weather—very cold; mornings clear; afternoons overclouded. *In the hills*:—Wheat, barley, *tori* and potatoes progressing favourably. In some places harvesting of potatoes, *tori* and *phafur* going on. *In the terai*:—Mustard has begun to be harvested, while harvesting of paddy and potatoes going on. Prospects good. Prices of coarse rice:— Srs. Hills ... ... 11 } Terai ... ... 13 } per rupee.
	26	Jalpaiguri	„ 21, '93	Nil	Weather—cold and cloudy at times. Harvesting of *haimanti* paddy approaching completion. Prospects of potato and tobacco continue good. Price of common rice unchanged. Condition of cattle good. Fodder and water sufficient.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
Bhagalpur Divn.	27	Monghyr Jan. 21, '93	Nil	Weather—cold and cloudy. Rice crop has been harvested. Prospects of *rabi* crops favourable. Opium and indigo doing well. Fodder and water sufficient. No cattle-disease. Prices of common rice:— Srs. Sadar ... ... 13 to 16 } per rupee. Begusarai ... ... 15½ } Jamui ... ... 14½ }
		Begusarai ...	Nil	
		Jamui ...	0·10	
	28	Bhagalpur " 21, '93	0·03	Weather—chilly and cloudy. Rice harvest still in progress. Indigo is favourably reported from the subdivisions. Price of common rice stationary.
		Banka ...	0·08	
		Madhipura ...	Nil	
		Supaul ...	Nil	
	29	Purnea ...	...	Report not received.
	30	Malda " 21, '93	0 01	Weather—cloudy throughout the week; slight rainfall on the 18th. Harvesting of winter rice almost finished. Transplantation of *boro* paddy continues. Gathering of *kalai* in full progress. Price of course rice 13 to 17 seers per rupee. No want of fodder or drinking water.
	31	Sonthal Parganas " 21, 93	0·31	Weather—cold and cloudy. Threshing of paddy still going on. Prospects of standing *rabi* crops good. Fodder and water-supply plentiful.
		Deoghur ...	Nil	
		Godda ...	0·09	
		Jamtara ...	Nil	
		Pakur ...	Nil	
		Rajmahal ...	0·04	
Patna Division.	32	Patna " 21, '93	Nil	Weather—cold and occasionally cloudy. *Rabi* and poppy crops doing well. The slight rain is expected to do some good. Prospects fair. Prices of common rice:— Srs. Sadar ... ... 17 } per rupee. Barh ... ... 13 } Bihar ... ... 17 } Dinapore ... ... 14 to 15 }
		Bihar ...	Nil	
		Barh ...	0·11	
		Dinapore ...	0·07	
	33	Gaya " 21, 93	0 18	Weather—cold and cloudy throughout the greater part of the week. Harvesting of paddy nearly completed. Threshing continues. Prospects of *rabi* crops fair. The little rainfall during the week has done good to the standing crops. Common rice sells at 14 seers per rupee at Sadar. Supply of fodder and water for cattle sufficient. Prices stationary.
		Nawada ...	0·05	
		Aurangabad ...	0·34	
		Jahanabad ...	0·14	
	34	Shahabad " 21, '93	0·7	Weather—unusually cold even for this season. *Rabi* thriving. Sugarcane being pressed with excellent outturn. Poppy promises well. Rain has fallen in the south and west of the district and has been of great benefit, but more is wanted.
		Sasaram ...	0·13	
		Bhabhua ...	0·04	
	35	Darbhanga " 21, '93	0 10	Weather—occasionally cloudy. *Rabi* crops doing well and prospects very favourable. Poppy greatly benefited by the late rain. Fields being prepared for indigo sowing. Price of common rice stationary. Condition of cattle good.
		Samastipur ...	0 15	
		Madhubani ...	Nil	
	36	Muzaffarpur " 21, '93	0·09	Weather—seasonable: occasionally cloudy. Threshing of paddy still continues in places. *Rabi* flowering and doing well. Fodder and water for cattle sufficient.
		Hajipur ...	Nil	
		Sitamarhi ...	0·04	
	37	Saran " 21, '93	0·05	Weather—seasonable. Cloudy again to-day (21st). Rain has done good to *rabi* crops. Sugarcane pressing going on. Poppy doing well. Fodder and water abundant. Prices of common rice are:— Srs. c. Chapra ... ... 14 8 } per rupee. Siwan ... ... 13 2 } Gopalganj ... ... 14 8 }
		Siwan ...	0·28	
		Gopalganj ...	0·11	
	38	Champaran " 21, '93	Nil	Weather—cool with west wind. Paddy threshing nearly over. *Rabi* and poppy doing well. Lands are being prepared for indigo sowing. Prices steady. Cattle are in good condition. Fodder and water sufficient.
ORISSA.				
Orissa Divn.	39	Cuttack ...	...	Report not received.
	40	Puri " 19, '93	Nil	Weather—seasonable. Harvesting of *sarad* rice going on. *Dalua* rice plants growing. Miscellaneous crops doing well. Price of rice stationary.
		Khurda ...	Nil	
		Banpur ...	Nil	
	41	Balasore " 21, '93	Nil	Weather—cloudy with a few drops of rain. Harvesting of winter rice completed. Prices stationary.

	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
CHOTA NAGPUR.					
South-West Frontier Agency.					
CHOTA NAGPUR DIVN.	42	Hazaribagh	Jan. 21, '93	0·06	Weather—cloudy; slight rain on 17th. Prospects of crops good. Common rice sells at 12 to 16 seers per rupee. Poppy flowering.
	43	Lohardaga	" 21, '93	0·07	Weather—cloudy. Reaping of *surguja* continues. Prospect of *rabi* continues good. Common rice selling at 14 seers per rupee. Fodder and water sufficient.
	44	Palamau	" 20, '93	0·10	Clouds constantly gathering: unsettled weather. There has been a slight fall of rain except in thana Hossenabad. *Rabi* crops promise well. A little cattle-disease reported.
	45	Singhbhum	" 21, '93	0·30	Weather—cloudy; slight rain on the 19th. *Rahar*, mustard and linseed are being harvested; probable outturn 12 to 16 annas. Common rice selling at from 12 to 16 seers per rupee.
	46	Manbhum Gobindpur	" 21, '93 ...	0·20 0·17	Weather—cloudy. *Rabi* crops doing well. Rice selling at from 10 to 14 seers per rupee. Fodder and water-supply sufficient.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 24th January, 1893.

C. E. BUCKLAND,
Secy. to the Govt. of Bengal.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the

QUANTITIES PER RUPEE IN

	Number.	DISTRICTS.	WHEAT. Present return.	WHEAT. Next preceding return.	WHEAT. Corresponding return of last year.	BARLEY. Present return.	BARLEY. Next preceding return.	BARLEY. Corresponding return of last year.	RICE, BEST SORT. Present return.	RICE, BEST SORT. Next preceding return.	RICE, BEST SORT. Corresponding return of last year.	RICE, COMMON. Present return.	RICE, COMMON. Next preceding return.	RICE, COMMON. Corresponding return of last year.	JOWAR OR CHOLUM. (*Sorghum Vulgare.*) Present return.	JOWAR OR CHOLUM. Next preceding return.	JOWAR OR CHOLUM. Corresponding return of last year.
BENGAL.			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
BURDWAN DIVISION.	1	Burdwan .	12 0	12 0	12 0	...	...	...	11 0	11 4	12 6	12 12	12 12	14 4	...	...	...
	2	Bankura .	12 0	12 0	12 8	...	...	16 0	10 0	10 0	12 8	12 8	11 12	18 0	.	...	...
	3	Birbhum ...	10 4	10 4	12 8	9 0	9 0	...	11 0	11 0	13 0	14 4	14 4	15 0	...	...	...
	4	Midnapore ...	10 4	10 4	12 0	...	...	...	10 0	10 0	13 0	13 2	13 2	16 8	...	...	...
	5	Hooghly ...	11 0	11 0	13 0	11 0	11 0	..	9 0	9 0	8 0	10 0	9 8	13 0	...	...	...
	6	Howrah ...	...	...	...	...	...	...	9 6	9 6	10 4	12 4	12 4	13 4	...	...	...
PRESIDENCY DIVISION.		Calcutta	11 0	11 0	10 15	15 0	15 0	20 0	8 0	8 0	8 11	10 0	10 0	12 12	17 0	17 0	16 0
	7	24-Parganas ...	11 0	11 0	10 8	16 0	16 0	18 0	8 0	8 0	8 0	12 0	11 12	13 8	18 0	16 0	...
	8	Nadia .	14 8	13 14¼	12 12¾	...	...	22 14	10 0	9 4	10 10½	12 0	11 4½	12 12¾	...	.	...
	9	Khulna ...	...	...	...	...	...	...	12 0	12 8	13 0	15 0	15 0	16 0	...	...	...
	10	Jessore ..	10 0	10 0	10 0	...	...	...	8 8	8 0	13 0	14 0	13 0	15 0	...	...	...
	11	Murshidabad ...	12 8	13 0	12 0	...	...	...	10 0	10 0	10 0	13 0	13 0	13 4	...	...	...
CHITTAGONG DIVISION.	12	Chittagong ...	9 4	9 4	9 12	...	...	...	10 8	10 8	9 0	12 0	12 4	13 0	...	...	...
	13	Noakhali ...	...	...	...	...	...	...	11 0	11 0	13 0	12 6	13 0	14 0	...	...	...
	14	Tippera ...	11 0	9 0	10 0	...	...	...	10 0	9 8	10 10	12 6	12 0	6 0		.	...
	15	Chittagong Hill Tracts.	...	...	...	...	...	...	...	...	...	12 0	10 0	10 10	...	...	...
DACCA DIVISION.	16	Dacca ..	...	...	10 8	...	...	26 0	8 0	8 0	12 0	12 0	12 0	16 0	...	...	...
	17	Faridpur ...	11 0	11 0	11 8	20 0	20 0	17 0	8 0	8 0	10 0	12 0	12 0	16 0	...	...	...
	18	Backergunge ...	...	...	...	...	...	...	Old 8 0 New 12 0	Old 8 0 New 12 8	12 0	13 0	14 0	14 0	...	...	...
	19	Mymensingh ..	9 8	9 8	9 0	...	...	...	10 0	10 0	11 0	11 0	12 0	15 0	...	...	...
RAJSHAHI DIVISION.	20	Dinajpur ...	13 0	11 13	10 13	15 12	15 12	17 0	8 0	8 0	10 13	14 8	15 0	12 0	...	..	...
	21	Rajshahi ...	12 12	12 12	12 0	19 8	19 8	26 4	11 4	11 4	11 4	12 12	12 12	12 0	...	...	...
	22	Rangpur	11 8	11 8	8 0	...	...	...	9 6	9 6	9 0	10 10	10 10	11 8	....	...	...

A In the subdivisional marts the retail prices of salt per rupee are :—Kalna 10 seers, Katwa 10½ seers, and Raniganj 11 seers.
B At Vishnupur the retail price of salt is 11 seers per rupee.
C At Rampur Hát the retail price of salt is 11 seers per rupee.
D In the subdivisional marts the retail prices of salt per rupee are :—Contai 10 seers, Tamluk 11½ seers, and Ghatal 10 seers 11 chitaks.
E In the subdivisional marts the retail prices of salt per rupee are :—Bhaddreswar 10¼ seers and Jahanabad 10 seers 10 chitaks.
F At Ulubaria the retail price of salt is 10½ seers per rupee.
G In the subdivisional marts the retail prices of salt per rupee are :—Chotla Hát 12 seers 9 chitaks, Magrahat 10½ seers, and Baduria 10 seers 10 chitaks.
H In the subdivisional marts the retail prices of salt per rupee are :—Bahadurkhali 10½ seers, Chuadanga 10 seers, Meherpur 10½ seers, and Ranagnat 10¼ seers.
I In the subdivisional marts the retail prices of salt per rupee are :—Bagerhat 8 seers and Satkhira 11 seers.
J In the subdivisional marts the retail prices of salt per rupee are :—Jhenida 9 seers 9 chitaks, Magura 10 seers, Narail 9 seers 10 chitaks.

Head-quarters Station Bazars of the Districts of Bengal on the 15*th January,* 1893.

Indian-corn or Maize. (*Zea Mays.*) Present return.	Next preceding return.	Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus Indicus.*) Present return.	Next preceding return.	Corresponding return of last year.	Firewood. Present return.	Next preceding return.	Corresponding return of last year.	Salt. Present return.	Next preceding return.	Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt. Present return.	Next preceding return.	Corresponding return of last year.	Districts.	Number.	
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.	BENGAL.		
...	...	...	19 0	19 0	16 0	100 0	100 0	100 0	A 12 0	12 0	11 4	3 5 4	3 5 4	3 6 0	Burdwan	1	Burdwan Division.
23 0	22 8	22 0	12 0	12 0	17 8	320 0	320 0	220 0	B 11 0	11 0	11 6	3 10 0	3 10 0	3 10 0	Bankura.	2	
22 0	22 0	...	11 0	11 0	12 0	200 0	200 0	200 0	C 10 12	10 12	10 8	3 12 6	3 12 6	3 10 0	Birbhum.	3	
...	...	...	17 8	17 8	10 0	280 0	280 0	120 0	D 11 7	11 7	11 2	3 8 0	3 8 0	3 9 0	Midnapore.	4	
...	...	...	12 12	11 0	11 0	160 0	120 0	120 0	E 10 10	11 8	10 0	3 8 0	3 8 0	3 12 0	Hooghly.	5	
...	...	...	10 10	11 10	11 0	106 0	106 0	100 0	F 10 10¾	10 10¾	10 8	3 8 0	3 8 0	3 6 0	Howrah.	6	
19 0	19 0	16 7	12 0	12 0	15 2	85 0	85 0	95 0	9 8	9 8	11 5	4 0 0	4 0 0	3 4 3	Calcutta.		Presidency Division.
18 0	18 0	...	17 0	16 0	15 0	100 0	100 0	100 0	G 11 0	11 0	11 0	3 4 6	3 4 6	3 4 0	24-Parganas.	7	
...	...	...	20 0	17 12½	17 8	128 0	128 0	...	H 10 0	10 0	10 8½	3 8 0	3 8 0	3 9 0	Nadia.	8	
...	...	...	10 0	9 0	...	160 0	160 0	160 0	I 9 0	9 0	10 0	3 12 0	4 0 0	3 12 0	Khulna.	9	
...	...	...	13 0	13 0	20 0	120 0	120 0	160 0	J 9 14	9 14	9 2	3 10 0	3 10 0	3 10 0	Jessore.	10	
...	...	...	17 0	17 0	26 0	200 0	200 0	200 0	K 10 8	10 8	10 8	3 7 0	3 7 0	3 12 0	Murshidabad.	11	
...	...	...	...	...	...	120 0	120 0	110 0	10 0	10 0	11 0	3 8 0	3 10 0	3 8 0	Chittagong.	12	Chittagong Division.
...	..	...	...	...	9 0	...	...	...	L 9 0	9 0	10 0	4 0 0	4 0 0	3 12 0	Noakhali.	13	
...	...	...	10 0	8 0	7 0	...	...	...	M 10 13½	10 0	10 0	3 12 0	4 0 0	3 12 0	Tippera.	14	
No. in cobs. .300	No. in cobs. 300	...	...	...	...	240 0	320 0	240 0	8 0	8 0	8 0	4 8 0	4 8 0	4 8 0	Chittagong Hill Tracts.	15	
...	...	...	...	.	13 0	120 0	120 0	120 0	N 10 0	10 0	10 8	3 10 0	3 10 0	3 8 0	Dacca.	16	Dacca Division.
...	...	..	...	...	13 8	...	...	...	O 10 0	10 0	10 8	3 14 0	3 14 0	3 12 0	Faridpur.	17	
...	Musuri dal. ...	...	...	Mug. ...	...	80 0	80 0	80 0	P 10 8	10 8	10 8	3 10 0	3 10 0	3 12 0	Backergunge.	18	
...	...	...	13 0	13 0	10 0	120 0	120 0	...	Q 10 0	10 0	10 8	4 0 0	3 15 0	3 10 0	Mymensingh.	19	
...	...	...	13 8	13 8	15 11	160 0	160 0	160 0	9 8	9 4	10 8	3 14 0	3 12 0	3 12 0	Dinajpur.	20	Rajshahi Division.
...	...	...	17 0	17 4	18 12	240 0	240 0	240 0	R 9 9	9 9	9 9	3 10 8	3 10 8	3 10 8	Rajshahi.	21	
...	...	...	9 8	9 8	8 0	80 0	80 0	100 0	S 10 0	10 0	8 0	4 4 0	4 4 0	5 0 0	Rangpur.	22	

K In the subdivisional marts the retail prices of salt per rupee are :—Kandi 11½ seers and Jangipur 10¼ seers.
L At Fenny Hát the retail price of salt is 8 seers 5 chitaks per rupee.
M In the subdivisional marts the retail prices of salt per rupee are :—Chandpur 9 seers and Brahmanbaria 9 seers 6 chitaks.
N In the subdivisional marts the retail prices of salt per rupee are:—Madanganj 11 seers, Manikganj 9 seers 13 chitaks, Mirkadim 10 seers, and Munshirhat 10 seers.
O In the subdivisional marts the retail prices of salt per rupee are :—Madaripur 10 seers and Goalundo 10 seers.
P In the subdivisional marts the retail prices of salt per rupee are :—Patuakhali 9 seers, Pirojpur 10¼ seers, and Bhola 9 seers.
Q In the subdivisional marts the retail prices of salt per rupee are :— Jamalpur 10 seers, Kishorganj 10 seers, Netrakona 10 seers, and Kagmari 10 seers.
R In the subdivisional marts the retail prices of salt per rupee are :—Nator 9 seers and Naugaon 9 seers 9 chitaks.
S In the subdivisional marts the retail prices of salt per rupee are :—Kurigaon 8 seers, Gaibanda 10 seers, and Nilphamari 10 seers.

PRICES-CURRENT (*retail*) *of Food-grains, Firewood, and Salt in the Head-quarters*

QUANTITIES PER RUPEE IN

Number.	DISTRICTS.	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum. (*Sorghum Vulgare.*) Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
BENGAL—*continued.*																
		S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
RAJSHAHI DIVISION—*concld.*																
23	Bogra ...	10 14	10 14	10 8	...	...	...	10 0	9 12	12 0	15 0	15 0	13 8	...	...	...
24	Pabna ...	14 4	14 4	13 2	...	...	...	6 4	6 12	7 2	13 8	14 2	14 4	...	...	...
25	Darjeeling	7 0	7 0	8 0	8 0	8 0	10 0	5 0	5 0	5 0	11 8	11 0	10 0	...	...	...
26	Jalpaiguri	11 0	11 0	10 0	13 0	13 0	14 0	7 0	7 0	7 0	13 0	13 0	10 0	...	...	...
BIHÁR.																
BHÁGALPUR DIVISION.																
27	Monghyr ...	12 0 to 13 0	12 0 to 13 0	13 0	14 0 to 15 0	14 0 to 15 0	20 8	8 0 to 9 0	8 0 to 9 0	9 8	11 0 to 13 0	11 4	12 0	...	...	...
28	Bhágalpur ...	13 14	13 14	12 10	12 10	13 14	22 11	12 10	New. 12 0 Old. 8 13	11 6 Old. 10 11	1 2	New. 15 2 Old. 12 10	12 0 Old. 11 6		...	...
29	Purnea (Kasba)*		10 0	11 0	...	...	20 0		13 0	10 0		15 0	11 0	.	..	...
30	Malda ...	12 8	13 0	11 0	...	...	...	...	10 0	10 0	14 0	14 0	13 0	...	...	...
31	Sonthal Parganas.	11 0	11 0	10 0	...	...	...	11 8	11 0	12 0	14 8	14 8	14 0	...	.	...
PATNA DIVISION.																
32	Patna ...	15 0 / 14 0	Red. 15 0 White 14 0	16 0 / 14 0	20 0	20 0	25 0	10 8	10 8	11 8	17 0	17 0	16 0	29 0	28 0	19 0
33	Gaya ...	12 8	12 8	12 8	18 4	18 0	23 0	9 0	9 0	10 8	14 8	14 0	14 0	19 8	20 4	...
34	Shahabad ...	14 0	15 0	13 8	16 0	16 0	20 0	9 0	8 0	8 0	15 0	15 0	14 0	...	...	...
35	Darbhanga ...	12 2	13 3	14 4	11 8	12 0	22 0	11 0	11 0	11 0	15 6	15 0	14 0	...	...	...
36	Muzaffarpur	12 0	12 0	12 0	18 0	18 0	20 0	8 0	8 8	11 0	14 0	14 0	13 0	...	...	...
37	Saran ...	14 0	14 0	12 12	19 8	20 0	25 8	11 8	10 8	8 8	14 8	15 8	13 2	24 0	...	...
38	Champaran ...	11 12	11 0	12 0	...	12 8	20 8	8 8	9 0	7 4	15 8	15 8	14 0	...	...	...
ORISSA.																
ORISSA DIVISION.																
39	Cuttack ...	10 8	11 13	9 2	...	..	...	10 8	10 8	10 8	15 1	15 1	13 2	...	..	...
40	Puri ...	...	...	...	...	...	...	9 3	9 3	11 13	17 2	15 12	15 12	.	...	...
41	Balasore ...	11 0	11 0	11 0	10 0	10 0	10 0	10 0	10 0	12 0	17 0	16 0	17 0	...	...	...
CHOTA NAGPUR.																
CHOTA NAGPUR DIVISION.																
42	Hazáribágh ..	12 0	12 0	12 0	11 0	11 0	17 0	8 0	8 0	8 0	13 8	14 0	13 0 to 14 0	..	...	...
43	Lohardaga ...	10 8 to 10 12 / 8 0 to 10 0	Red. 11 8 White. 8 0 to 10 0	11 0 to 11 8 / 7 4 to 10 0	10 0	10 0	13 0	11 0 to 14 0	11 0 to 14 0	11 0 to 12 0	16 0	16 4	14 0 to 16 0	...	..	...
44	Palámau ...	11 4	11 13	12 15	...	...	...	14 1	11 13	10 2	15 12	16 14	14 10	...	..	...
45	Singhbhum ...	12 0	12 0	15 0	...	...	16 0	11 0	10 0	16 0	15 0	16 0	20 0	...	...	...
46	Manbhum	11 8	11 8	11 0	...	...	...	10 8	10 0	13 8	13 0 to 14 0	13 0 to 14 0	17 0	...	...	...

* Present return not received.
T At Sirajganj the retail price of salt is 11 seers per rupee.
U At Alipur the retail price of salt is 8 seers per rupee.
V At Begusarai and Jamui the retail price of salt is 10 seers per rupee.
W A Banka, Madhipura, and Supaul the retail price of salt is 10 seers per rupee.
X At Kishanganj the retail price of salt is 10 seers per rupee.
Y In the subdivisional marts the retail prices of salt per rupee are :—Deoghur 10 seers, Godda 9½ seers, Jamtara 9 seers, Pakur 10½ seers, and Rajmahal 10 seers.
Z In the subdivisional marts the retail prices of salt per rupee are :—Barh 11 seers 6 chitaks, Dinapore 10 seers.
a In the subdivisional marts the retail prices of salt per rupee are :—Aurangabad 10 seers, Nawada 9 seers, and Jahanabad 10 seers.

CALCUTTA,
The 24th January, 1893.

Station Bazars of the Districts of Bengal on the 15th January 1893—(concluded).

Indian-corn or Maize. (*Zea Mays.*) Present return.	Indian-corn Next preceding return.	Indian-corn Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus indicus.*) Present return.	Arhar Next preceding return.	Arhar Corresponding return of last year.	Firewood. Present return.	Firewood Next preceding return.	Firewood Corresponding return of last year.	Salt. Present return.	Salt Next preceding return.	Salt Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt. Present return.	Wholesale Salt Next preceding return.	Wholesale Salt Corresponding return of last year.	Districts.	Number.	Division
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
															BENGAL—*continued.*		
...	...	...	...	...	...	90 0	90 0	90 0	9 12	9 12	9 9	3 13 0	3 13 0	3 14 8	Bogra.	23	Rajshahi Division—*concld.*
...	...	...	22 0	21 0	16 0	200 0	200 0	200 0	[T] 9 12	9 12	9 12	3 10 0	3 10 0	3 12 0	Pabna.	24	Rajshahi Division—*concld.*
14 0	14 0	16 0	8 0	8 0	8 0	120 0	120 0	120 0	8 0	8 0	8 0	4 10 0	4 12 0	5 0 0	Darjeeling	25	Rajshahi Division—*concld.*
...	...	...	10 0	10 0	8 0	180 0	180 0	200 0	[U] 10 0	10 0	10 0	3 12 0	3 12 0	4 0 0	Jalpaiguri.	26	Rajshahi Division—*concld.*
															BIHAR.		
22 0	22 0	19 8	15 0	15 0	15 0	140 0	140 0	145 0	[V] 10 8	10 8	10 8	3 7 0	3 7 0	3 12 0	Monghyr.	27	Bhagalpur Division.
27 12	27 14	18 15	16 6	16 6	16 6	176 0	176 0	164 0	[W] 10 11	10 11	10 11	3 12 0	3 12 0	3 12 0	Bhagalpur.	28	Bhagalpur Division.
	25 0	17 0		16 0	13 0		320 0	...	[X]	10 0	10 0		3 10 2	4 0 0	Purnea.	29	Bhagalpur Division.
25 0	26 0	...	12 0	12 0	...	160 0	160 0	120 0	10 0	10 0	9 8	3 12 0	3 12 0	3 12 0	Malda	30	Bhagalpur Division.
24 0	24 0	21 0	20 8	18 8	17 0	200 0	200 0	200 0	[Y] 10 8	10 8	9 0	3 10 3	3 10 3	4 0 0	Sonthal Parganas	31	Bhagalpur Division.
24 0	24 0	23 0	20 0	20 0	18 8	130 0	130 0	120 0	[Z] 11 8	11 8	11 8	3 8 0	3 8 0	3 8 0	Patna.	32	Patna Division.
21 0	23 0	...	18 0	19 0	17 0	200 0	200 0	140 0	[a] 10 0	10 0	10 0	3 13 0	3 13 0	3 14 0	Gaya.	33	Patna Division.
23 0	21 0	18 0	16 0	16 0	15 0	160 0	160 0	120 0	[b] 11 0	11 0	10 8	3 10 0	3 10 0	4 0 0	Shahabad.	34	Patna Division.
25 5	27 8	20 14	17 9	17 9	16 8	176 0	176 0	160 0	[c] 10 4	10 6	11 0	3 11 0	3 14 0	3 6 0	Darbhanga.	35	Patna Division.
25 0	26 0	21 0	17 0	16 0	15 0	160 0	160 0	160 0	[d] 11 0	10 8	11 0	3 10 0	3 11 0	3 10 6	Muzaffarpur.	36	Patna Division.
22 8	22 0	21 8	18 8	18 12	17 8	200 0	200 0	160 0	[e] 10 8	10 8	10 12	3 11 0	3 11 0	3 11 0	Saran.	37	Patna Division.
24 8	25 0	21 0	16 0	16 4	14 0	160 0	160 0	160 0	[f] 10 12	11 0	10 8	3 12 0	3 10 0	3 12 0	Champaran.	38	Patna Division.
															ORISSA.		
...	...	...	17 1	17 1	15 12	80 0	80 0	80 0	[g] 10 12	10 12	11 0	3 6 0	3 5 0	3 12 0	Cuttack.	39	Orissa Division.
...	...	...	...	...	...	...	...	...	12 0	12 0	11 13	3 4 0	3 4 0	3 6 0	Puri.	40	Orissa Division.
...	...	...	10 12	10 12	...	160 0	160 0	140 0	[h] 11 0	11 0	10 8	3 10 0	3 10 0	3 14 0	Balasore.	41	Orissa Division.
															CHOTA NAGPUR.		
20 0	22 0	19 0	15 0	16 0	17 0	240 0	240 0	240 0	[i] 9 0	9 8	10 0	4 0 0	4 0 0	3 12 0	Hazáribágh.	42	Chota Nagpur Division.
21 0	21 0	20 0	Big. 14 0 Small. 15 8	Big. 11 8 Small. 13 4	Big 12 0 Small 18 0	160	160 0	140 0 to 160 0	9 8	9 8	9 12	4 0 0	4 1 0	4 0 0	Lohardaga.	43	Chota Nagpur Division.
25 5	25 5	22 7	...	...	...	...	...	..	8 13½	9 9	9 9	...	...	...	Palámau.	44	Chota Nagpur Division.
...	16 0	20 0	12 0	12 0	16 0	100 0	100 0	160 0	9 0	9 0	9 0	4 6 0	4 6 0	4 4 0	Singhbhum.	45	Chota Nagpur Division.
21 0	21 0	26 0	18 0	18 0	18 0	...	.	...	[j] 10 10	10 10	10 10	3 11 0	3 12 3	3 10 0	Manbhum.	46	Chota Nagpur Division.

b. In the subdivisional marts the retail prices of salt per rupee are :—Buxar 11 seers, Sasaram 10¼ seers, and Bhabhua 10 seers.
c At Madhubani the retail price of salt is 11 seers per rupee.
d In the subdivisional marts the retail prices of salt per rupee are :—Hajipur 10½ seers and Sitamarhi 11½ seers.
e At Siwan the retail price of salt is 11 seers per rupee.
f At Bettiah the retail price of salt is 10 seers per rupee.
g In the subdivisional marts the retail prices of salt per rupee are :—Kendrapara 9 seers, Banki 12 seers.
h At Bhadrak the retail price of salt is 9 seers per rupee.
i At Giridih the retail price of salt is 11 seers per rupee.
j At Gobindpur the retail price of salt is 10½ seers per rupee.

Published for general information.

C. P. BUCKLAND

PRICES-CURRENT** (wholesale) of **Food-grains, Firewood, and Salt

Number.	MARTS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE COMMON.		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
1	Calcutta ...	3 6 0	3 6 0	3 6 4	2 8 0	2 8 0	1 2 0	5 9 0	5 8 0	4 5 4	4 2 0	4 0 0	2 14 4
2	Sirajganj ...	3 8 0	3 8 0	3 12 0	...	...	...	5 6 0	5 4 0	5 4 0	3 2 0	3 0 0	3 9 0
3	Dacca ...	...	...	3 12 0	...	...	1 8 0	5 0 0	5 0 0	3 5 0	3 4 0	3 4 0	2 8 0
4	Narayanganj	...	...	...	...	...	...	3 6 0	3 4 0	2 10 0	3 2 0	3 0 0	2 8 0
5	Chittagong	4 2 0	4 2 0	4 0 0	...	...	...	3 12 0	3 12 0	4 8 0	3 2 0	3 2 0	3 0 0
6	Patna ...	2 10 6 2 13 6	Red. 2 10 6 White. 2 13 6	2 8 0 2 13 6	2 0 0	2 0 0	1 9 6	3 13 0	3 13 0	3 8 0	2 5 6	2 5 6	2 8 0
7	Balasore ...	3 8 0	3 8 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	2 14 0	2 6 0	2 6 0	2 6 0
8	Puri ...	...	...	...	...	...	...	4 5 0	4 5 0	4 9 0	2 5 0	2 8 6	2 8 6
9	Cuttack ...	3 10 0	3 10 0	4 4 0	...	...	...	3 10 0	3 12 0	3 10 0	2 10 0	2 10 0	3 0 0

CALCUTTA,
The 24th January, 1893.

in the undermentioned Marts of Bengal on the 15*th January* 1893.

Gram, Chana, Chhola, Kadalay or Sunaga. (*Cicer Arietinum.*)			Indian-corn or Maize. (*Zea Mays.*)			Arhar or Thur, Cadjan Pea. (*Cajanus indicus.*)			Firewood.			Salt.			Marts.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
2 13 0	2 13 0	2 4 7	1 13 0	1 13 0	2 2 7	3 4 3	3 4 6	2 6 3	0 7 0	0 7 0	0 5 9	4 0 0	4 0 0	3 4 3	Calcutta.
2 14 0	2 14 0	2 13 0	...	...	...	...	...	...	0 6 6	0 6 6	0 6 6	3 8 0	3 8 0	3 7 0	Sirajganj.
...	...	2 10 0	...	...	...	...	...	2 10 0	0 5 0	0 5 0	0 5 0	3 10 0	3 10 0	3 8 0	Dacca.
3 12 0	3 12 0	3 8 0	...	...	...	3 6 0	3 6 0	3 8 0	0 8 0	0 8 0	0 8 0	3 8 0	3 8 0	3 6 0	Narayangan.
3 10 0	3 10 0	3 8 0	...	...	...	...	...	...	0 5 0	0 5 0	0 5 0	3 8 0	3 10 0	3 8 0	Chittagong.
2 0 0	2 0 0	1 13 0	1 10 9	1 10 9	1 11 6	2 0 0	2 0 0	2 2 6	0 5 0	0 5 0	0 5 4	3 8 0	3 8 0	3 8 0	Patna.
2 14 0	2 14 0	2 12 0	...	...	...	3 10 0	3 10 0	...	...	...	...	3 12 0	3 10 0	3 12 0	Balasore.
...	...	...	...	...	...	...	...	...	...	...	...	3 4 0	3 4 0	3 6 0	Puri.
2 4 0	(Kalai.) 2 4 0	2 10 0	...	...	...	2 6 0	2 6 0	2 8 0	0 8 0	0 8 0	0 8 0	3 6 0	3 5 0	3 12 0	Cuttack.

Published for general information.

C. E. BUCKLAND,
Secretary to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

STATION OBSERVATIONS.

Meteorological Division.	District.	Representative station.	Air pressure.			Wind.		Temperature.						
			Mean barometric height, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri ...	29·963	29·912	—	Calm	223	80·6	20th Jan.	60·1	15th Jan.	77·5	65·3	71·4
		Gopalpore ..	29·967	29·928	—·098	NNW	288	81·2	19th ,,	57·0	15th ,,	79·6	60·9	70·3
		False Point ..	29·967	29·931	—·101	W	216	80·4	19th ,,	57·0	15 & 16 ,,	78·8	60·9	69·9
	Cuttack	Cuttack ...	29·905	29·932	—·096	Calm		85·3	17 & 19 ,,	54·9	15th ,,	83·0	60·5	71·7
	Balasore	Balasore ..	29·925	29·930	—·111	Variable	102	85·4	19th ,,	53·5	15th ,,	81·5	58·4	70·0
South-West Bengal.	Midnapore	Midnapore ..	29·838	29·941	—·111	N	215	85·3	17th ,,	53·2	15th ,,	81·6	58·1	69·9
	24-Parganas	Calcutta ..	29·957	29·924	—·116	Calm	65	79·7	17, 18, 19 ,,	51·2	15th ,,	77·6	57·8	67·7
		Saugor Island	29·951	29·921	—·109	Variable	243	78·2	17th ,,	57·9	16th ,,	76·1	63·2	69·6
	Howrah													
	Hooghly													
	Nadia	Krishnagar ..	29·934	29·932	—·090	Variable	73	80·2	19th ,,	47·3	15th ,,	78·2	53·5	65·9
	Khulna													
	Jessore	Jessore ..	29·916	29·927	—·105	Calm	51	79·7	18th ,,	48·9	15th ,,	76·8	54·8	65·8
	Burdwan ...	Burdwan ..	29·891	29·943	—·106	Calm	31	82·1	17th ,,	50·6	15th ,,	78·9	55·5	67·2
		Raniganj ...	29·652	29·957	—·105	NWly	26	81·7	17th ,,	51·7	15th ,,	77·5	54·3	65·9
	Bankura	Bankura ...	29·662	29·929	—·107	NWly	46	84·1	17th ,,	51·3	15th ,,	78·2	55·9	67·1
	Birbhum													
	Murshidabad	Berhampore ..	29·911	29·930	—·117	Calm	41	80·1	17, 19 ,,	50·2	16th ,,	76·2	53·3	64·8
	Pabna	Sirajganj ..	29·930	29·912	—·100	SW	29	77·6	17th ,,	47·9	21st ,,	74·7	50·9	62·8
North Bengal.	Bogra	Bogra ..	29·912	29·929	—·079	N	35	78·3	17th ,,	48·2	15, 21 ,,	75·2	50·8	63·0
	Rajshahi	Rampur Boalia.	29·905	29·928	—·092	Sly	59	78·6	17th ,,	47·7	15th ,,	75·0	51·0	63·0
	Malda	Malda* ..	29·887	29·924	—	SWly	92	78·5	17 & 19 ,,	?	?	75·6		?
	Dinajpur	Dinajpur ...	29·859	29·938	—·076	Wly	40	76·1	17th ,,	43·5	21st ,,	73·6	49·3	61·5
	Rangpur	Rangpur ..	29·853	29·937	—·103	SEly	43	73·7	17th ,,	44·1	21st ,,	72·1	49·0	60·6
	Jalpaiguri	Jalpaiguri* ..	29·707	29·961	—·076	Calm	39	71·4	15, 21 ,,	46·6	20th ,,	70·6	50·2	60·5
	Kuch Bihar													
	Darjeeling	Darjeeling ...	22·840	—	—·128	Calm	215	42·1	20th ,,	28·7	21st ,,	39·5	31·7	35·6
	Sikkim	Gnatong ..	19·055	—	—	Variable	66	31·2	16th ,,	—1·9	21st ,,	26·0	4·2	15·4
East Bengal.	Chittagong	Chittagong ...	29·904	29·943	—·085	NE		78·7	18th ,,	52·1	16th ,,	77·[illegible]	56·2	66·7
	Chittagong Hill Tracts	Demagiri ...						Observations not received.						
	Backergunge	Barisál ..	29·962	29·921	—·092	Calm	41	82·3	18th Jan.	52·1	15, 16 ,,	78·2	57·0	67·6
	Noakhali	Noakhali ...	29·927	29·918	—·094	Variable	82	78·3	19th ,,	56·0	16th ,,	77·0	57·2	67·2
	Faridpur	Faridpur ...	29·938	29·934	—·095	Calm & S	45	78·5	17th ,,	49·0	15th ,,	74·2	52·7	63·5
	Dacca	Dacca ...	29·956	29·927	—·104	Calm	66	79·1	17th ,,	52·8	15th ,,	77·2	56·4	66·8
	Tippera	Comilla ..	29·951	29·935	—·089	Calm & Ely.	37	80·9	18th ,,	50·1	16th ,,	78·0	55·8	66·9
	Mymensingh	Mymensingh	29·134	29·912	—·093	Calm & Ely.	57	74·9	17th ,,	49·3	21st ,,	73·3	53·5	63·4
North Bihar.	Purnea	Purnea ..	29·849	29·939	—·109	Calm	33	76·2	19th ,,	42·3	21st ,,	73·9	47·4	60·7
	Bhagalpur	Bhagalpur ..	29·814	29·935	—·105	Calm	11	79·8	17th ,,	45·5	21st ,,	75·9	49·9	62·9
	Darbhanga	Darbhanga ..	29·820	29·951	—·103	WSW & WNW.	67	75·6	17th ,,	46·7	21st ,,	73·1	50·4	61·8
	Muzaffarpur	Muzaffarpur...	29·801	29·931	—	WSW	74	75·7	17th ,,	43·3	21st ,,	72·8	48·9	60·9
	Champaran	Motihari ..	29·727	29·923	—·111	WSW	101	76·2	17, 18 ,,	40·0	20th ,,	74·2	46·2	60·3
	Saran	Chapra ...	29·793	29·930	—·077	Calm & SW.	85	79·3	17th ,,	45·7	21st ,,	74·8	50·3	62·6
South Bihar.	Shahabad	Dehri ..	29·616	29·942	—·117	SW	50	81·1	17th ,,	48·0	21st ,,	76·0	53·0	64·5
		Buxar ...	29·729	29·938	—·115?	WSW	73	?	?	44·4	20th ,,	?	50·0	?
		Arrah .	29·784	29·938	—·091	Variable	67	80·1	17th ,,	44·9	21st ,,	75·7	49·4	62·6
	Gaya	Gaya ...	29·570	29·923	—·140	Sly	122	81·4	17th ,,	46·9	21st ,,	76·4	52·0	64·2
	Patna	Bankipore .	29·803	29·919	—·115	Wly	86	80·0	18th ,,	45·0	21st ,,	74·7	50·2	62·4
	Monghyr													
	Sonthal Parganas ..	Naya Dumka	29·477	29·956	—·092	Calm	48	80·6	17th ,,	48·6	15th ,,	76·1	52·4	64·3
Chota Nagpur.	Hazaribagh	Hazaribagh ..	27·915	29·954	—·101	Calm	150	78·2	17th ,,	45·2	20th ,,	72·4	49·4	60·9
	Lohardaga	Ranchi .	27·785	29·871	—·101	W	116	77·1	17th ,,	47·4	19 & 20 ,,	72·8	50·1	61·4
	Palamau													
	Singhbhum ...	Chaibassa .	29·179	29·92[illegible]	—·104	W	24	84·5	19th ,,	50·2	15th ,,	79·8	54·7	67·2
	Manbhum													

* Mean of 6 days.

Explanation.—*Summary.*—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period
The *humidity* of the atmosphere is expressed at percentage, saturated air being represented by 100. A clear sky is denoted by 0 and an overcast sky by 10
rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station
district, *i.e.*, from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one on

for the week ending Saturday, the 21st of January 1893.

Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	DISTRICT OBSERVATIONS. Of week. Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Rainfall. Since 1st of month. Mean for district.	Normal mean.	Variation.	Since 16th October 1892. Mean for district.	Normal mean.	Variation.	District.
—	67·7	84	4·1	0·68		0·14		0·28		0·24			0·34		
+0·1	65·4	84	0·1	0·25											Puri.
+1·1	66·8	88	3·9	1·25											
−0·8	64·0	76	3·0	0·56		0·18		0·37		0·27			4·12		Cuttack.
+1·5	63·0	78	1·4	0·15		0·17		0·30		0·20			2·92		Balasore.
+2·4	62·7	67	2·0	0·02	Nil	0·09	0·00	0·27	Nil	0·28	−0·28	7·93	2·89	+5·04	Midnapore.
+1·5	61·5	83	2·9	Nil	Nil	0·18	0·00	0·43	Nil	0·34	−0·34	7·12	2·76	+4·36	24-Parganas.
+1·8	67·2	90	4·3	Nil											
					Nil	0·15	0·00	0·47	Nil	0·32	−0·32	3·56	2·11	+1·45	Howrah.
					0·05	0·19	0·00	0·41	0·05	0·32	−0·27	7·19	1·89	+5·30	Hooghly.
+1·7	59·9	80	3·9	0·02	0·03	0·13	0·00	0·31	0·03	0·22	−0·19	4·27	1·80	+2·47	Nadia.
					Nil	0·21	0·00	0·42	Nil	0·39	−0·39	6·92	2·73	+4·19	Khulna.
+0·2	59·7	87	4·1	0·24	0·11	0·18	0·40	0·34	0·11	0·31	−0·20	9·30	2·24	+7·06	Jessore.
+0·3	58·0	72	3·3	0·08	0·06	0·19	0·25	0·32	0·06	0·28	−0·22	4·55	1·73	+2·82	Burdwan.
−0·3	59·3	69	1·4	0·02											
+1·7	59·7	75	3·1	0·64	0·27	0·23	1·00	0·51	0·37	0·31	+0·06	4·83	1·89	+2·94	Bankura.
					0·07	0·13	0·33	0·32	0·09	0·36	−0·27	3·31	1·32	+1·99	Birbhum.
−0·1	57·0	89	3·7	0·24	0·10	0·12	0·50	0·30	0·13	0·35	−0·22	1·96	1·24	+0·72	Murshidabad.
0	56·1	94	2·0	0·18	0·24	0·11	1·00	0·33	0·24	0·29	−0·05	1·35	1·77	−0·42	Pabna.
−0·8	56·1	87	2·1	Nil	0·07	0·08	0·25	0·21	0·13	0·28	−0·15	1·05	1·35	−0·30	Bogra.
+0·9	59·9	77	2·7	0·03	0·15	0·12	0·33	0·29	0·24	0·35	−0·11	0·76	1·45	−0·69	Rajshahi.
—	57·2	84	1·7	0·01	Nil	0·13	0·00	0·20	0·12	0·38	−0·26	0·91	1·61	−0·70	Malda.
−0·6	54·6	88	1·7	0·07	Nil	0·08	0·00	0·21	0·35	0·33	+0·02	0·78	1·07	−0·29	Dinajpur.
−0·9	53·7	92	0·9	Nil	Nil	0·12	0·00	0·21	0·36	0·38	−0·02	1·40	1·54	−0·06	Rangpur.
−1·5	55·3	92	3·5	Nil	Nil	0·24	0·00	0·48	0·09	0·44	−0·35	1·22	2·69	−1·47	Jalpaiguri.
−4·1	34·2	93	5·9	0·03	0·17	0·15	0·50	0·27	0·29	0·32	−0·03	1·17	1·32	−0·15	Kuch Bihar.
					0·67	0·29	0·75	0·83	0·81	0·62	+0·19	4·22	2·86	+1·36	Darjeeling.
—	19·7	81	1·1	0·80											Sikkim.
+0·1	60·6	96	3·0	0·05	0·02	0·21	0·00	0·31	0·02	0·50	−0·48	12·80	5·37	+7·43	Chittagong.
					1·92	0·23	1·00	0·35	1·92	0·41	+1·51	8·61	4·68	+3·93	Chittagong Hill Tracts.
+3·5	61·6	90	3·7	0·08	0·29	0·29	0·50	0·44	0·29	0·44	−0·15	8·14	3·99	+4·15	Backergunge.
+2·1	63·2	90	1·1	0·12	0·24	0·18	1·00	0·31	0·24	0·40	−0·16	15·66	5·19	+10·47	Noakhali.
0	58·7	90	2·6	Nil	Nil	0·18	0·00	0·39	Nil	0·31	−0·31	7·23	1·85	+5·38	Faridpur.
+0·1	60·0	86	5·0	0·14	0·11	0·15	0·50	0·42	0·11	0·26	−0·15	8·87	2·50	+6·37	Dacca.
+2·4	61·1	90	4·1	0·28	0·20	0·17	1·00	0·43	0·20	0·40	−0·20	8·57	2·70	+5·87	Tippera.
+0·8	57·4	92	3·7*	0·06	0·24	0·13	0·80	0·33	0·24	0·28	−0·04	3·10	2·09	+1·01	Mymensingh.
−1·0	48·9	90	1·3	Nil	0·03	0·18	0·00	0·29	0·31	0·44	−0·13	0·33	1·70	−1·37	Purnea.
+1·1	56·2	81	2·0	0·03	0·03	0·11	0·00	0·33	0·31	0·36	−0·05	0·84	1·41	−0·57	Bhagalpur.
−0·2	54·7	88	2·0	0·10	0·08	0·21	0·33	0·39	0·59	0·49	+0·10	0·60	1·37	−0·77	Darbhanga.
—	52·8	93	2·0	0·09	0·03	0·24	0·00	0·45	0·33	0·53	−0·20	0·37	1·55	−1·18	Muzaffarpur.
+0·3	52·0	92	1·1	Nil	Nil	0·28	0·00	0·52	0·10	0·58	−0·48	0·10	1·12	−1·02	Champaran.
+1·0	54·5	87	1·1	0·05	0·15	0·32	0·67	0·63	0·46	0·60	−0·14	0·49	1·31	−1·02	Saran.
?	57·7	78	1·1	0·25											
?	57·0	81	1·4	0·04	0·12	0·21	0·20	0·42	0·48	0·57	−0·09	0·88	1·07	−1·09	Shahabad.
+1·0	54·0	84	1·4	0·07											
+1·3	55·2	83	1·7	0·18	0·18	0·24	1·00	0·30	0·28	0·55	−0·27	0·81	1·59	−0·78	Gaya.
+1·1	56·9	77	0·6	0·05	0·07	0·18	0·25	0·31	0·22	0·46	−0·24	0·45	1·71	−1·26	Patna.
					0·11	0·15	0·33	0·33	0·12	0·45	−0·33	1·45	1·69	−0·24	Monghyr.
+0·8	57·1	77	1·4	0·31	0·07	0·11	0·17	0·35	0·21	0·31	−0·10	1·66	1·45	+0·21	Sonthal Parganas.
−0·8	56·6	69	0·3	0·20		0·22		0·51		0·45			1·70		Hazaribagh.
+0·2	56·4	71	3·4	0·07	0·04	0·23	0·00	0·60	0·22	0·53	−0·31	6·39	2·28	+4·10	Lohardaga.
+0·1	57·6	85	3·9	0·30	0·10	0·18	1·00	0·47	0·19	0·57	−0·38	0·76	2·01	−1·25	Palamau.
					0·30	0·29	1·00	0·60	0·34	0·55	−0·25	6·30	2·34	+3·96	Singhbhum.
					0·18	0·19	1·00	0·47	0·26	0·42	−0·16	3·29	1·65	+1·64	Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 21st of January 1893.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 15th.	Monday, 16th.	Tuesday, 17th.	Wednesday, 18th.	Thursday, 19th.	Friday, 20th.	Saturday, 21st.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th October 1892.	Average rainfall from 16th October to date.
ORISSA ..	Puri	Puri ...	...	...	...	...	...	...	0·68	1	0·68	0·06	0·68	0·14	10·73	6·97
		Khurda ...	...	...	...	...	...	0·20				0·11		0·22		4·78
		Banpur ...										0·06		0·06		5·99
		False Point ...	...	...	...	..	..	0·32	0·93	2	1·25	0·34	1·25	0·54	9·49	7·62
		Gop ...										?		?		?
		Satpara ...										?		?		?
		Pipli ..	.	...	...	...	.	0·25				?		?		?
	Cuttack ...	Jagatsingpore	..	.	...	.	.	0·40				0·18		0·29		4·03
		Banki ..	...	...	.	...	.	0·10				0·12		0·18		4·19
		Cuttack ...						0·65	0·01	1	0·66	0·24	0·66	0·27	6·75	4·27
		Kendrapara ...	...	..	...	...	...	0·45	..	1	0·45	0·21	0·45	0·35	3·87	4·42
		Jajpur ...	...	...	...	...	...	0·83	...	1	0·83	0·15	0·83	0·22	4·48	3·69
		Dharmsala ...	...	..	...	...	...					?		?		?
		Salipore .										?		?		?
		Pul Lahara ...										?		?		?
	Balasore ...	*Akhyapada* ...	...	...	...	...	...	0·59	...	1	0·59	?	0·80	?	3·99	?
		Chandbali ...	...	...	...	..	...	0·55	...	1	0·55	0·35	0·57	0·41	5·24	4·21
		Bhadrak ...	.	...	..	...	...	0·57	...	1	0·57	0·17	0·78	0·22	6·73	3·06
		Soro ...	...	.	..	..	...	...	0·50	1	0·50	0·07	0·50	0·17	6·98	2·82
		Balasore ..	..		...	...	...	...	...	Nil	Nil	0·20	Nil	0·33	10·62	3·81
		Jellasore ...	...	...	...	...	...	..	...	Nil	Nil	0·13	Nil	0·23	4·[illegible]3	1·64
		Baripodah .	...	...	...	...	...	..	...	Nil	Nil	0·09	Nil	0·17	7·59	1·99
SOUTH-WEST BENGAL.	Midnapore	Contai ..	..	..	..	..	...	...	...	Nil	Nil	0·03	Nil	0·18	10·24	4·95
		Tamluk ..	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·25	5·55	2·73
		Midnapore ..	...	...	...	.	...	..	...	Nil	Nil	0·13	Nil	0·18	7·82	2·61
		Ghatal .	...	...	...	..	...	...	...	Nil	Nil	0·11	Nil	0·30	8·20	1·19
		Kukrahaty .	...	...	...	...	...	0·09	...	Nil	0·09	?	0·09	?	3·69	?
		Garhbeta ..	...	...	...	...	0·10	...	...	1	0·10	?	0·10	?	3·41	?
	24-Parganas	Saugor Island	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·24	11·63	5·12
		Diamond Harbour	...	...		...	...	...	...	Nil	Nil	0·31	Nil	0·30	6·63	3·00
		Canning Town	...	..		...	.	..	...	Nil	Nil	?	Nil	?	9·24	?
		Alipore Observatory ...	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·32	4·85	2·63
		Barrackpore ..	...	.	..	...	..	...	...	Nil	Nil	0·15	Nil	0·37	7·79	2·03
		Dum-Dum .	.	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·34	3·78	2·24
		Barasat .	...	.	.	...	...	...	...	Nil	Nil	0·28	Nil	0·32	5·78	2·28
		Basirhat ...	...	...		...	...	...	...	Nil	Nil	0·09	Nil	0·21	6·26	2·05
	Howrah ..	Howrah	...	...	...	..	...	...	...	Nil	Nil	0·15	Nil	0·32	3·03	2·14
		Mohesreka ..	..	...	...	...	..	...	...	Nil	Nil	0·14	Nil	0·3[illegible]	4·[illegible]2	1·77
		Uluberia ..	...	...	..	...	...	...	...	Nil	Nil	?	Nil	?	3·86	?
	Hooghly	Serampore ...	...	...		0·06	...	...	...	Nil	0·06	0·17	0·06	0·32	8·69	1·91
		Hooghly ..		...	..	0·04	...	..	...	Nil	0·04	0·18	0·04	0·34	7·85	1·[illegible]
		Jahanabad	.			0·04	...	..	...	Nil	0·04	0·23	0·04	0·30	5·01	1·73
	Nadia .	Ranaghat	.	.			...	.	...	Nil	Nil	0·[illegible]7	Nil	0·30	5·[illegible]6	2·[illegible]3
		Krishnagar	..		..	0·02	..	..	.	Nil	0·02	0·14	0·02	0·21	5·98	1·38
		Chuadanga	...		.	0·07	..	...	...	Nil	0·07	0·12	0·07	0·21	?	2·03
		Meherpore	..	--	.		...	.	...	Nil	Nil	0·08	Nil	0·17	2·09	1·64
		Kushtia	...			0·01	...	.	...	Nil	0·01	0·15	0·01	0·21	2·97	1·88
	Khulna .	Satkhira	.		...	.	.	..	...	Nil	Nil	0·13	Nil	0·27	4·94	2·53
		Bagerhat	.	..	...	.	...	..	...	Nil	Nil	0·51	Nil	0·49	8·65	2·77
		Khulna .	..				..	...	...	Nil	Nil	0·18	Nil	0·38	7·2[illegible]	2·86
		Nakipur .	...	...	.	..	0·08	..	...	Nil	0·08	?	0·08	?	5·[illegible]2	?
		Rampal ..	..	...	..	...	0·96	...	...	1	0·96	?	0·96	?	6·02	?
	Jessore	Narail	...	..	.		0·21	...	...	1	0·21	0·23	0·21	0·43	9·31	2·80
		Jessore .	...	...	.	0·08	0·16	0·02	...	1	0·26	0·22	0·26	0·37	13·98	2·56
		Jhenidah	...	...	...	...	0·06	...	...	Nil	0·06	0·13	0·06	0·28	8·63	2·10
		Magura .	...	...	...	...	0·02	...	...	Nil	0·02	0·15	0·02	0·20	7·08	1·72
		Bangaon	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·30	7·48	2·17
	Burdwan	Kalna	...	...	...	...	...	...	...	Nil	Nil	0·28	Nil	0·34	7·39	1·91
		Burdwan ...	...	...	...	0·06	...	0·02	...	Nil	0·08	0·18	0·08	0·23	5·14	1·80
		Katwa .	...	...	...	0·13	...	...	...	1	0·13	0·17	0·13	0·25	3·94	1·84
		Raniganj ..	...	...	...	0·02	...	...	...	Nil	0·02	0·13	0·02	0·22	1·71	1·39
		Mankur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·73	?
	Bankura	Bankura .	...	.	...	0·30	...	0·04	...	1	0·34	0·20	0·66	0·26	5·16	1·88
		Vishnupur ...	...	...	...	0·13	...	...	...	1	0·13	0·24	0·16	0·30	5·58	1·77
		Maliara ..	...	...	...	0·13	...	...	...	1	0·13	0·17	0·13	0·27	1·46	1·46
		Khatra ...	...	...	...	0·19	...	...	...	1	0·19	0·30	0·52	0·41	7·11	2·44
		Indas .	...	...	...	0·10	...	...	...	1	0·10	?	0·10	?	5·52	?
		Kotalpur .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·56	?
		Onda ..	...	..	...	0·11	...	...	...	1	0·11	?	0·11	?	4·91	?
		Gangajalghati	...	...	...	0·20	...	...	...	1	0·20	?	0·20	?	2·00	?
		Raipur ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·36	?
		Sonamukhi ...	...	...	...	..	...	...	...	Nil	Nil	?	Nil	?	6·21	?
	Birbhum ...	Suri	...	...	...	0·13	...	...	...	1	0·13	0·15	0·18	0·34	1·79	1·61
		Hetampore ...	...	...	...	0·03	...	0·01	...	Nil	0·04	0·10	0·04	0·38	4·54	0·99
		Rampur Hat...	...	...	...	0·04	...	...	...	Nil	0·04	0·15	0·07	0·37	3·68	1·36
		Bolpur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·25	?
		Murarai ...	...	...	...	...	...	...	...	Nil	Nil	?	0·07	?	0·97	?
	Murshidabad	Kandi ...	...	...	...	0·19	...	...	...	1	0·19	0·07	0·19	0·29	2·60	1·39
		Berhampore ...	...	...	...	0·24	...	...	...	1	0·24	0·13	0·33	0·33	1·80	1·37
		Lalbagh ...	...	...	...	0·12	...	...	...	1	0·12	0·07	0·15	0·20	3·16	0·99
		Azimganj ...	...	...	...	...	...	...	...	Nil	Nil	0·25	Nil	0·45	1·54	1·37
		Jangipur .	...	...	0·03	...	...	...	...	Nil	0·03	0·08	0·10	0·38	1·80	1·09
		Lalgola ...	...	...	...	..	...	...	...	Nil	Nil	0·09	Nil	0·30	1·15	1·20
		Akhriganj ...	...	...	...	0·12	...	...	...	1	0·12	?	0·12	?	1·07	?
		Patkabari .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·30	?
NORTH BENGAL.	Pabna ...	Pabna ..	...	...	...	0·29	...	...	...	1	0·29	0·11	0·29	0·24	2·24	1·59
		Sirajganj ...	...	...	...	0·18	...	...	...	1	0·18	0·11	0·18	0·33	0·45	1·91
	Bogra ...	Sherpore ..	...	...	...	...	0·27	...	...	1	0·27	0·04	0·27	0·32	1·05	1·61
		Nowkhilla ...	...	...	...	...	...	...	...	Nil	Nil	0·08	0·09	0·28	1·18	1·44
		Bogra ..	...	...	...	...	...	...	...	Nil	Nil	0·17	0·04	0·32	0·94	1·63
		Panchbibi ...	...	...	...	...	...	...	...	Nil	Nil	0·04	0·11	0·21	1·02	0·69
	Rajshahi ...	Boalia ...	...	...	...	0·06	...	...	...	Nil	0·06	0·09	0·08	0·26	1·30	1·39
		Nator ...	...	...	...	0·03	0·37	...	...	1	0·40	0·21	0·42	0·45	0·79	1·83
		Naugaon ...	...	...	...	...	...	...	...	Nil	Nil	0·05	0·23	0·32	0·23	1·10
		Lalpore .	...	...	...	1·14	...	...	...	1	1·14	?	1·14	?	1·72	?
		Manda ...	...	...	...	...	...	...	...	Nil	Nil	?	0·05	?	0·19	?

Statement of Rainfall in Bengal for the week ending Saturday (3 a.m.), the 21st of January 1893—contd.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 15th.	Monday, 16th.	Tuesday, 17th.	Wednesday, 18th.	Thursday, 19th.	Friday, 20th.	Saturday, 21st.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BENGAL—concld.	Malda	Malda	...	...	...	0·01	...	...	...	Nil	0·01	0·16	0·08	0·36	1·40	1·89
		Chanchal	...	...	...	...	...	...	...	Nil	Nil	0·10	0·16	0·41	0·42	1·27
		Gajol	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·34	?
		Sibganj	...	...	...	...	...	...	...	Nil	Nil	?	0·15	?	0·75	?
	Dinajpur	Mohadebpore	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·30	0·51	0·74
		Churaman	...	...	...	...	...	...	...	Nil	Nil	0·08	0·31	0·33	0·60	0·76
		Raiganj	...	...	...	...	...	...	...	Nil	Nil	0·13	0·84	0·49	1·35	0·83
		Dinajpur	...	...	...	...	...	...	...	Nil	Nil	0·09	0·14	0·33	0·72	2·28
		Balurghat	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·23	0·55	0·77
		Thakurgaon	...	...	...	...	...	...	...	Nil	Nil	?	0·21	?	0·21	?
	Rangpur	Bhawanigunge (*Gyabanda*)	...	...	...	...	...	...	...	Nil	Nil	0·12	0·05	0·27	0·58	1·60
		Rangpur	...	...	...	...	...	...	...	Nil	[illegible]	0·25	0·80	0·52	3·72	2·12
		Kurigaon	...	...	...	...	...	...	...	Nil	Nil	0·09	0·22	0·39	0·43	1·33
		[illegible] (*Nilphamari*)	...	...	...	...	...	...	...	Nil	Nil	0·04	0·37	0·36	1·10	1·04
		Ulipore	...	...	...	...	...	...	...	Nil	Nil	?	0·39	?	0·39	?
	Jalpaiguri	Jalpaiguri	...	...	...	...	...	...	...	Nil	Nil	0·24	0·09	0·44	1·22	2·69
		Alipore Dooar	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·98	?
		Faltacotta	...	...	...	...	...	...	...	Nil	Nil	?	0·13	?	1·24	?
		Debiganj	...	...	...	...	...	...	...	Nil	Nil	?	0·20	?	0·80	?
		Bhagatpore (Nagrakatta)	...	0·25	...	0·05	0·10	...	...	3	0·85	?	1·42	?	7·60	?
	Kuch Bihar	Dinhatta	...	...	...	...	0·37	...	...	1	0·37	0·14	0·13	0·34	0·94	1·23
		Kuch Bihar	...	...	...	...	...	...	...			0·20	0·21	0·38	1·41	1·57
		Mekliganj	...	...	...	...	0·27	...	...	1	0·27	0·17	0·27	0·31	1·09	1·51
		Mathabhanga	...	...	...	...	0·02	...	...	Nil	0·02	0·08	0·14	0·24	1·47	1·03
	Darjeeling	Buxa	...	0·25	0·50	0·08	1·16	...	...	3	2·59	0·31	2·64	0·85	11·91	4·37
		Siliguri	0·06	0·07	...	...	0·06	...	...	Nil	0·19	0·17	0·33	0·40	2·19	1·18
		Darjeeling	...	0·05	...	...	...	...	...	Nil	0·33	0·16	0·09	0·58	1·01	4·18
		Kalimpong	...	...	...	0·04	...	...	...	Nil	0·04	0·53	0·31	0·82	1·77	1·68
		Kurseong	0·12	0·05	...	...	0·03	...	...	1	0·20	?	0·10	?	2·55	?
EAST BENGAL	Chittagong	Cox's Bazar	...	...	...	...	...	...	...	Nil	Nil	0·21	Nil	0·45	13·05	6·42
		Chittagong	...	...	...	...	0·03	...	...	Nil	0·03	0·21	0·03	0·33	12·58	5·23
		Kutubdia	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	11·13	?
		Satkania	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·79	?
	Chittagong Hill Tracts.	Rangamati	...	...	...	...	...	1·32	...	1	1·32	0·23	1·32	0·41	8·61	4·68
		Bandarban	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·70	?
	Backergunge	Patuakhali	...	...	...	...	0·95	...	...	1	0·95	0·31	0·95	0·43	8·80	4·47
		[illegible]	...	...	...	...	0·05	...	...	Nil	0·05	0·29	0·06	0·51	7·22	3·70
		[illegible]	...	...	...	...	...	...	...	Nil	Nil	0·28	Nil	0·52	7·59	3·97
		Gournadi	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·86	?
		Bhola	...	...	...	...	0·15	...	...	1	0·15	[illegible]	0·15	[illegible]	[illegible]	3·75
		Daulatkhan	...	...	...	...	...	...	...	Nil	Nil		[illegible]		11·[illegible]	?
		Golachipa	...	...	...	0·15	0·24	...	...	2	0·12	?	0·12	?	8·51	?
	Noakhali	Noakhali	...	...	...	...	0·15	0·02	...	1	0·15	0·14	0·15	0·56	16·51	4·17
		Fenny	...	...	...	0·32	...	...	...	1	0·32	0·24	0·52	0·42	14·08	5·80
		Hurrishpore	...	...	...	...	0·05	...	...	Nil	0·05	?	0·05	?	11·54	?
		Ramganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	10·75	?
	Faridpur	Madaripur	...	...	...	...	...	...	...	Nil	Nil	0·19	Nil	0·41	6·89	2·04
		Faridpur	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·26	10·70	1·79
		Goalundo	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·25	4·93	1·71
	Dacca	Munshiganj	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·28	[illegible]·09	2·77
		Dacca	...	...	...	0·23	...	...	...	1	0·23	0·12	0·23	0·22	11·74	1·87
		Naryanganj	...	...	...	0·02	...	...	...	Nil	0·02	0·17	0·02	0·28	10·02	3·58
		Manikganj	...	...	...	0·03	...	...	...	Nil	0·03	0·14	0·03	0·25	6·46	1·69
		Joydebpore	...	...	...	0·17	...	...	...	1	0·17	?	0·17	?	3·83	?
	Hill Tippera	Agartola	...	...	...	0·19	...	...	...	1	0·19	0·15	0·19	0·38	6·83	3·11
	Tippera	Comilla	...	...	...	0·23	...	...	...	1	0·23	0·14	0·23	0·43	8·93	2·87
		Chandpore	...	...	...	...	...	0·18	...	1	0·18	0·23	0·18	0·29	7·93	2·17
		Brahmanbaria	...	...	...	0·20	...	...	...	1	0·20	0·15	0·20	0·45	10·57	2·64
		Ramchandrapore	...	...	...	0·01	...	...	...	Nil	0·01	?	0·01	?	7·95	?
		Nasirnagar	...	...	...	0·24	...	...	...	1	0·24	?	0·24	?	10·71	?
		Daudkandi	...	...	...	0·10	...	...	...	1	0·10	?	0·10	?	4·55	?
		Kasba	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	12·39	?
		Laksham	...	...	...	0·31	...	...	...	1	0·31	?	0·31	?	0·17	?
	Mymensingh	Kishorganj	...	...	...	0·17	0·27	...	...	2	0·44	0·14	0·44	0·43	6·38	2·14
		Atia (*Tangail*)	...	...	...	0·15	...	...	...	1	0·15	0·15	0·15	0·29	2·91	1·65
		Mymensingh	...	...	...	0·06	...	...	...	Nil	0·06	0·12	0·06	0·22	0·67	2·13
		Jamalpur	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·39	1·74	1·90
		Netrakona	...	...	...	...	0·54	...	...	1	0·54	0·12	0·54	0·18	3·81	2·57
		Subornakhally	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·41	?
		Durgapore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·04	?
		Sherepore Town	...	...	...	...	...	...	...	Nil	Nil	?	0·05	?	3·32	?
		Dewanganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·75	?
NORTH BIHAR	Purnea	Kishanganj	...	...	...	...	...	...	...	Nil	Nil	0·20	0·24	0·53	0·28	1·71
		Araria	...	...	...	0·09	...	...	...	Nil	0·09	0·10	0·18	0·39	0·18	1·35
		Purnea	...	...	...	...	...	...	...	Nil	Nil	0·15	0·52	0·30	0·55	1·98
		Gondwara (Korah)	...	...	...	0·04	...	...	...	Nil	0·04	?	0·40	?	0·40	?
		Barsoe	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Forbesganj	...	...	...	...	...	...	...	Nil	Nil	?	0·11	?	0·11	?
		Kaliaganj	...	...	...	...	...	...	...	Nil	Nil	?	0·05	?	0·05	?
	Bhágalpur	Madhipura	...	...	...	...	...	...	...	Nil	Nil	0·10	0·35	0·38	0·35	1·37
		Bongaon (Sujabad)	...	...	...	...	...	...	...	Nil	Nil	?	0·69	?	0·69	?
		Supaul	...	...	...	...	...	...	...	Nil	Nil	0·15	0·67	0·37	0·67	1·28
		Protabganj	...	...	...	...	...	...	...	Nil	Nil	?	0·16	?	0·16	?
		Bhagalpur	...	...	0·02	0·01	...	...	...	Nil	0·03	0·10	0·07	0·33	0·56	1·45
		Banka	...	...	0·08	...	...	...	...	Nil	0·08	0·09	0·15	0·30	1·70	1·63
		Colgong	...	...	0·02	0·01	...	...	...	Nil	0·03	?	0·43	?	1·97	?
	Darbhanga	Tajpur	...	...	...	0·15	...	...	...	1	0·15	0·15	0·37	0·46	0·37	1·40
		Darbhanga	...	...	0·02	0·08	...	...	...	Nil	0·10	0·20	0·77	0·48	0·79	1·37
		Madhubani	...	...	...	...	...	...	...	Nil	Nil	0·29	0·63	0·55	0·63	1·43
		Bahera	...	...	0·27	...	...	...	...	1	0·27	?	0·77	?	0·77	?
		Roshera	...	0·05	0·09	...	...	...	...	Nil	0·14	?	0·44	?	0·44	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 21st of January 1893—concld.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 15th.	Monday, 16th.	Tuesday, 17th.	Wednesday, 18th.	Thursday, 19th.	Friday, 20th.	Saturday, 21st.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BIHAR—*concluded.*	Muzaffarpur...	Sitamarhi ...	...	...	0·04	...	...	...	...	Nil	0·04	0·15	0·19	0·38	0·19	1·11
		Muzaffarpur	...	...	...	...	...	...	...	Nil	Nil	0·32	0·56	0·62	0·56	2·12
		Hajipur	...	...	0·05	...	...	...	...	Nil	0·05	0·24	0·25	0·57	0·37	1·37
		Paru										?		?		?
		Mahua	...	...	0·05	0·24	...	...	...	1	0·29	?	0·52	?	0·60	?
		Sinhar	...	...	...	...	...	...	...	Nil	Nil	?	0·10	?	0·10	?
		Pupri	...	...	...	...	...	...	...	Nil	Nil	?	0·35	?	0·35	?
	Champaran	Motihari	...	...	...	...	...	...	...	Nil	Nil	0·21	0·15	0·56	0·15	1·08
		Bettiah	...	...	...	...	...	...	...	Nil	Nil	0·35	0·04	0·61	0·04	1·13
		Bagaha ...	...	...	...	...	...	...	...	Nil	Nil	?	0·19	?	0·28	?
		Burhurwa	...	...	0·08	...	...	...	...	Nil	0·08	?	0·21	?	0·21	?
	Saran	Gopalganj ...	...	...	0·04	0·07	...	...	...	Nil	0·11	0·13	0·36	0·59	0·36	0·97
		Siwan	...	...	0·10	0·18	...	...	...	2	0·28	0·28	0·72	0·68	0·72	1·90
		Chupra ...	...	...	0·05	...	...	...	...	Nil	0·05	0·24	0·28	0·54	0·37	1·69
SOUTH BIHAR	Shahabad ...	Buxar ..	...	...	0·02	0·02	...	...	...	Nil	0·04	0·22	0·32	0·66	1·00	1·96
		Dehri ...	...	...	0·05	0·20	...	...	...	1	0·25	0·28	0·72	0·57	1·08	2·05
		Bhabhua ..	...	...	0·13	...	...	...	...	Nil	0·13	0·19	0·50	0·62	0·71	2·19
		Sasaram ..	...	...	0·04	0·09	...	...	...	Nil	0·13	0·15	0·53	0·41	0·76	1·94
		Arrah ..	...	...	0·06	...	...	...	...	Nil	0·06	0·20	0·32	0·54	0·61	1·63
		Mohanea	...	...	0·05	...	...	...	...	Nil	0·05	?	0·05	?	0·05	?
		Khiri ..	...	...	...	...	...	...	...	Nil	Nil	?	0·20	?	0·20	?
		Ageaon ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Ramagar ...	...	...	...	...	...	...	...	Nil	Nil	?	0·25	?	0·25	?
		Koath ...	...	...	0·04	...	...	...		Nil	0·04	?	0·09	?	1·21	?
		Sikroul ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Bassowan ...	...	...	0·11	...	...	...	...	1	0·11	?	0·22	?	1·33	?
		Monaharpur	...	...	0·05	...	...	...	...	Nil	0·05	?	0·37	?	0·45	?
	Gaya ...	Aurangabad ...	...	...	0·16	0·18	...	...	...	2	0·34	0·21	0·62	0·50	1·36	1·38
		Gaya ...	...	...	0·08	0·10	...	...	...	1	0·18	0·20	0·20	0·45	0·61	1·67
		Nawadah ...	...	...	0·05	...	...	...	...	Nil	0·05	0·32	0·07	0·63	0·88	1·67
		Jahanabad ..	...	...	0·14	...	...	...	...	1	0·14	0·21	0·22	0·59	0·34	1·58
		Arwal	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·30	?
		Daudnagar ...	...	...	0·20	...	...	...	...	1	0·20	?	0·20	?	0·20	?
		Sherghati	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·99	?
		Rajauli ...	...	...	0·04	...	...	...	...	Nil	0·04	?	0·04	?	2·99	?
		Pakri Barawan	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·42	?
	Patna ...	Patna	...	...	0·05	...	...	...	...	Nil	0·05	0·20	0·27	0·47	0·41	1·71
		Dinapore ...	...	...	0·07	...	...	...	...	Nil	0·07	0·20	0·32	0·48	0·32	1·64
		Behar .	...	...	0·11	...	...	...	...	1	0·14	0·17	0·14	0·53	0·44	1·81
		Barh ..	...	...	...	...	...	...	...	Nil	Nil	0·14	0·05	0·37	0·50	1·67
		Bickram .	...	...	...	...	...	...	...	Nil	Nil	?	0·08	?	0·28	?
		Hilsa	...	...	...	0·04	...	...	...	Nil	0·04	?	0·04	?	0·31	?
	Monghyr ..	Begusarai ..	...	...	0·20	...	...	...	...	1	0·20	0·19	0·20	0·52	2·40	2·00
		Monghyr ...	...	...	0·04	...	...	...	...	Nil	0·04	0·14	0·04	0·37	0·99	1·73
		Jamui	...	...	0·09	0·01	...	...	...	Nil	0·10	0·11	0·13	0·47	0·97	1·37
		Gocri	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·57	?
		Shaikpura ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·20	?
		Chahai Bamda	...	...	0·08	...	...	...	...	Nil	0·08	?	0·18	?	1·40	?
	Sonthal Parganas.	Rajmahal .	...	...	...	0·04	...	...	...	Nil	0·04	0·07	0·11	0·15	0·79	1·21
		Godda	...	...	0·07	0·02	...	...	...	Nil	0·09	0·14	0·41	0·30	0·89	1·14
		Pakour	...	...	...	...	...	...	...	Nil	Nil	0·06	0·12	0·24	3·50	1·03
		Naya Dumka	...	...	0·09	0·22	...	...	...	1	0·31	0·08	0·30	0·45	1·84	1·74
		Deoghur	...	...	...	...	...	...	...	Nil	Nil	0·14	0·23	0·38	0·73	1·94
		Jamtara ...	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·35	2·19	1·66
		Belbodda ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Nanihat ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·12	?
CHOTA NAGPUR.	Hazaribagh ..	Pachamba (*Giridih*). ...	...	...	...	0·04	...	...	...	Nil	0·04	0·09	0·17	0·28	3·24	1·50
		Hazaribagh	...	...	0·05	0·15	...	...	...	1	0·20	0·17	0·32	0·42	3·00	1·80
		Semtakurai										0·19		0·43		1·46
		Mahudi Hills										0·31		0·61		1·72
		Jhumra Hill										0·32		0·50		1·90
		Parhi .	...	...	...	0·08	...	...	...	Nil	0·08	?	0·22	?	1·46	?
		Chatra ...	...	...	0·23	0·21	...	...	...	2	0·44	?	0·53	?	1·98	?
		Karagdeha	...	...	...	...	...	...	...	Nil	Nil	?	0·17	?	1·34	?
		Ramgar ...	...	...	0·05	...	...	...	...	Nil	0·05	?	0·05	?	3·32	?
	Lohardaga	Lohardaga ...	...	...	0·06	...	...	...	...	Nil	0·06	0·20	0·29	0·53	6·11	2·55
		Ranchi ...	...	...	0·02	...	...	...	...	Nil	0·02	0·26	0·15	0·53	6·63	2·00
		Silli ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·35	?
	Palamau ...	Palamau (Daltonganj).	...	...	0·10	...	...	...	...	1	0·18	0·18	0·19	0·57	0·76	2·01
		Palumath	...	...	0·03	0·06	...	...	...	Nil	0·09	?	0·14	?	3·73	?
		Husainabad	...	...	0·04	0·31	...	...	...	1	0·35	?	0·94	?	1·56	?
		Garhwa	...	...	0·13	...	...	...	...	1	0·13	?	0·21	?	1·54	?
	Singhbhum ..	Chaibassa	...	...	...	...	...	0·30	...	1	0·30	0·29	0·30	0·55	6·30	2·34
		Chakardharpur.	...	...	...	...	...	0·09	...	Nil	0·09	?	0·09	?	0·16	?
		Ghatsila	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·15	?
		Baharagura	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·35	?
	Manbhum	Purulia ...	...	...	...	0·20	...	...	...	1	0·20	0·23	0·35	0·39	4·70	1·61
		Gobindpur	...	...	...	0·16	...	...	...	1	0·16	0·14	0·17	0·43	1·87	1·66
		Raghunathpore	...	...	...	0·05	...	...	...	Nil	0·05	?	0·05	?	1·74	?
		Barahabhum	...	...	...	0·12	...	0·05	...	1	0·17	?	0·24	?	5·41	?
		Jhalda	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·88	?
		Chas	...	...	...	0·35	...	...	...	1	0·35	?	0·35	?	2·96	?
		Pandra ...	...	...	...	0·30	...	...	...	1	0·30	?	0·30	?	1·38	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the* 24*th January* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 21ST OF JANUARY 1893.

AT the close of the previous week pressure had fallen continuously and by rather considerable amounts, and had become in defect of the normal by almost a seventh of an inch. So low had the pressure become, therefore, that what almost amounted to a feeble barometric depression existed over Bengal, and with this low pressure unusually high temperature and high humidity with rather clouded skies obtained. On the 15th, or the first day of the present week, a further rather rapid fall of pressure took place over the west of the province, and a moderate fall elsewhere, and the defect increased to nearly a fifth of an inch in the west of Bihár, while over Northern India generally no less than three feeble low pressure areas existed. A fall of temperature had also occurred in Bengal, and it had become below the normal. Pressure again fell by small amounts on the 16th, and it became very uniform over the whole province, while winds became very irregular, and at the eastern stations there was a distinct tendency for moist southerly winds to set in. A wave of comparatively high temperature also began to advance on the 16th over the western half of the province, where a moderate excess was shown, though defects were registered elsewhere. On the 17th, a slight increase of pressure began in Bengal, but a distinct low pressure area still existed over parts of South-West and Central Bengal, while a large low pressure area also was shown over the Central and North-West Provinces; southerly winds were also reported in Orissa, South Bengal, and part of East Bengal, and these brought up considerable amounts of moisture. Temperature also rose rapidly over the remainder of the province and became largely above the normal, the excess equalling about 5° at many stations, so that on this day conditions generally were very abnormal. With these disturbed conditions rather numerous but light rain showers were reported on the 17th from North and South Bihar and parts of Chota Nagpur. On the 18th, pressure had again commenced to fall at all stations, and a distinct low pressure area existed over South and South-East Bengal. Winds, however, were rather less strongly southerly than they were on the previous day and had become decidedly irregular. Rainfall on the 18th had extended and was reported from a considerable part of South-West Bengal, and East Bengal while it continued in parts of Bihar and Chota Nagpur, but the amounts were again small. On the 19th pressure commenced to rise rather rapidly, but it was still nearly a tenth of an inch below the normal, and winds slowly began to resume their north-westerly direction; the excessive temperature also commenced to decrease, and the excess on this day was only equal to about 1° to 3°. The rainfall reported on the 19th was confined to a few showers in South, West, North, and East Bengal. On the 20th a further rapid increase of pressure took place, in some cases exceeding a tenth of an inch, and the distribution of pressure became almost normal, though there was still a defect of about 0·01" or 0·02" over a considerable part of the province. Winds had, however, again become rather irregular in direction, and cloud proportion was rather high, but the rainfall was confined to a few showers in Orissa and Chota Nagpur. On the 21st, or the last day of the week, pressure again rose, the increase being largest at the central stations, and pressure became comparatively low in South Bengal, and particularly at Saugor Island and in the north-west angle of the Bay, while winds in South Bengal and Orissa began to shift round to north-easterly and easterly. Rather heavily clouded skies continued to be reported, but practically no rain fell except in Orissa, where at some stations it was rather heavy. A rather rapid fall of temperature had taken place at all except the southern stations, and it was below the normal by 2° to 4° in all districts, except South Bengal and Orissa. Conditions therefore were again disturbed and unsettled at the close of the week.

Practically, therefore, almost throughout the week conditions have been unusual and weather has been distinctly unsettled almost throughout this period. The disturbance has resulted in rainfall in all divisions, but except in Orissa and East Bengal, where moderate amounts of a quarter to half an inch are reported, the falls have been generally light and do not average more than about a tenth of an inch.

Pressure—Has been unusually low almost throughout the week, and the mean pressure for the week has been about a tenth of an inch in defect of the normal; the average defect equalling from 0·09" to 0·12", and the defect being generally largest in the west of the province.

Temperature.—The changes of temperature during the week have been unusually large, and the mean of the week for the whole province has been in excess of the normal by 0·7°. The excess has been largest in North Bihar and in East and South-West Bengal, and, on the other hand, slight defects have been registered in Chota Nagpur and North Bengal.

The distribution of temperature for the week in the province generally and its variation from the normal value are clearly seen in the table below, where the average maximum minimum and mean temperatures at nine typical stations in different districts of the province are compared with their normal values for the period :—

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 21st January 1893.

	Normal mean maximum temperature for the week ending 21st January.	Actual mean maximum temperature for the week ending 21st January 1893.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 21st January.	Actual mean minimum temperature for the week ending 21st January 1893.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 21st January.	Actual mean daily temperature for the week ending 21st January 1893.	Variation of actual mean rom the normal.
Cuttack	84·7	83·0	—1·7	60·3	60·5	+0·2	72·5	71·7	—0·8
Calcutta	76·8	77·6	+0·8	55·5	57·8	+2·3	66·2	67·7	+1·5
Dacca	78·4	77·2	—1·2	55·0	56·4	+1·4	66·7	66·8	+0·1
Burdwan	78·4	78·9	+0·5	54·4	55·5	+1·1	66·4	67·2	+0·8
Patna	72·7	74·7	+2·0	50·1	50·2	+0·1	61·4	62·4	+1·0
Gaya	75·9	76·4	+0·5	50·9	52·0	+1·1	63·4	64·2	+0·8
Purnea	74·9	73·9	—1·0	48·3	47·4	—0·9	61·6	60·7	—0·9
Hazaribagh	72·9	72·4	—0·5	50·5	49·4	—1·1	61·7	60·9	—0·8
Darjeeling	44·4	39·5	—4·9	34·8	31·7	—3·1	39·7	35·6	—4·1

Rainfall.—The heaviest falls have occurred in Orissa, where an average amount of 0·40 inch has been received and where the falls have been largest in the Puri and Cuttack districts. East Bengal has received an average fall of 0·25 inch, and in this division the districts of Chittagong Hill Tracts and Backergunge have received the largest amounts. In Chota Nagpur the falls have averaged 0·15 inch, the Singhbhum district having received the heaviest falls; but in all other divisions the falls have been about a tenth of an inch and less, and the only districts where moderate falls have been received have been Bankura, Pabna, Darjeeling, and Gaya. Compared with the normal, the falls in Orissa and East Bengal have been in distinct excess, but elsewhere they have been in defect.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 21st of January 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th Oct. 1892.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	85·4	53·5	80·1	61·2	70·7	+0·5	0·40	0·17	+0·23	0·80	0·32	+0·48	0·41	0·26	6·96	4·24
South-West Bengal ...	85·3	47·3	77·9	56·3	67·1	+1·0	0·06	0·16	—0·10	0·24	0·37	—0·13	0·07	0·31	5·63	2·07
North Bengal	78·6	43·5	73·8	50·2	61·9	—0·5	0·08	0·12	—0·04	0·24	0·25	—0·01	0·26	0·34	1·07	1·45
East Bengal	82·3	49·0	76·4	55·5	66·0	+1·3	0·25	0·18	+0·07	0·60	0·38	+0·22	0·25	0·35	8·21	3·11
North Bihar	79·8	40·0	74·1	48·9	61·5	+0·2	0·06	0·21	—0·15	0·17	0·43	—0·26	0·38	0·49	0·52	1·43
South Bihar	81·4	41·4	75·8	51·2	63·6	+1·1	0·11	0·17	—0·06	0·36	0·34	+0·02	0·26	0·45	1·06	1·64
Chota Nagpur	84·5	45·2	75·0	51·4	63·2	—0·2	0·15	0·21	—0·06	0·64	0·52	+0·12	0·27	0·47	4·34	1·85

Meteorological Office, Bengal,
The 24th January 1893.

A. Pedler,
Meteorological Reporter to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 15th to 21st January 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Temperature. Maximum.	Temperature. Range.	Temperature. Minimum.	Hygrometry. Mean wet bulb.	Hygrometry. Vapour tension.	Hygrometry. Dew point.	Hygrometry. Humidity.	Wind. Prevailing direction.	Wind. Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
Jan.	15th	130·3	9·5	29·873	63·4	77·0	25·9	51·1*	56·7	0·375	51·0	67	WSW and calm...	39	Nil	Clear, dew.
"	16th	131·9	8·8	·866	65·5	79·9	26·2	53·7	61·1	·486	58·1	79	WSW, S by W and calm.	82	"	Chiefly clear, dew, ≡.
"	17th	130·0	9·6	·882	68·7	79·9	17·7	62·2	63·3	·510	59·5	75	S by W, NE and variable.	98	"	Clear, dew.
"	18th	131·8	9·3	·874	69·3	79·9	20·6	59 3	64·3	·540	61·1	77	WSW and variable.	114	"	Chiefly clear.
"	19th	129·5	7·4	·931	69·3	76·6	17·5	59·1	62·3	·472	57·3	67	NNW and variable.	68	Not measurable.	Day clear; night cloudy, dew, o, d.
"	20th	123·3	2·0	30·003	66·1	73·0	12·9	60·1	64·5	·450	56·0	71	NNW and calm ...	29	Nil	Chiefly cloudy, o.
"	21st	133·6	3·8	·027	66·6	75·2	16·1	59·1	58·0	·370	50·6	57	NNE and calm ...	55	"	Chiefly cloudy, o.

	Inches.
The mean pressure of the seven days	29·922
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	30·021
	Hours.
The total number of hours of bright sunshine	50·4
The maximum possible number of hours of sunshine	76·2
	°
The mean temperature of the seven days	67·0
The average temperature of the corresponding period for 24 years, S.-G.'s Office	67·7
The extreme variation of temperature	28·8
The maximum temperature	79·9
	Miles.
The highest velocity of the wind in one hour	16
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	70
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	70
	Inches.
The total fall of rain from 15th to 21st January 1893 ...	Nil
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·06
The total fall from 1st to 21st January 1893	Nil
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·17

* The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

[dew symbol], dew; ≡, fog; o, overcast; d, drizzling rain.

C. LITTLE,

For Meteorological Reporter to the Govt. of Bengal.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;

Calcutta, the 23rd January 1893.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 15th to 21st January 1893.

MONTH	Date.	Pressure at 10 A.M. corrected and reduced to 32° Fahr.	TEMPERATURE. Daily mean.	Maximum.	Range.	Minimum.	HYGROMETRY. Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	Rainfall at 10 A.M. for past 24 hours.
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
January ...	15th ...	29·950	65·4	78·9	27·0	51·9	70·1	61·0	·417	54·0	57	Nil
" ...	16th ...	·944	68·4	81·9	27·0	54·9	71·1	63·6	·489	58·3	64	"
" ...	17th ...	·965	71·4	80·9	19·0	61·9	74·6	67·4	·575	62·9	67	"
" ...	18th ...	·920	71·2	81·9	21·4	60·5	74·6	69·6	·658	66·8	77	"
" ...	19th ...	·991	68·4	77·9	19·0	58·9	71·6	61·5	·414	53·7	54	"
" ...	20th ...	30·069	67·2	73·9	13·5	60·4	69·4	59·7	·386	51·8	54	"
" ...	21st ...	·089	67·4	75·9	16·0	59·9	69·6	58·3	·338	48·2	46	"

	Inches.
The mean 10 A.M. pressure of the seven days	29·990
	°
The mean temperature of the seven days	68·5
The extreme variation of temperature	30·0
The maximum temperature	81·9
	%
The mean 10 A.M. relative humidity of the seven days	60
	Inches.
The total fall of rain from 15th to 21st January 1893	Nil

The daily mean temperatures are the crude means of maximum and minimum temperatures.

C. LITTLE,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 23rd January 1893.

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 14th January 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*286,286	*3,22,433 0 0	27,10,414 10	5,90,342 10 0	18,363 3 0	9,31,138 13 0	77,576¾	111,287¾	188,864½
Or per-mile of railway	......	200 3 4	......	366 8 11	11 6 5	578 2 8	.....	......	......
For previous 1 week of half-year	238,902	2,94,118 11 0	28,27,602 10	5,97,247 3 0	18,875 6 0	9,10,241 4 0	74,824	112,370½	187,194½
Total for 2 weeks ...	525,188	6,16,551 11 0	55,38,016 20	11,87,589 13 0	37,238 9 0	18,41,380 1 0	152,400¾	223,657¾	376,058½
Comparison.									
Total for corresponding week of previous year	278,459½	2,93,677 9 7	25,18,457 10	5,94,813 9 8	16,776 4 8	9,05,267 7 11	78,425	98,969	177,394
Per mile of railway corresponding week of previous year ...	......	185 8 8	......	375 12 10	10 9 7	571 15 1	......	......	......
Total for corresponding 2½ weeks of previous year	575,152	6,31,648 6 11	58,03,477 10	13,65,290 3 5	31,743 15 4	20,28,676 9 8	172,233	224,803	397,036

* The increase is chiefly due to running of remount and ordinary special trains and to pilgrims.

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 14th January 1893, on 22½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	18,840	4,564 4 0	9,247 20	301 2 0	15 0 0	4,880 6 0	869	171	1,040
Or per mile of railway	......	205 2 2	......	13 8 7	0 10 9	219 5 6	......	......	......
For previous 1 week of half-year	18,225	4,624 15 0	9,618 0	407 14 0	15 0 0	5,017 13 0	873	95	968
Total for 2 weeks ...	37,065	9,189 3 0	18,865 20	709 0 0	30 0 0	9,928 3 0	1,742	266	2,008
Comparison.									
Total for corresponding week of previous year	19,094½	4,402 12 3	10,490 20	381 15 0	16 4 0	4,891 0 0	869	99	968
Per mile of railway corresponding week of previous year	......	201 14 9	......	17 2 8	0 11 8	219 13 1	......	......	......
Total for corresponding 2½ weeks of previous year ...	42,370½	10,202 1 6	24,223 20	913 8 0	33 1 3	11,148 10 9	2,014	208	2,2[illegible]

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 14th January 1893, on 161⅞ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*15,673	*12,533 1 0	57,431 10	16,040 5 0	53 0 0	28,626 6 0	5,437	3,079	8,516
Or per mile of railway	......	77 10 5	......	99 6 2	0 5 3	177 5 10	.....	......	......
For previous 1 week of half-year	15,321	9,424 3 0	39,839 10	7,870 3 0	66 0 0	17,360 6 0	5,138	3,536	8,674
Total for 2 weeks ...	30,994	21,957 4 0	97,270 20	23,910 8 0	119 0 0	45,986 12 0	10,575	6,615	17,190
Comparison.									
Total for corresponding week of previous year	13,775	10,784 1 7	48,079 0	7,988 14 0	51 14 3	18,824 13 10	6,266	2,240	8,506
Per mile of railway corresponding week of previous year ...	......	66 13 1	......	49 7 11	0 5 2	116 10 2	......	......	......
Total for corresponding 2½ weeks of previous year	29,893	22,231 8 1	1,02,841 0	18,073 10 0	133 9 9	40,438 11 10	13,748	4,668	18,416

* The increase is chiefly due to running of remount and ordinary special trains and to pilgrims.

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for the week ended 14th January 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	163,715	77,060 0 0	6,27,442 0	1,13,010 0 0	13,280 0 0	2,03,350 0 0	27,912	31,498	59,440
Or per mile of railway ..	211	99 0 0	808 0	145 0 0	*3 0 0	247 0 0	......	......	.....
For previous 1 week of half-year	213,215	84,790 0 0	6,56,455 0	1,15,630 0 0	14,670 0 0	2,15,090 0 0	27,912	32,192	60,104
Total for 2 weeks .	376,930	1,61,850 0 0	12,83,897 0	2,28,640 0 0	27,950 0 0	4,18,440 0 0	55,854	63,690	119,544
Comparison.									
Total for corresponding week of previous year	154,649	68,041 0 0	5,42,506 0	92,810 0 0	11,337 0 0	1,72,182 0 0	27,538	29,416	56,954
Per mile of railway corresponding period of previous year ..	199	88 0 0	698 0	119 0 0	*2 0 0	209 0 0	......	......	......
Total to corresponding date of previous year	384,206	1,66,414 0 0	12,16,514 0	2,02,226 0 0	25,760 0 0	3,94,430 0 0	61,374	65,584	126,958

* Excluding steamer earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 14th January 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	26,635	10,190 0 0	47,126 0	3,140 0 0	280 0 0	13,610 0 0	3,681	1,991	5,672
Or per mile of railway . .	213	82 0 0	377 0	25 0 0	2 0 0	109 0 0	......	......	......
For previous 1 week of half-year	33,729	11,820 0 0	45,587 0	3,080 0 0	50 0 0	14,950 0 0	3,929	1,743	5,672
Total for 2 weeks ..	60,364	22,010 0 0	92,713 0	6,220 0 0	330 0 0	28,560 0 0	7,610	3,734	11,344
Comparison.									
Total for corresponding week of previous year	24,983	9,228 0 0	66,475 0	3,689 0 0	60 0 0	12,977 0 0	3,681	1,991	5,672
Per mile of railway corresponding week of previous year .	200	74 0 0	532 0	30 0 0	......	104 0 0	......	......	......
Total to corresponding date of previous year	63,078	23,009 0 0	138,512 0	7,798 0 0	212 0 0	31,019 0 0	8,295	4,704	12,999

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 14th January 1893, on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ..	18,134	5,400 0 0	22,487 0	1,970 0 0	160 0 0	7,530 0 0	2,187	737	3,224
Or per mile of railway	214	63 0 0	261 0	23 0 0	2 0 0	88 0 0	......	......	......
For previous 1 week of half-year	16,987	6,160 0 0	17,451 0	1,810 0 0	150 0 0	8,120 0 0	2,487	737	3,224
Total for 2 weeks ...	35,121	11,560 0 0	39,938 0	3,780 0 0	310 0 0	15,650 0 0	4,674	1,474	6,448
Comparison.									
Total for corresponding week of previous year ..	16,121	5,100 0 0	6,186 0	654 0 0	47 0 0	6,010 0 0	2,502	722	3,224
Per mile of railway corresponding week of previous year .	187	59 0 0	73 0	10 0 0	1 0 0	70 0 0	......	......	......
Total to corresponding date of previous year	39,023	12,600 0 0	18,182 0	2,097 0 0	163 0 0	14,860 0 0	5,693	1,649	7,342

BENGAL AND NORTH-WESTERN RAILWAY.

(Includes the Tirhut State Railway.)

Approximate return of traffic for the week ending 14th January 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open ...	81,150	32,390	3,81,680	57,250	12,640	1,02,280	10,306	16,642	26,948
Or per mile of railway ...	107·4	42·84	504·87	75·73	15·72	135·29	...	.	.....
For previous 1 week of half-year ...	81,370	32,530	4,14,100	54,380	11,370	98,260	12,534	17,906	30,440
Total for 2 weeks ...	162,520	64,920	7,95,780	111,630	24,010	2,00,540	22,840	34,548	57,388
Comparison.									
Total for corresponding period of previous year on 737 miles open ...	75,525	30,361	3,00,835	39,585	8,063	78,009	11,666	15,750	27,416
Per mile of corresponding week of previous year ...	102·48	41·20	408·19	53·71	10·94	105·85	...	.	.....
Total to corresponding date of previous year ...	162,322	67,705	6,34,839	81,878	18,168	1,68,051	28,170	33,450	61,620

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 14th January 1893	7,966	0	0
Corresponding period of 1892	7,204	0	0
Increase	762	0	0
Receipts per mile for the week ending 14th January 1893	156	3	2
Corresponding period of 1892	141	4	2
Increase	14	15	0
Receipts from 1st to 14th January 1893	15,661	0	0
Corresponding period of 1892	14,268	0	0
Increase	1,393	0	0

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No. 5 of 1893.



SUPPLEMENT TO

The Calcutta Gazette.

WEDNESDAY, FEBRUARY 1, 1893.

OFFICIAL PAPERS.

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CONTENTS.

STATEMENT SHOWING THE ACTUAL RECEIPTS AND EXPENDITURE OF PROVINCIAL SERVICES FOR 1891-92 AND THE REVISED ESTIMATE FOR 1892-93.

Receipts.	Actuals, 1891-92.	Revised estimate, 1892-93.
	Rs.	Rs.
Opening balance	24,72,773	23,76,000
Principal heads of Revenue—		
I.—Land Revenue	1,14,02,385	87,09,000
III.—Salt	1,10,854	94,000
IV.—Stamps	1,13,25,347	1,16,25,000
V.—Excise	27,83,491	28,50,000
VI.—Provincial Rates	45,24,517	44,90,000
VII.—Customs	57,104	50,000
VIII.—Assessed Taxes	21,53,964	21,85,000
IX.—Forests	3,94,776	4,00,000
X.—Registration	6,67,156	6,97,000
Total	3,34,19,594	3,11,00,000
XII.—Interest	1,18,163	1,32,000
Receipts by Civil Department—		
XVI.—Law and Justice—		
Courts of Law	8,81,016	8,75,000
Jails	9,27,642	9,00,000
XVII.—Police	4,48,634	2,53,000
XVIII.—Marine	9,65,408	8,90,000
XIX.—Education	5,95,123	5,70,000
XX.—Medical	1,46,818	1,50,000
XXI.—Scientific and other Minor Departments.	1,96,040	1,89,000
Total	41,60,711	38,27,000
Miscellaneous—		
XXII.—Receipts in aid of superannuation	1,26,979	65,000
XXIII.—Stationery and Printing	1,57,368	1,15,000
XXV.—Miscellaneous	8,36,024	8,03,000
Total	11,20,371	9,88,000
Railways—		
XXVI.—State Railways (gross earnings)	1,60,39,547	32,25,000
Irrigation—		
XXIX.—Major works (direct receipts)	16,02,710	16,35,000
XXX.—Minor works and navigation—		
By Public Works Department	8,17,934	7,85,000
,, Civil Department	1,17,692	1,18,000
Total	25,38,336	25,38,000
Buildings and Roads—		
XXXII.—Civil works—		
By Public Works Department	} 4,05,262	2,10,000
,, Civil Department		2,26,000
Total	4,05,262	4,36,000
Contributions	......	......
Total	5,78,01,984	4,22,41,000
GRAND TOTAL	6,02,74,757	4,46,17,000

Expenditure.	Actuals, 1891-92.	Revised estimate, 1892-93.
Direct demand on the Revenues—	Rs.	Rs.
1. Refunds and drawbacks	1,54,203	1,53,000
2. Assignments and compensations	1,66,129	1,80,000
3. Land Revenue	41,14,334	33,88,000
5. Salt	51,608	1,25,000
6. Stamps	3,38,834	4,37,000
7. Excise	1,66,416	1,70,000
8. Provincial Rates	4,34,286	4,30,000
9. Customs	5,18,724	5,30,000
10. Assessed Taxes	90,014	92,000
11. Forests	2,10,235	2,27,000
12. Registration	3,41,736	3,52,000
Total	65,86,519	60,84,000
13. Interest on ordinary debt	1,01,134	1,20,000
Post-office, Telegraph and Mint—		
15. Post office	4,498	4,000
Salaries and expenses of Civil Department—		
18. General Administration	16,16,331	16,25,000
19. Law and Justice { Courts of Law	84,82,775	85,10,000
Law and Justice { Jails	20,22,010	20,40,000
20. Police	59,61,810	56,89,000
21. Marine	9,42,251	8,61,000
22. Education	25,51,576	25,45,000
24. Medical	15,06,727	15,80,000
25. Political	34,505	37,000
26. Scientific and other Minor Departments	3,12,858	3,25,000
Total	2,34,90,843	2,32,12,000
Miscellaneous—		
29. Superannuation, &c.	15,99,525	16,90,000
30. Stationery and Printing	13,35,849	12,50,000
32. Miscellaneous	2,95,254	1,98,000
Total	32,30,628	31,38,000
Famine Relief and Insurance—		
33. Famine relief	......	2,50,000
37. Construction of Railways	7,750	......
Railways (Revenue account)—		
38. State Railways { Working expenses	1,04,65,868	......
State Railways { Interest on debt	36,98,508	......
40. Subsidized Companies—Land, &c.	1,358	24,000
41. Miscellaneous Railway Expenditure	76,164	......
Total	1,42,41,898	24,000
Irrigation—		
42. Major works—		
Working expenses	13,54,171	14,30,000
Interest on debt	24,03,107	24,27,000
43. Minor works and Navigation—		
By Public Works Department	15,59,796	16,09,000
,, Civil Department	14,553	4,000
Total	53,31,627	54,70,000
Buildings and Roads—		
45. Civil Works—		
By Public Works Department	} 40,25,425	28,21,000
,, Civil Department		1,70,000
Total	40,25,425	29,91,000
Contributions	8,78,840	11,80,000
Total	5,78,99,162	4,24,73,000
Closing balance	23,75,595	21,44,000
GRAND TOTAL	6,02,74,757	4,46,17,000
Provincial surplus (+) or deficit (—)	(—)97,178	(—)2,32,000

No. 627F.

PUBLISHED for general information.

H. H. RISLEY,
Secretary to the Government of Bengal.

CALCUTTA;
FINANCIAL DEPT.—*Finance,*
The 31*st January* 1893.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 28th January, 1893.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.				
Burdwan Divn.	1	Burdwan Jan. 28, '93 Kalna ... Katwa ... Raniganj ...	0·73 0·38 0·33 0·43	Weather—cool and clear. Prospects of *rabi* crops fair, except in parts of Sadar subdivision. Condition of cattle good. Prices of common rice:— Srs. Burdwan ... ... 11 to 14 per rupee. Kalna ... ... 10 to 13 per rupee. Katwa ... ... 13¼ per rupee. Raniganj ... ... 13 per rupee.
	2	Bankura „ 28, '93 Vishnupur ...	0·51 0 93	Weather—some days cloudy and others fine; cold throughout the week. *Rabi* crops thriving. Supply of fodder and water plentiful. No cattle-disease reported. Prices of common rice:— Srs. Sadar ... ... 12½ per rupee. Vishnupur ... ... 11½ per rupee.
	3	Birbhum „ 28, '93 Rampur Hát ...	0·72 0·55	Prospects of spring crops everywhere reported to be good. Common rice sells at 13 to 14 seers per rupee.
	4	Midnapore „ 28, '93	0·36	Weather—cold. The rain will benefit the *rabi* crops. Harvesting of paddy crop is over, and that of *rabi* has begun. Prices of common rice:— Srs. Sadar ... ... 11½ per rupee. Contai ... ... 12 to 15 per rupee. Tamluk ... ... 12 to 14 per rupee. Garhbeta ... ... 12 to 13 per rupee.
	5	Hooghly „ 28, '93 Serampore ... Jahanabad ...	0·52 0·16 0·2	Weather—clear and exceedingly cold after the rain. *Rabi* crops doing well. Potato crop in Sadar said to be rather short. The difficulties about water continues in Dwarbasini. Rather a sharp outbreak of cattle-disease in the Sadar subdivision spreading over three thanas. Prices of common rice:— Srs. Sadar ... ... 9 to 10 per rupee. Serampore ... ... 10 per rupee. Jahanabad ... ... 11 to 13 per rupee.
	6	Howrah „ 28, '93 Ulubaria ...	0·29 0·30	Weather—cold. About $\frac{1}{16}$th of *aman* crop left to be harvested. Spring crops doing well. Condition of cattle good. Fodder and water-supply sufficient except that tanks in Howrah Municipality are drying up too quickly. Price of rice 11 to 11½ seers per rupee.
Presidency Divn.	7	24-Parganas „ 28, '93	0·70	Weather—seasonable. Pressing of sugarcane continues. Prospects of *rabi* crops continue fair. No cattle-disease reported. Fodder and water sufficient. Prices of common rice:— Srs. Srs. c. Sadar ... ... 9 to 14 8 per rupee. Barasat ... ... 11 0 per rupee. Basirhat ... ... 12 13 per rupee. Diamond Harbour ... ... 13 0 per rupee. Barrackpore ... ... 12 0 per rupee. Dum-Dum ... ... 11 8 per rupee.
	8	Nadia „ 28, '93 Kushtia ... Meherpur ... Chuadanga ... Ranaghat ...	0·30 0·45 0 30 Nil 0·29	Weather—cloudy with light showers early in the week; bright and very cold since. Prospects of *rabi* crops good. Common rice selling at 12 seers 12 chitaks to 13 seers 5 chitaks per rupee. Health of cattle good. Fodder and water-supply sufficient.
	9	Khulna „ 28, '93 Bagerhat ... Satkhira ...	0·14 Nil 0·30	Weather—seasonable. Sowing of *boro* paddy going on. Harvesting of *aman* not yet over; outturn expected to be good except in Paikgacha. Prospects of *rabi* fair. Common rice sells at 12 to 14 seers per rupee. Fodder and water sufficient.
	10	Jessore „ 28, '93 Jhenida ... Magura ... Narail ... Bangaon ...	0·26 0·18 0·22 0·17 0·29	Weather—very cold and occasionally cloudy. *Rabi* crops prospering. Mustard being reaped. Harvesting of *aman* nearly over; outturn good. Supply of fodder and water for cattle sufficient.
	11	Murshidabad „ 28, '93	0·51	Weather—seasonable; at times cloudy. State of *rabi* crops favourable. *Kalai* doing well. No cattle-disease reported. Fodder and water sufficient. Coarse rice selling at 14 seers per rupee.

Division	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and State and prospects of the crops.
BENGAL—*concld.*					
CHITTAGONG DIVN.	12	Chittagong	Jan. 28, '93	0·02	Weather—seasonable. Prospects of crops good. Prices stationary. Condition of cattle good. Supply of fodder sufficient.
	13	Noakhali	" 28, '93	Nil	Weather—cold and cloudy at times. Condition of *rabi* crops favourable. Cattle-disease reported from Companiganj and Sundip. Fodder and water sufficient. Price of common rice stationary.
	14	Tippera	" 28, '93	0·29	Weather—very cold. There was rain on two days of the week, which has done immense good to the standing crops and also to cultivation. The *aman* paddy has been harvested, and there is now a tendency to the fall of price of eatable articles.
	15	Chittagong Hill Tracts.	" 27, '93	1·92	Weather—cloudy. Recent rain has rendered prospects of vegetables good. No cattle-disease reported. Prices of common rice:— Srs. Rangamati ... ... 12 } Bandarban ... ... 11 } per rupee. Manicksury ... ... 18 }
DACCA DIVN.	16	Dacca	" 28, '93	0·31	Weather—very cold and cloudy at times. *Rabi* crops thriving. Prospects good. *Boro* paddy being sown. Fodder available. No cattle-disease. Common rice selling at from 11 to 14 seers per rupee.
	17	Faridpur	" 28, '93	0·19	Weather—cool and occasionally cloudy. Prospects of standing crops fair. Mustard is being gathered. *Boro* paddy is still being sown. Cutting and pressing of sugarcane in progress. Common rice selling at 13 seers per rupee at Sadar, Goalundo, and Madaripur. Condition of cattle good. Fodder and water available.
	18	Backergunge Patuakhali Pirojpur	" 28, '93	Nil 0·09 0·13	Weather—seasonable. State of crops good. Harvesting of *aman* rice finished; outturn 14 annas. Common rice sells at about 12 seers per rupee. Fodder and water sufficient.
	19	Mymensingh	" 28, '93	0·51	Weather continues very cold. Prospects of standing crops good. Outturn of *aman* 14 annas. Rice sells at 11 to 14 seers per rupee. Fodder and water available.
RAJSHAHI DIVN.	20	Dinajpur Thakurgaon	" 28 '93 ...	0·16 0·35	Weather—very cool. The rain has done good to *rabi* crops. Standing crops doing well. Sugarcane still being pressed. Lands being ploughed for *bhadoi* and jute. Prices of rice:— Srs. Sadar ... ... 15 } Thakurgaon ... ... 12 to 14 } per rupee. Condition of cattle good except in some parts of Thakurgaon where cattle-disease is reported to have appeared. Supply of fodder and drinking water sufficient.
	21	Rajshahi Nator Naugaon	" 28, '93	0·23 0·22 0·25	Weather—very cold. State and prospects of standing crops good. The recent rain has been favourable to agricultural operations. No cattle-disease reported. Fodder and water generally sufficient. Price of common rice ranges from 12 to 16 seers per rupee.
	22	Rangpur Gaibanda Nilphamari Kurigaon Ulipur	" 28, '93	0·31 Nil 0·29 0·23 0·10	Weather—very cold. Mustard has been harvested. Wheat doing well. Lands being prepared for *bhadoi* crop. Common rice 14 seers per rupee.
	23	Bogra Sherpur Naukhila	" 28, '93	0·24 0·31 0·27	Weather—cold and cloudy at intervals. Lands being ploughed for jute, sugarcane, *kaon*, &c. Prospects of *rabi* crops good. Common rice selling at 15 seers per rupee. Fodder and water sufficient.
	24	Pabna	" 28, '93	0·47	Weather—very cool. The recent rain will improve the prospects of the *rabi* crops. Price of common rice at Pabna 13½ seers per rupee and at Sirajganj Rs. 3-6 to Rs. 4 per maund. Water-supply and fodder sufficient.
	25	Darjeeling Siliguri	" 28, '93 ...	0·55 0·68	Weather—very cold. Snow fell on 25th, 3 inches, which melted in two days except at and above Jellapahar. *In the hills:*—Wheat, barley, and *tori* progressing favourably. In some places harvesting of potatoes, *tori* and *phafur* going on. *In the terai:*—Harvesting of paddy finished. Potatoes, mustard and tobacco progressing favourably. Prospects good. Prices of coarse rice:— Srs. Hills ... ... 11 } Terai ... ... 13 } per rupee.
	26	Jalpaiguri	" 28, '93	0·46	Weather—very cold and cloudy at times. Harvesting of *haimanti* paddy nearly completed. Prospects of tobacco and potato good. No cattle-disease reported. Water-supply and fodder sufficient. Price of common rice stationary.

	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
BHAGALPUR DIVN.	27	Monghyr Jan. 28, '93 Begusarai ... Jamui ...	0·24 0·55 0·31	Weather—cold and cloudy. The late rain has done good to the *rabi* crops on the ground. Indigo and poppy doing well. Plenty of fodder. No cattle-disease. Prices of common rice :— Srs. Sadar ... ... 13 to 16 } per rupee. Begusarai ... ... 16 } Jamui ... ... 15 }
	28	Bhagalpur „ 28, '93 Banka ... Madhipura ... Supaul ..	0·22 0·41 0·60 0·80	Weather—generally cloudy and cold. Reaping of winter rice nearly over. Indigo doing well. The rain, though slight, has done much good. Price of common rice a little over 15 seers per rupee.
	29	Purnea „ 28, '93 Kissenganj ... Araria ...	0·54 0·48 0·43	Weather—cloudy with slight showers at the beginning and middle of the week. The weather has been considerably colder since the rain. Strong winds. Harvesting of *aghani* finished in many places. The recent rain, though little, has done much good to the standing *rabi* crops. Cutting of *tori* (mustard) almost over; outturn good. Harvesting of tobacco continues. Ploughing of *bhadoi* lands in progress. No cattle-disease. Fodder and water plentiful. Prices of common rice stationary.
	30	Malda „ 28, '93 Shibganj ... Gajole ...	0·07 0·61 0·7	Weather—first part of the week cool and bright; latter part chilly and cloudy. Harvesting of winter rice finished. *Kalai* and mustard still being reaped. Rain has done good to the standing *rabi* crops. Common rice sells at from 14 to 17 seers per rupee. Fodder and water-supply sufficient.
	31	Sonthal Parganas „ 28, 93 Deoghur ... Godda ... Jamtara ... Pakur ... Rajmahal ...	0·41 0·44 0·25 1·12 0·99 0·07	Weather—very cold. Harvesting of paddy almost finished. Standing *rabi* crops much benefited by the recent rain. Fodder and water-supply sufficient.
PATNA DIVISION.	32	Patna „ 28, '93 Bihar ... Dinapore ... Barh ...	0·56 0·11 0·50 0·30	Weather—severely cold and occasionally cloudy. Prospects of the *rabi* and poppy crops continue to be good. The rain is expected to do some good to the standing crops. Prices of common rice are :— Srs. Sadar ... ... 17 } per rupee. Bihar ... ... 17 } Dinapore ... ... 14 to 15 } Barh .. .. 13 }
	33	Gaya „ 28, 93 Nawada ... Aurangabad ... Jahanabad ...	0 26 0·33 0·38 0·09	Weather—very cold and cloudy. Harvesting of paddy over; threshing continues. Standing *rabi* crops doing well. The rainfall has done good to *rabi* and poppy. Common rice sells at 14 seers per rupee at Gaya. Prices stationary. Supply of fodder and water for cattle sufficient.
	34	Shahabad „ 28, '93 Buxar ... Sasseram ... Bhabhua ...	0·27 0·34 0·20 0·17	Weather—very cold and cloudy with west wind. Prospects of *rabi* crops favourable. Sugarcane pressing in progress. A hailstorm reported from the western part of the Sasaram subdivision, but no damage done. Poppy flowering. Prices stationary. Fodder and water sufficient.
	35	Darbhanga . 28 '93 Madhubani ... Samastipur ...	1·19 1 04 0·17	Weather—chilly with west winds towards the latter part of the week. Prospects of all crops improved by rain which will also facilitate indigo sowing. *Rahar* slightly damaged by high wind and rain. Cattle healthy. Common rice sells at 15 to 16 seers per rupee at Darbhanga.
	36	Muzaffarpur „ 28, '93 Sitamarhi ...	1·12 1·26	Weather—very cold; occasionally cloudy. *Rahar* and peas, &c., in blossom damaged to some extent by the late rain. Fodder and water for cattle sufficient.
	37	Saran „ 28, '93 Siwan ... Gopalganj ...	1·00 0·58 0·48	Weather—very chilly during the last three days. There was a fall of small hail-stones within a few miles of Chapra on the 25th which has not caused harm to crops. The rain has done good to all standing crops. Mustard is almost ripe. Sugarcane pressing is going on. Fodder and water abundant. Prices of common rice :— Srs. C. Chapra ... ... 14 8 } per rupee. Siwan ... ... 10 10 } Gopalganj ... . 14 8 }
	38	Champaran „ 28, '93	0·53	Weather—cloudy and cool with west wind. Hailstorms on the night of the 24th have done some injury to the *rabi*, poppy and other standing crops. Prices steady. Cattle are in good condition. Fodder and water sufficient.
ORISSA.				
ORISSA DIVN.	39	Cuttack „ 28, '93	Nil	Weather—cold. *Sarad* harvest completed; outturn generally good. Recent rain has been of much benefit to cold-weather crops though injurious to mango prospects. Prices of rice :— Srs. C. Srs. C. Sadar ... ... 10 8 to 18 12 } per rupee. Jajpur ... ... 17 0 to 21 0 } Kendrapara ... ... 14 0 to 21 0 } Banki ... ... 17 0 }
	40	Puri „ 26, '93 Khurda ... Banpur ...	Nil Nil Nil	Weather—seasonable but cloudy. Harvesting of *sarad* still going on. *Dalua* paddy growing well. Miscellaneous crops thriving. Rice sells at from 15 seers 12 chitaks to 17 seers 1 chitak per rupee.
	41	Balasore „ 28, '93	0·82	Weather—rainy. There are hardly any crops on the ground. Rice sells at 17 seers per rupee at Balasore and 18 seers at Bhadrak.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
CHOTA NAGPUR.			
South-West Frontier Agency.			
42	Hazaribagh Jan. 28, '93 Giridi ...	0·90 0·41	Weather—very cold and fine. *Rabi* progressing favourably. Sugarcane being cut. Common rice selling at from 12 to 16 seers per rupee.
43	Lohardaga „ 28, '93	0·51	Weather—cold. The rainfall has done much good to the *rabi* crops. Common rice selling at 14 seers per rupee. Fodder and water sufficient.
44	Palamau „ 27, '93	0·88	There has been good rain and the weather is cold. The rain has greatly benefited the *rabi*, and prospects are generally good. Slight damage has been caused in two outposts by hail. Rice selling at 11½ to 18 seers per rupee. A little cattle-disease in some parts.
45	Singhbhum „ 28, '93	0·23	Rain on the 25th. Weather clear and cold to-day (28th). *Rabi* crops and sugarcane being harvested with good outturn. Common rice selling at from 12 to 16 seers per rupee.
46	Manbhum „ 28, '93 Gobindpur ...	1·00 1·11	Weather—cloudy with a good shower of rain on Thursday (26th); now very cold. Harvesting of *rabi* crops going on. Rice selling at 10 to 14 seers per rupee. Fodder and water-supply sufficient.

(Nos. 42–46: CHOTA NAGPUR DIVN.)

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 31*st January*, 1893.

C. E. BUCKLAND,
Secy. to the Govt. of Bengal.

The following Statement shows the Quantities of the Principal Staples of Traffic imported into Calcutta from the Interior during the month of July, 1892.

IMPORTS INTO CALCUTTA.

Whence imported.	Food-grains. Rice and Paddy. Rice.	Paddy.*	Total (in rice).	Wheat.	Gram and pulses.	Other food-grains.	Total.	Fibrous Products. Jute, raw.	Gunny-bags.†	Oilseeds. Linseed.	Mustard seed.	Tea, Indian.	Cotton, raw.	Silk, raw.	Sugar. Refined.	Unrefined.	Tobacco. Unmanufactured.	Manufactured.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	No.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
BENGAL.																		
Burdwan	68,772	22,891	83,079	......	6,676	47	89,802	......	7,320	3,188	... ..	......	5	4	......	11	11	......
Birbhum	11,725	3,167	13,704	......	383	......	14,087	5	5,635	......	......	......	87	60	......	......	...	......
Midnapore	96,327	16,134	1,06,411	......	8	... ..	1,06,419	288	2,900	1,781	411	... ..	2	155	.....	983	7	56
Hooghly	70,154	15,946	80,120	5,727	11,229	665	97,741	1,637	241,360	5,476	1,669	......	6	13	60	12,940	10,698	390
24-Parganas ...	54,155	7,207	58,659	34	534	12	59,239	1,204	250,990	59	......	......	236	......	1,620	7,959	2,873	85
Nadia	1,155	661	1,568	8,596	60,101	734	65,999	494	4,540	7,281	235	......	280	......	445	814	2,366	84
Khulna	503	2,450	2,034	......	400	......	2,434	7,465	315	300	......	......	150	.. ...	...	5,950	...	......
Jessore ...	1,782	4,325	4,485	......	1,721	... .	6 206	150	4,375	1,373	41	.....	277	......	923	16,167	1,917	......
Murshidabad ...	5,963	5	5,967	10,610	28,953	1,213	46,743	951	800	5,763	711	... ..	4	816	......	... ..	44	......
Dinajpur	1,100	......	1,100	......	580	......	1,680	1,936	5,355	... ..	400	......	... ..	......	......	......	...	......
Rajshahi	261	......	261	......	9,180	......	9,441	15,233	105	2,328	......	......	32	435	......	......	...	......
Rangpur	......	...	... ..	35	... ..	......	35	32,756	2,345	......	18	... .	95	......	......	......	34,988	......
Bogra	624	......	624	......	141	......	765	2,6?7	490	... ..	.....	......	...	......	......	......	...	......
Pabna	324	... ..	324	147	1,901	......	2,372	1,15,184	507,275	2,657	19,065	......	216	......	......	......	1,527	......
Darjeeling	......	......	......	......	... ..	.. ...	.....	......	9,835	... ..	......	20,306	......	......	......	......	45	......
Jalpaiguri	......	......	......	......	......	......	.....	2,947	9,030	... .	......	8,827	.....	......	......	......	687	......
Dacca	842	120	917	150	505	......	1,572	59,052	4,445	541	50	.. ...	4,223	......	75	......	53	......
Faridpur	8,579	.. ...	8,579	978	5,240	......	14,797	1,70,288	10,780	4,682	16,906	54	458	1	......	... ..	...	......
Backergunge ...	78,548	400	78,798	270	1,001	... ..	80,069	479	245	973	400	......	......	......	......	39	67	......
Mymensingh ...	4,341	......	4,341	......	1,935	......	6,276	4.0	1,155	... .	1,450	......	154	......	......	......	...	......
Tippera	4,750	7	4,755	......	......	... ..	4,735	1,768	......	300	......	......	...	......	......	......	...	......
Chittagong ...	1,000	......	1,000	......	......	......	1,000	......	......	.. ...	......	1,401	10,291	... ..	......	......	...	......
Noakhali	6,431	......	6,431	......	......	.. ..	6,431	......	......	2,050	850	......	2,875	......	... ..	......	...	......
Total of Bengal ...	4,17,336	73,313	4,63,157	21,547	1,30,488	2,671	6,17,863	4,14,934	1,069,295	38,752	42,206	30,588	19,391	1,484	3,123	44,863	55,283	605
BIHAR.																		
Patna	2	......	2	32,342	18,722	2,471	53,537	2	1,330	1,26,435	15,842	......	31	......	722	711	776	2,020
Gaya	......	......	......	3	...	...	3	......	1,785	4,415	438	......	......	......	......	12	...	269
Shahabad	......	......	......	51,918	6,289	......	58,207	......	385	14,405	......	......	......	......	830	1,387	...	10
Muzaffarpur ...	405	......	405	...	......	651	1,256	......	35	9,870	.. ..	......	......	......	......	......	314	......
Darbhanga ...	.....	......	......	5,315	117	23	5,455	......	......	17,307	3,442	......	......	......	... .	158	680	14
Saran	......	......	......	4,925	2,503	16	7,444	......	......	12,007	8,641	......	9	......	430	......	58	......
Champaran ...	... ..	......	... .	... ..	... .	......	.....	......	... .	7,335	.. .	......	......	......	......	289	...	......
Monghyr	1,183	...	1,183	7,177	836	54	9,250	......	840	5,244	2,014	......	......	.. ...	......	181	5	6
Bhagalpur ...	......	......	......	11,992	1,332	......	13,324	21	1,030	5,096	17,651	......	... ..	......	.. ...	......	...	......
Purnea	......	......	... .	465	15,195	......	15,660	......	1,295	1,602	13,490	......	... ..	......	......	......	632	......
Malda	1,267	......	1,267	8,599	6,030	23	15,919	......	......	3,312	283	......	......	... ..	......	......	...	......
Sonthal Parganas	10	......	10	2,852	3,087	......	5,949	......	350	1,505	3,739	.. ...	......	302	......	......	...	......
Total of Bihar ...	2,867	......	2,867	1,25,588	54,111	3,436	1,86,004	23	7,050	2,08,593	65,570	......	40	302	1,982	2,718	2,465	2,319
ORISSA.																		
Balasore	16,692	3,680	18,992	......	1,534	......	20,526	...	3,900	1,124	.. ...	... .	......	......	......	......	155	......
CHOTA NAGPUR.																		
Hazaribagh ...	......	......	......	......	... ..	......	......	......	945	335	......	17	......	......	......	......	...	......
Singhbhum ...	354	......	354	... ..	...	......	354	......	35	......	......	......	......	......	......	......	...	......
Manbhum ...	1,109	......	1,109	......	170	.....	1,279	......	525	. ...	......	......	.. ..	......	......	......	...	......
Total of Chota Nagpur.	1,463	......	1,463	......	170	.. ...	1,633	......	1,505	335	......	17	......	......	......	......	...	......
Grand Total of supplies from the Provinces under the Lieutenant-Governor of Bengal.	4,38,358	76,993	4,86,479	1,47,135	1,86,303	6,109	8,26,026	4,14,957	1,081,750	2,48,804	1,07,776	30,605	19,431	1,786	3,105	47,581	57,903	2,924
OTHER PROVINCES.																		
Assam ...	3,250	......	3,250	175		......	3,425	1,061	... .	4,214	1,30,480	1,12,105	50	121	... .	......	...	......
North-Western Provinces and Oudh.	2	......	2	1,28,659	81,155	1,918	2,11,734	......	1,260	1,60,052	26,095	......	9,270	... ..	2,718	408	955	9
Punjab	8	......	8	5,303	2,803	1,442	9,556	......	......	3,503	......	426	... ..	......	......	......	...	......
Central Provinces	1,803	......	1,803	2,856	4,703	234	9,596	......	35	2,959	... ..	......	......	......	.. ...	......	...	......
Rajputana and Central India.	......	......	......	1,624	13,851	1,651	17,126	......	......	303	......	.....	......	......	......	......	...	......
Bombay	......	......	......	......		......	.. ...	......	......	......	......	......	3,882	......	177	.. ...	...	4
Madras	16	... ..	16	......	.....	......	16	......	.. ...	......	......	2	1,628	......	2,115	......	129	133
Burma	5	......	5	......	......	......	5	......	15,000	......	... ..	......	1,097	......	......	......	...	17
Other places ...	......	......	.. ...	......	......	4	4	......	800	......	......	......	......	......	18,525	27,168	12	381
Grand Total of Imports in July 1892	4,43,442	76,993	4,91,563	2,85,752	2,88,815	11,358	10,77,488	4,16,018	1,098,845	4,19,834	2,70,351	1,43,138	35,358	1,907	28,640	75,157	58,998	3,468
Grand Total of Imports in July 1891	7,94,907	90,150	8,50,251	6,62,729	2,60,072	36,928	18,09,980	4,56,591	2,203,897	12,81,396	2,88,574	1,60,610	33,452	2,350	49,014	69,631	64,642	2,135

* One maund of paddy is equivalent to 25 seers of rice. † Exclusive of bags obtained by local manufacture.

The Sea-borne Trade of Calcutta in these Staples during the month of July, 1892, *was as follows :—*

	Rice.	Paddy.	Total (in rice).	Wheat.	Gram and pulses.	Other food-grains.	Total.	Jute, raw.	Gunny-bags.	Linseed.	Mustard seed.	Tea, Indian.	Cotton, raw.	Silk, raw.	Sugar, Refined.	Sugar, Unrefined.	Tobacco, Unmanufactured.	Tobacco, Manufactured.
EXPORTED FROM CALCUTTA—																		
To Indian ports, viz.—																		
Bombay	30,762	20	30,775	... ..	169	638	31,582	... ..	249,100	......	......	......	......	......	125	......	...	22
Madras	38,794	......	38,794	3,238	49,352	964	92,578	10	41,200	4	......	......	......	493	50	......	...	26
Other ports in Madras ...	9,205	......	9,205	871	7,023	......	17,099	......	61,400	......	256	14	......	14	20	......	...	6
Burma	8,066	......	8,086	4,229	17,621	339	30,275	38	......	......	......	156	408	......	968	240	39,450	......
Other Indian ports	......	......	......	589	1,776	.....	2,356	......	18,063	......	......	1	......	4	1,622	148	2,756	130
Pondicherry ...	......	......	......	229	270	......	499	135	364,800	......	......	......	......	......	......	......	...	... ..
Sind	......	......	......	......	......	......	......	......	228,700	......	......	67	......	......	......	......	...	......
Total of Inter-portal trade ...	86,847*	20	86,860	9,147	76,241	1,941	1,74,180	183	963,263	4	256	238	408	511	2,765	388	42,206	184
To Foreign ports—																		
United Kingdom	30,154	......	30,154	2,81,646	11,648	......	3,23,448	35,068	2,616,000	3,01,659	37,006	1,14,089	4,072	466	......	......	...	36
Other Foreign ports	5,54,556	1,784	5,55,671	50,416	30,769	6,351	6,43,207	68,529	8,591,850	5,09,119	1,81,492	11,584	28,312	277	546	......	100	189
Total of Foreign trade	5,84,710	1,784	5,85,825	3,32,062	42,417	6,351	9,66,655	1,03,597	11,207,850	8,10,778	2,18,498	1,25,673	32,384	743	546	......	100	225
Grand Total of Exports in July 1892	6,71,557	1,804	6,72,685	3,41,209	1,18,658	8,292	11,40,844	1,03,780	12,171,113	8,10,782	2,18,754	1,25,911	32,792	1,254	3,311	388	42,306	409
Grand Total of Exports in July 1891	9,38,177	3,809	9,40,557	5,93,792	79,329	15,771	19,29,449	91,343	11,486,631	15,95,680	38,902	31,714	14,431	1,881	2,749	1,005	24,304	473

The following Statement shows the several Routes followed by the Trade in the Principal Staples of Traffic imported into Calcutta during the month of July, 1892.

IMPORTS INTO CALCUTTA.

Specification of Routes.	Food-grains. Rice.	Paddy.	Wheat.	Gram and pulses.	Other food-grains.	Fibrous Products. Jute, raw.	Gunny bags.	Oilseeds. Linseed.	Mustard seed.	Tea, Indian.	Cotton, raw.	Silk, raw.	Sugar. Refined.	Unrefined.	Tobacco. Unmanufactured.	Manufactured.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	No.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
By country boats ...	2,89 699	51,862	38,208	1,01,819	2,723	20,723	478,100	40,435	81,394	53	4,738	95	4,835	35,059	12,792	2,173
,, river steamers	48 288	346	20,537	10,026	......	26,584	. .	58,422	1,21,712	76,805	1,664	844	395	28	649	......
,, rail { E. I. Railway	38,231	21,481	2,16 879	1,49,019	8,590	640	26,285	3,10,902	46,597	443	9,398	492	907	3,166	2,572	328
,, rail { E. B. S. Railway.	19,137	120	1,128	35,337	41	3,68,067	557,410	8,951	20,738	64,434	2,441	516	879	6,000	38,343	......
,, road	40,624	2,664	.....	80	......	4	18,240	.. ...	......	......	216	...	807	3,736	4,347	438
,, sea	16,433	780	. .	1,534	4	... ..	18,850	1,124	......	1,403	16,898	...	20,817	27,168	295	531
Grand Total of Imports in July { 1892 ...	4,43,442	76,993	2,85,752	2,68,815	11,338	4,16,018	1,098,845	4,19,834	2,70,351	1,43,138	35,358	1,907	28,640	75,157	58,998	3,468
Grand Total of Imports in July { 1891 ..	7,94,907	90,150	6,62,729	2,60,072	36,928	4,56,591	2,203,897	12,81,396	2,85,574	1,60,610	33,452	2,350	49,014	69,631	64,642	3,135

The following Statement shows the Values and Quantities of the Principal Staples of Traffic exported Inland from Calcutta during the month of July, 1892.

EXPORTS FROM CALCUTTA.

Whither exported.	Cotton piece-goods. European.	Cotton piece-goods. Indian.	Cotton twist. European.	Cotton twist. Indian.	Salt.	Gunny bags.
	Rs.	Rs.	Mds.	Mds.	Mds.	No.
BENGAL.						
Burdwan ...	97,508	1,974	304	933	18,493	37,001
Birbhum ...	37,532	...	49	569	9,542	24,570
Midnapore ...	1,52,820	900	2,667	......	55,355	7,911
Hooghly ...	88,808	475	694	135	1,363	39,630
24-Parganas ..	1,11,812	2,525	249	......	11,275	35,506
Nadia ...	2,32,018	......	1,789	......	35,755	27,260
Khulna ...	60,976	. ...	248	......	4,840	... ..
Jessore ...	1,07,414	......	1,110	......	22,144	585
Murshidabad ...	44,042	......	112	14	18,479	7,215
Dinajpur ...	39,440	......	61	......	4,770	... ..
Rajshahi ...	1,59,120	. ...	430	......	14,366	4,432
Rangpur ...	5,74,638	......	186	......	13,915	1,680
Bogra ...	47,208	......	99	......	4,456	1,750
Pabna ...	2,93,828	......	271	......	48,492	8,265
Darjeeling ..	1,23,012	... ..	232	... ..	5,892	3,395
Jalpaiguri ...	1,54,016	. ...	159	......	9,900	... ..
Dacca ...	6,11,116	... .	2,816	......	23,453	8,820
Faridpur ...	84,220	......	1,338	......	49,380	42,560
Backergunge ..	63,540	......	2,371	....	40,250	1,505
Mymensingh ...	1,50,416	.....	64	. ....	13,300	840
Tippera ...	3,264	......	174	209	9,600	... ..
Chittagong ...	47,640	. ....	16	......	400	2,263
Noakhali ...	......	......	......	......	14,720	... ..
Total of Bengal ..	83,34,418	5,874	15,460	1,860	4,30,320	255,278
BIHAR.						
Patna ...	61,864	......	385	391	22,922	188,580
Gaya ...	26,396	... .	66	566	10,560	3,360
Shahabad ...	53,004	.. .	......	1,802	11,529	32,830
Muzaffarpur ...	46,426	168	.. ...	26	9,878	10,500
Darbhanga ...	79,032	. .	12	500	18,318	19,705
Saran ...	59,466	. ...	2	215	9,201	6,650
Champaran ...	1,83,002	42	37	153	8,519	14,875
Monghyr ...	25,850	... ..	1	561	17,156	24,710
Bhagalpur ..	46,252	... .	52	355	21,276	34,265
Purnea ...	37,848	588	202	241	11,554	3,300
Malda ...	... ...	.....	. .	..... .	3,665	1,150
Sonthal Parganas ...	22,350	......	69	472	12,575	4,445
Total of Bihar ...	6,41,490	798	826	5,282	1,57,153	344,370
ORISSA.						
Balasore ...	21,275	... ..	685	96	22,837	15,800
CHOTA NAGPUR.						
Hazaribagh	20,902	... ..	3	54	30,112	350
Singhbhum	19,350	.	90	308	2,384	......
Manbhum	53,186	1,008	16	888	16,348	2,625
Total of Chota Nagpur ..	93,438	1,008	109	1,250	48,844	2,975
Grand total of supplies into the Provinces under the Lieutenant-Governor of Bengal ...	40,90,624	7,680	17,080	8,488	6,59,154	6,18,423
OTHER PROVINCES.						
Assam	5,44,408	......	1,246	4	65,496	19,615
North-Western Provinces and Oudh	13,11,010	4,242	1,367	935	12,612	449,085
Punjab	4,43,410	8,778	282	25	......	100,205
Central Provinces .. .	70,961	......	158	616	......	39,725
Rajputana and Central India	51,018	252	70	12	......	11,025
Berar	688	......	......	......	......	......
Nizam's Territory	344	......	......	......	. ....	......
Bombay	7,426	252	......	......	......	249,100
Madras	76,848	42	67	1,600	......	102,600
Pondicherry	......	......	.....	......	......	304,800
Burma	2,00,854	360	656	2,420	......	......
Sind	3,535	84	......	... ..	......	228,700
Other places	15,029	2,499	......	11,608	4	11,207,850
Grand Total of Exports in July { 1892 ..	68,22,151	24,189	20,926	25,708	7,37,266	13,391,128
Grand Total of Exports in July { 1891 ...	76,55,989	46,697	21,096	18,006	8,22,220	13,846,684

The Sea-borne Trade of Calcutta in these Staples during the month of July, 1892, was as follows:—

IMPORTED INTO CALCUTTA—	Rs.*	Rs.	Mds.	Mds.	Mds.	No.
From Foreign Ports—						
United Kingdom	95,17,676	......	9,471	... ..	5,40,504	......
Other Foreign ports ...	47,226	......	433	......	2,20,390	800
Total of Foreign Trade ...	95,64,902	......	9,904	......	7,60,894	800
From Indian Ports—						
Bombay	10,927	65,005	10	6,272	47,899	......
Madras	......	41,255	......	583	......	......
Other ports in Madras ...	......	......	......	......	4,080	......
Burma	10,380	1,300	27	......	......	15,000
Other Indian ports ...	......	......	......	......	......	3,050
Total of Interportal Trade ...	21,307	1,07,560	37	6,855	51,979	18,050
Grand Total of Imports in July { 1892 ..	95,86,209	1,07,560	9,941	6,855	8,12,873	18,850
Grand Total of Imports in July { 1891...	93,73,916	1,33,149	16,725	10,851	8,30,91	2,000

* As per tariff declaration value.

The following Statement shows the several Routes followed by the Trade in the Principal Staples of Traffic exported from Calcutta during the month of July, 1892.

Specification of Routes.	Cotton piece-goods. European.	Cotton piece-goods. Indian.	Cotton twist. European.	Cotton twist. Indian.	Salt.	Gunny-bags.
	Rs.	Rs.	Mds.	Mds.	Mds.	No.
By country boats ...	95,525	1,475	2,020	......	2,61,142	87,378
,, river steamers ...	5,12,902	......	3,07	225	1,03,738	56,461
,, rail { East Indian Railway ...	27,59,490	17,130	2,918	9,652	2,14,658	978,705
,, rail { Eastern Bengal State Railway ...	29,38,212	......	11,002	......	1,33,950	95,620
,, road ...	1,44,751	2,425	462	107	4,017	1,851
,, sea ...	3,71,181	2,859	1,454	15,724	19,141	12,171,113
Grand Total of Exports in July { 1892 ...	68,22,151	24,189	20,926	25,708	7,37,266	13,391,128
Grand Total of Exports in July { 1891 ...	76,55,989	46,697	21,096	18,006	8,22,220	13,846,684

STATISTICAL DEPARTMENT,
The 13th January, 1893.

C. E. BUCKLAND,
Secy. to the Govt. of Bengal.

The following Statement shows the Quantities of the Principal Staples of Traffic imported into Calcutta from the Interior during the month of August, 1892.

IMPORTS INTO CALCUTTA.

Whence imported.	FOOD-GRAINS. Rice and Paddy. Rice.	* Paddy.	Total (in rice).	Wheat	Gram and pulses.	Other food-grains.	Total.	FIBROUS PRODUCTS. Jute, raw.	† Gunny-bags.	OIL-SEEDS. Linseed.	Mustard seed.	Tea, Indian.	Cotton, raw.	Silk, raw.	SUGAR. Refined	Unrefined.	TOBACCO. Unmanufactured.	Manufactured
BENGAL.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	No.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Burdwan	49,284	45,562	77,760	1,423	8,063	38	87,284	111	13,269	1,414	1,157	......	4	76	9	64	85	1
Birbhum	46,774	2,868	48,567	......	50	... ..	48,617	......	10,255	23	......	......	1	194	......	1	...	......
Midnapore	1,09,987	12,805	1,17,990	......	456	274	1,18,720	32	3,287	1,786	... ..	......	14	276	... ..	375	2	... ..
Hooghly	96,897	16,881	1,07,448	4,071	9,232	101	1,21,752	661	259,996	13,519	1,967	......	... ..	6	44	17,472	15,084	221
24-Parganas ...	48,665	3,993	51,161	... ..	4	......	51,165	2,221	148,649	514	......	......	128	......	1,410	12,294	2,014	12
Nadia ...	10,358	766	10,834	9,898	41,847	956	63,535	38,701	8,785	13,106	1,769	......	298	244	182	387	1,830	......
Khulna	4,920	1,150	5,639	......	181	... ..	5,820	48,564	525	... ..	......	......	47	... ..	300	10,876	4	......
Jessore	2,720	3,500	4,907	350	2,764	......	8,021	8,803	4,201	171	......	... ..	110	... ..	100	9,483	1,553	......
Murshidabad ...	6,182	......	6,182	9,580	10,235	661	26,658	3,838	425	4,176	469	... ..	3	817	2,228	13	6	......
Dinajpur	45,544	......	45,544	......	470	588	46,603	7,731	7,175	... ..	... ..	... ..	......	... ..	... ..	......	...	... ..
Rajshahi	6,918	......	6,918	258	11,293	......	18,469	1,00,916	840	5,425	230	......	......	404	... ..	... ..	65	......
Rangpur	1,130	......	1,130	......	......	... ..	1,130	42,120	7,149	......	... ..	125	......	... ..	... ..	... ..	39,095	... ..
Bogra	1	......	1	......	......	... ..	1	10,844	2,635	... ..	... ..	......	... ..	... ..	.. ..	... ..	..	......
Pabna	917	......	917	1,190	1,501	225	3,833	4,03,005	595,490	1,612	30,309	......	......	... ..	.. ..	... ..	2,053	... ..
Darjeeling	......	......	......	......	......	......	......	... ..	24,675	... ..	......	22,964	......	... ..	... ..	......	...	......
Jalpaiguri	... ..	......	... ..	......	......	... ..	... ..	3,043	35,805	......	.. ..	17,014	...	......	......	... ..	526	.. ..
Dacca	2,470	... ..	2,470	......	454	......	2,924	2,55,787	3,675	17	118	... ..	2,683	... ..	......	... ..	..	... ..
Faridpur	10,792	150	10,886	258	4,592	......	15,736	6,26,107	2,940	1,994	12,173	47	221	... ..	...	... ..	1,232	... ..
Backergunge ...	91,278	550	91,622	......	600	......	92,222	5,255	735	40	699	......	... ..	......	200	551	...	......
Mymensingh ...	11,745	......	11,745	......	......	... ..	11,745	17,473	1,260	... ..	......	......	... ..	.. ..	... ..	... ..	...	.. ..
Tippera	10,666	......	10,666	......	... ..	......	10,666	17,035	... ..	......	... ..	......	... ..	... ..	......	......	...	... ..
Chittagong	... ..	......	... ..	......	......	......	......	4,851	......	......	... ..	1,584	2,745	... ..	... ..	... ..	...	2
Noakhali	34,925	100	34,987	......	......	......	34,987	650	... ..	......	... ..	... ..	750	... .	...	... ..	...	......
Total of Bengal .	5,92,171	88,325	6,47,374	27,928	91,752	2,833	7,09,887	15,95,765	1,131,803	43,797	48,891	41,634	7,002	2,037	4,471	51,427	63,547	384
BIHAR																		
Patna	326	......	326	22,982	62,580	10,645	96,533	......	1,059	1,24,931	11,401	......	75	14	250	2,034	794	2,348
Gaya	......	......	......	2,682	... ..	... .	2,682	......	1,045	4,493	... ..	......	143	.. ..	......	12	...	531
Shahabad	... ..	......	......	60,751	10,641	1,233	72,625	... ..	175	10,860	3,157	......	... ..	......	80	381	112	47
Muzaffarpur ...	1,067	......	1,067	750	170	2,482	4,469	......	......	12,300	1,304	.8 ..	... ..	... ..	... ..	... ..	164	......
Darbhanga	... ..	......	... ..	3,733	1,760	... ..	5,492	......	105	57,815	21,242	......	... ..	... ..	... ..	234	42	41
Saran	......	......	......	11,900	13,178	4,685	29,763	... ..	105	13,427	13,481	......	... ..	... ..	... ..	164	8	......
Champaran ...	......	......	......	.. ..	297	......	297	......	......	2,332	754	......	... ..	......	... ..	63	...	......
Monghyr	4,763	......	4,763	16,787	3,379	......	24,929	......	2,125	20,779	11,896	... ..	613	... ..	... ..	131	9	10
Bhagalpur	322	......	322	21,821	27,072	4,446	53,631	......	1,589	6,112	8,774	... ..	......	... ..	......	... ..	..	... ..
Purnea	......	......	......	2,649	3,276	77	5,993	19	2,940	2,846	11,455	... ..	... ..	......	......	23	3,599	... ..
Malda	735	......	735	6,318	3,132	219	10,414	698	... ..	2,930	2.4	......	... ..	......	.. ..	— ..	571	......
Sonthal Parganas	......	......	......	7,480	2,735	......	10,215	130	1,225	5,018	1,372	... ..	... ..	260	... ..	130	15	.. ..
Total of Behar .	7,213	......	7,213	1,57,873	1,28,220	23,787	3,17,093	807	10,380	2,63,772	85,110	... ..	831	274	330	3,198	5,692	2,991
ORISSA.																		
Cuttack	999	... ..	999	......	543	......	1,542	......	......	......	......	180	... ..	......	... ..	......	...	79
Balasore	26,300	4,608	29,130	......	4,461	... ..	33,640	35	150	170	... .	... ..	... ..	... ..	... ..	......	148	......
Total of Orissa ...	27,299	4,608	30,179	... ..	5,003	... ..	35,182	35	150	170	... ..	180	... .	... ..	... ..	... ..	148	79
CHOTA NAGPUR.																		
Hazaribagh ...	......	... ..	......	......	......	......	......	......	1,155	......	... ..	220	......	......	......	......	...	......
Singbhum ...	455	......	455	......	......	......	455	......	280	145	......	.. ..	......	... ..	......	... ..	...	... ..
Manbhum ...	1,922	......	1,922	... ..	......	......	1,922	......	315	... ..	. ..	273	......	... .	... ..	... ..	...	......
Total of Chota Nagpur.	2,377	......	2,377	......	......	......	2,377	... ..	1,750	145	... ..	493	......	......	......	......	...	......
Grand Total of supplies from the Provinces under the Lieutenant-Governor of Bengal.	6,29,060	92,933	6,87,143	1,85,801	2,24,975	26,620	11,24,539	15,96,607	1,144,083	3,07,884	1,34,091	42,307	7,833	2,291	4,801	54,625	69,387	3,434
OTHER PROVINCES																		
Assam	3,325	......	3,325	......	100	......	3,425	2,138	3,309	1,948	74,465	1,37,831	175	64	......	......	...	......
North-Western Provinces and Oudh.	13	......	13	2,30,042	1,94,413	2,919	4,36,387	......	1,680	1,43,022	39,445	414	28,534	3	1,494	123	401	4
Punjab . ..	6	......	6	1,992	14,312	1,761	18,071	... ..	70	625	... ..	75	......	......	......	... ..	...	... ..
Central Provinces	5,810	......	5,810	693	5,544	......	12,047	......	......	2,869	......	......	......	......	......	......	...	......
Rajputana and Central India ...	......	......	......	1,416	10,711	694	12,821	......	......	4,988	......	... ..	......	......	......	......	...	......
Bombay	......	......	......	......	3	......	3	......	40,000	......	.. ..	......	14,285	1	.. .	......	...	
Madras	4	......	4	......	......	......	4	......	... ..	......	... ..	......	3,318	... ..	3,053	... ..	316	236
Burma	98	......	98	... ..	......	... ..	98	......	400	......	... ..	... ..	2,254	3	... ..	... ..	...	26
Other places ...	......	35	22	... ..	.. ..	. . ..	22	... ..	... .	......	... ..	... .	... ..	... ..	64,822	... ..	39	284
Grand Total of Imports in August ... 1892	6,38,316	92,968	6,96,421	4,28,944	4,50,058	31,994	16,07	15,98,745	1,189,533	4,61,340	2,47,911	1,80,627	53,309	2,332	74,089	54,748	70,143	4,025
Grand Total of Imports in August ... 1891	11,58,271	1,08,067	12,25,813	5,80,185	3,96,639	65,034	23,67,721	12,64,571	1,658,429	11,17,194	3,37,753	2,15,277	38,395	2,345	50,157	75,814	90,136	3,132

* One maund of paddy is equivalent to 25 seers of rice. | † Exclusive of bags obtained by local manufacture.

The Sea-borne Trade of Calcutta in these Staples during the month of August, 1892, *was as follows.*—

EXPORTED FROM CALCUTTA—	Rice.	Paddy.	Total (in rice).	Wheat	Gram and pulses.	Other food-grains.	Total.	Jute, raw.	Gunny-bags.	Linseed.	Mustard seed.	Tea, Indian.	Cotton, raw.	Silk, raw.	Sugar Refined	Unrefined.	Tobacco Unmanufactured.	Manufactured
To Indian ports, viz.—																		
Bombay ...	6,192	30	6,211	......	39	459	6,709	......	936,490	... ..	......	1,323	......	... ..	632	......	...	8
Madras	1,387	......	1,387	2,004	25,536	1,437	30,364	63	27,600	......	......	438	......	111	90	......	...	8
Other ports in Madras ...	18,229	......	18,229	860	9,936	.....	29,055	......	72,500	... ..	1,068	... ..	... ..	29	82	5,444	...	8
Burma ...	9,732	......	9,732	2,978	16,578	708	29,996	25	587,950	......	......	111	11	33	1,243	453	32,894	296
Other Indian ports	......	......	......	1,206	2,725	......	3,931	......	73,500	... ..	80	... ..	... ..	23	1,539	91	3,026	78
Pondicherry ...	......	......	......	99	210	.. ...	309	... ..	10,500	... ..	......	......	... ..	......	......	......	...	......
Sind	......	......	......	......	......	......	......	... ..	45,000	......	... ..	... .	......	......	... ..	......	...	......
Total of Inter-portal trade ...	35,540	30	35,559	7,147	55,054	2,604	1,00,364	103	1,753,450	......	1,148	2,093	11	196	3,586	6,018	33,920	398
To Foreign ports— United Kingdom	7,320	......	7,320	1,40,574	47,759	......	1,95,653	4,25,636	3,637,100	2,54,814	8,163	1,82,663	2,076	164	......	......	...	5
Other Foreign ports ...	4,11,205	1,504	4,12,145	7,457	22,786	9,334	4,51,722	1,02,897	7,573,714	1,31,188	35	12,161	10,877	1,600	856	......	2,779	185
Total of Foreign trade ...	4,18,525	1,504	4,19,465	1,48,031	70,545	9,334	6,47,375	5,28,533	11,210,814	3,86,002	8,198	1,94,824	12,953	1,764	836	......	2,779	190
Grand Total of Exports in August 1892	4,54,065	1,534	4,55,024	1,55,178	1,25,599	11,938	7,47,739	5,28,611	12,964,264	3,86,002	9,346	1,96,916	12,964	1,960	4,442	6,018	38,699	583
Grand Total of Exports in August 1891	8,54,386	1,862	8,55,550	3,49,206	1,97,831	18,510	14,21,150	2,56,199	16,506,150	8,93,470	2,35,289	1,79,127	7,883	991	3,380	1,033	32,529	598

The following Statement shows the several Routes followed by the Trade in the Principal Staples of Traffic imported into Calcutta during the month of August, 1892.

IMPORTS INTO CALCUTTA.

Specification of Routes.	Food-grains.					Fibrous Products.		Oilseeds.		Tea, Indian.	Cotton, raw.	Silk, raw.	Sugar.		Tobacco.	
	Rice.	Paddy.	Wheat.	Gram and pulses.	Other food-grains.	Jute, raw.	Gunny-bags.	Linseed.	Mustard seed.				Refined.	Unrefined.	Unmanufactured.	Manufactured.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	No.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
By country boats ...	4,12,194	40,436	81,583	1,19,504	13,250	1,40,752	394,753	1,04,082	1,14,622	... ..	2,014	398	3,210	42,352	19,793	2,218
,, river steamers ...	42,115	1,631	24,125	8,948	. .	1,80,224	... ..	26,894	62,991	1,00,817	1,149	854	9	377	376	...
,, rail { East Indian Railway.	79,690	44,506	3,26,542	3,01,565	18,728	9,947	44,485	3,22,324	57,567	982	28,667	619	463	3,350	1,543	857
,, rail { Eastern Bengal State Railway.	14,783	... .	694	15,588	16	12,61,997	685,615	7,870	12,731	77,064	2,324	487	2,228	5,906	44,090	...
,, road	33,148	1,834	... ..	..	......	929	24,300	......	... ..	...	93	... ..	290	2,761	3,838	333
,, sea	26,386	4,561	... ..	4,463	... ..	4,896	49,400	170	......	1,764	22,152	4	67,884	......	503	617
Grand Total of Imports in August { 1892 ..	6,38,316	92 968	4,23,944	4,50 058	31,994	15,98,745	1,189,533	4,61,340	2,47,911	1,84,627	56,390	2,362	74,089	54,748	70,143	4,025
Grand Total of Imports in August { 1891 ..	11,58,271	1,08,667	5,80,185	3,96 689	65,034	12,64,571	1,636,429	11,17,194	3,37,753	2,15,277	36,395	2,345	50,157	76,614	90,136	3,133

The following Statement shows the Values and Quantities of the Principal Staples of Traffic exported Inland from Calcutta during the month of August, 1892

EXPORTS FROM CALCUTTA.

Whither exported.	Cotton piece-goods.		Cotton twist.		Salt.	Gunny-bags.
	European.	Indian.	European.	Indian.		
BENGAL.	Rs.	Rs.	Mds	Mds.	Mds.	No.
Burdwan ...	2,02,668	1,092	561	792	27,169	52,630
Birbhum ...	72,796	4,116	139	804	16,476	29,505
Midnapore ...	1,85,660	..	2,980	... .	45,950	54,314
Hooghly ...	84,250	1,936	516	137	673	56,233
24-Parganas ...	73,015	2,692	461	4	13,625	1,605
Nadia ...	2,12,574	100	1,843	... .	43,354	17,365
Khulna ...	53,584	......	149	......	4,577	105
Jessore ...	1,10,430	. .	1,153	.. ..	22,239	5,985
Murshidabad ..	83 860	1,217	244	.. ..	17,133	10,290
Dinajpur ...	68,260	. ....	83	104	8,227	1,375
Rajshahi ...	4,02,266	... ..	357	......	27,104	5,615
Rangpur ...	2,65,744	.... .	245	......	13,389	2,625
Bogra ...	2,60,644	... ..	116	.. ...	4,668	1,190
Pabna ...	4,00,996	......	338	. ...	50,922	10,525
Darjeeling ...	2,29,414	......	199	......	6,700	315
Jalpaiguri ...	1,29,064	......	481	....	5,843	......
Dacca ...	9,25,468	......	2,049	......	60,332	7,765
Faridpur ...	75,564	......	670	......	41,648	21,420
Backergunge ...	4,64,644	......	2,148	......	35,645	6,370
Mymensingh ...	1,44,024	... ..	9	....	23,679	... ..
Tippera ...	12,172	......	279	......	10,600	.. ..
Chittagong ...	1,32,809	......	414	3,867	300	2,500
Noakhali ...	......	......	......	... ..	16,775	......
Total of Bengal	45,89,237	11,153	15,234	5,708	5,03,028	287,762
BIHAR						
Patna ...	1,41,642	610	301	698	30,258	189,165
Gaya ...	60,630	42	175	1,201	11,925	30,240
Shahabad ...	1,87,018	1,344	14	1,716	17,379	64,610
Muzaffarpur ...	89,274	210	......	135	9,541	11,908
Darbhanga ...	1,43,538	500	7	1,054	24,234	33,870
Saran ...	94,654	42	7	286	18,240	15,050
Champaran ...	2,10,634	1,182	......	544	7,749	9,835
Monghyr ..	54,900	252	49	630	32,072	38,895
Bhagalpur ...	1,96,560	......	357	407	25,599	41,360
Purnea ...	78,922	.... .	181	940	13,875	7,010
Malda ...	.. ..	......	.. ..	...	6,950	264
Sonthal Parganas ...	95,506	...	124	694	21,306	22,435
Total of Bihar ..	13,33,278	4,182	1,215	8,105	2,19,119	464,642
ORISSA						
Cuttack ...	300	......	......	705	1,797	10,200
Balasore ...	33,250	......	613	464	21,567	61,786
Total of Orissa ...	33,550	......	613	1,169	23,364	71,986
CHOTA NAGPUR.	Rs.	Rs.	Mds.	Mds	Mds	No
Hazaribagh	15,964	... ..	......	37	3,715	1,085
Singhbhum	13,450	... ..	24	725	2,044	1,330
Manbhum	1,14,856	......	39	743	11,570	3,430
Total of Chota Nagpur	1,44,270	......	63	1,505	17,329	5,845
Grand Total of supplies into the provinces under the Lieutenant-Governor of Bengal.	61,20,335	15,335	17,125	16,487	7,62,840	830,235
OTHER PROVINCES.						
Assam	8,13,212	......	2,035	......	50,271	26,406
North-Western Provinces and Oudh	18,47,454	14,784	2,783	1,038	9,391	689,050
Punjab	3,61,850	11,346	759	43	1,080	126,470
Central Provinces	48,156	1,008	332	344	......	87,675
Rajputana and Central India	40,906	420	113	30	......	6,930
Berar	844	......	......	......	... ..	......
Nizam's Territory	840	......	... ..	......	... ..	... ..
Bombay	7,874	210	8	... ..	......	938,400
Madras	60,780	......	115	2,056	... ..	100,100
Pondicherry	... ..	. ....	... ..	... ..	......	10,500
Burma	2,80,420	......	1,220	690	... ..	587,950
Sind	... ..	126	......	......	... ..	45,000
Other places	33,567	3,156	5	19,885	... ..	11,210,814
Grand Total of Exports in August { 1892	96,06,278	48,335	24,495	40,393	8,23,581	14,651,530
Grand Total of Exports in August { 1891 ..	87,70,709	46,134	25,352	24,784	6,81,243	18,792,198

The Sea-borne Trade of Calcutta in these Staples during the month of August, 1892, was as follows :—

IMPORTED INTO CALCUTTA—	Rs.*	Rs.	Mds.	Mds.	Mds.	No.
From Foreign Ports—						
United Kingdom ...	1,26,94,871	......	9,056	......	5,96,205	......
Other Foreign ports ...	1,09,642	......	647	......	2,86,308	......
Total of Foreign Trade .	1,28,04,513	... ..	9,703	... ..	8,82,513	......
From Indian Ports—						
Bombay	55,913	1,87,887	5	12,216	61,873	40,000
Madras	3,437	31,137	......	146	... ..	......
Other Ports in Madras ...	.... .	... .	5	153	4,442	......
Burma	15,650	806	33	10	......	400
Total of Interportal Trade ..	75,000	2,19,830	43	12,525	66,315	40,400
Grand Total of Imports in August { 1892 ...	1,28,79,513	2,19,830	9,746	12,525	9,48,828	40,400
Grand Total of Imports in August { 1891 ...	1,13,93,85.	1,65,820	13,870	15,079	8,16,083	14,474

* As per tariff declaration value.

The following Statement shows the several Routes followed by the Trade in the Principal Staples of Traffic exported from Calcutta during the month of August, 1892.

Specification of Routes.	Cotton piece-goods.		Cotton twist.		Salt.	Gunny-bags.
	European.	Indian.	European.	Indian.		
	Rs.	Rs.	Mds.	Mds.	Mds.	No.
By country boats	84,800	1,700	1,687	......	3,62,543	102,547
,, river steamers	7,76,832	923	5,095	......	1,14,759	149,769
,, rail { East Indian Railway	40,39,132	37,914	5,488	12,831	2,30,663	1,370,425
,, rail { Eastern Bengal State Railway	40,57,220	......	9,546	......	94,479	64,225
,, road	1,00,617	2,691	336	95	4,123	300
,, sea	5,47,667	3,156	2,313	27,667	17,014	12,964,264
Grand Total of Exports in August ... { 1892 ...	96,05,278	46 335	24,495	40,593	8,23,581	14,651,530
Grand Total of Exports in August ... { 1891 ...	87,70,709	46,134	25,352	24,784	6,86,243	18,792,198

STATISTICAL DEPARTMENT,
The 18th January, 1893.

C. E. BUCKLAND,
Secy. to the Govt. of Bengal.

I.—Table showing the Monthly and Annual Rainfall at 288 Rainfall-recording Stations in Bengal for 1892.

District.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
ORISSA.														
Puri	Puri	—	—	—	—	—	11·36	8·76	6·96	8·24	6·97	3·36	—	45·65
	Khurda	—	0·01	0·10	—	1·37	12·67	10·63	9·71	8·44	4·78	0·17	—	47·88
	Bhanpur	—	0·16	0·01	0·09	0·71	12·14	11·87	10·94	11·73	6·12	—	—	54·07
	False Point	—	0·42	0·01	—	2·17	15·69	8·90	5·67	15·43	5·18	3·29	—	56·76
	Gop	—	—	—	—	—	6·17	10·55	7·08	10·26	6·44	1·75	—	42·25
	Satpara	—	—	—	—	0·03	11·88	8·83	7·15	7·40	6·30	2·07	—	43·75
	Pipli	—	0·56	—	—	0·45	9·06	8·03	12·26	9·25	4·66	1·36	—	45·63
Cuttack	Jagatsingpur	—	0·43	—	—	0·34	7·34	14·41	10·35	10·45	9·02	0·76	—	53·10
	Banki	—	—	0·05	0·04	1·85	9·14	15·34	10·58	8·20	3·65	0·96	—	49·79
	Cuttack	—	—	—	0·15	1·75	11·78	12·45	6·37	9·20	12·47	0·36	—	54·53
	Kendrapara	—	0·91	0·06	0·01	0·54	10·34	12·34	8·20	7·77	6·29	0·94	—	47·39
	Jajpur	—	—	—	0·07	2·27	10·79	9·05	10·57	14·07	3·40	0·12	—	50·34
	Dharmsala	—	—	—	0·18	1·12	10·39	13·05	8·28	19·60	3·50	0·15	—	56·27
	Salipore	—	0·15	0·30	—	0·43	7·03	15·25	13·49	8·58	3·95	1·60	—	50·78
	Pal Lahara	?	?	?	?	?	9·10	24·07	4·74	11·67	2·70	0·68	—	?
Balasore	*Acquapada*	—	—	—	0·42	2·80	12·75	7·90	9·22	15·73	2·34	1·21	—	52·37
	Chandbali	—	0·24	—	—	1·50	15·88	8·15	8·52	4·61	3·35	1·36	—	43·61
	Bhadrak	—	0·18	—	4·59	2·92	17·98	8·06	10·09	10·46	6·12	0·33	—	60·73
	Soro	—	0·25	—	0·25	3·95	15·24	6·10	4·93	10·72	5·73	0·75	—	47·93
	Balasore	—	0·38	—	0·04	2·58	9·49	7·54	5·54	12·34	9·73	1·09	—	48·73
	Jellasore	—	—	—	0·20	2·79	8·60	8·42	8·29	7·75	3·56	0·80	—	40·41
	Baripoda	—	0·57	—	0·63	4·35	6·14	14·14	3·03	8·77	7·47	0·42	—	45·52
SOUTH WEST BENGAL.														
Midnapore	Contai	—	—	—	0·81	3·11	8·28	7·52	6·25	9·58	4·03	6·49	—	46·07
	Tamluk	—	0·20	—	1·73	4·26	4·48	8·92	6·79	6·92	2·35	3·40	—	39·05
	Midnapore	—	0·18	—	1·70	3·29	6·72	6·27	5·51	6·87	3·15	4·88	—	38·57
	Ghatal	—	0·09	—	1·25	7·11	7·19	11·87	3·67	5·67	2·19	6·17	—	45·21
	Kukrahaty	—	—	0·05	0·66	5·98	7·31	18·73	13·14	9·35	2·01	3·17	—	60·60
	Garhbeta	—	0·35	—	0·75	3·51	11·01	11·40	5·81	4·89	2·25	1·56	—	41·53
24-Parganas	Sauger Island	—	—	—	0·03	1·69	7·44	6·71	9·00	13·89	7·28	7·42	—	54·45
	Diamond Harbour	—	—	0·04	0·60	7·89	8·70	21·86	12·99	9·69	2·19	6·17	—	70·13
	Canning Town	—	—	—	2·98	2·69	19·31	19·87	16·03	8·69	4·39	7·15	—	81·11
	Alipore (*Observatory*)	—	—	—	1·77	4·45	9·00	10·26	8·86	7·60	3·35	1·74	—	47·03
	Barrackpore	—	0·21	—	2·37	2·67	6·20	10·05	7·60	5·85	4·73	3·92	—	43·60
	Dum-Dum	—	0·22	—	2·74	3·90	10·00	13·72	4·96	11·16	2·48	2·10	—	51·28
	Barasat	—	0·67	—	2·60	4·69	7·68	10·24	4·38	8·35	5·19	2·13	—	45·90
	Basirhat	—	0·05	—	3·35	3·31	8·14	18·27	6·48	5·26	7·23	1·20	—	53·38
Howrah	Howrah	—	0·01	—	1·53	3·02	9·37	10·86	6·30	6·37	1·55	1·54	—	40·55
	Mohesreka	—	0·04	—	1·28	2·98	5·72	8·62	3·65	5·09	2·70	3·15	—	33·23
	Ooloobeariah	—	0·14	—	1·35	3·88	8·54	12·02	8·48	10·89	2·34	2·52	—	50·06
Hooghly	Serampore	—	0·18	—	3·49	3·57	6·61	11·15	8·28	4·67	4·51	5·85	—	48·31
	Hooghly	—	0·05	—	3·73	5·18	4·74	7·61	4·75	7·44	3·95	4·05	—	41·50
	Jehanabad	—	0·04	—	1·05	5·78	7·75	14·08	3·63	6·39	1·84	3·21	—	43·77
Nadia	Ranaghat	—	0·14	—	2·53	5·38	8·71	10·52	4·49	5·63	3·81	2·71	—	43·92
	Krishnagar	—	0·03	—	4·15	2·24	8·61	6·28	3·38	4·55	3·52	2·62	—	55·41
	Chuadanga	—	0·04	—	1·05	9·74	7·40	5·07	5·68	?	?	?	—	?
	Meherpur	—	0·36	—	0·18	4·47	9·76	8·04	10·18	7·99	1·84	0·43	—	43·19
	Kushtia	—	0·24	1·13	3·16	8·75	6·62	10·62	6·80	7·56	2·30	0·80	—	47·98
Khulna	Satkhira	—	0·12	—	3·03	5·57	5·68	10·01	8·18	8·48	6·32	0·68	—	48·07
	Bagerhat	—	—	—	0·46	6·66	8·68	13·66	10·80	6·96	8·03	1·67	—	56·92
	Khulna	—	0·19	—	2·63	5·45	8·97	14·76	7·64	5·20	6·56	1·60	—	53·00
	Nakipur	—	—	—	1·70	4·67	12·07	14·19	11·35	9·50	4·70	2·19	—	60·37
	Rampal	—	0·09	—	0·80	3·89	11·93	12·80	10·05	8·54	5·74	1·01	—	54·85
Jessore	Narail	—	0·07	—	4·39	6·39	10·94	12·11	6·59	2·81	6·01	3·34	—	52·65
	Jessore	—	0·03	—	1·83	8·12	10·54	8·45	4·61	5·96	6·63	7·71	—	53·88
	Jhenidah	—	0·17	—	3·85	8·89	8·60	10·13	10·07	5·77	8·77	2·15	—	58·31
	Magura	—	0·24	0·10	3·04	6·62	10·00	12·79	10·31	3·45	5·24	3·76	—	55·55
	Bangaon	—	—	—	2·32	5·97	6·59	9·45	6·48	8·51	7·47	4·25	—	51·04
Burdwan	Kalna	—	0·02	—	4·37	3·80	9·01	10·68	7·39	5·25	6·11	3·33	—	49·96
	Burdwan	—	0·15	—	1·92	3·92	10·73	7·94	3·48	6·81	3·92	1·93	—	40·80
	Katwa	—	0·15	—	1·47	3·15	5·50	13·84	6·71	6·39	3·09	0·84	—	41·14
	Raniganj	—	0·69		2·01	2·68	13·39	8·37	7·54	9·78	3·28	0·19	—	47·88
	Mankur	—	0·29	—	0·18	3·16	5·99	8·29	5·73	5·08	0·98	0·93	—	30·63
Bankura	Bankura	—	0·24	—	0·84	5·30	10·03	9·33	3·88	6·57	4·29	1·90	—	42·38
	Vishnupur	—	0·45	—	1·18	5·12	8·11	10·40	5·97	8·47	3·45	2·44	—	45·59
	Maliara	—	0·68	—	0·72	1·60	8·78	7·17	7·20	6·77	1·07	0·32	—	34·31
	Khatra	—	0·35	—	0·70	4·10	9·72	12·47	7·14	10·64	4·39	2·84	—	52·55
	Indas	—	0·09	—	1·79	5·82	7·40	14·06	6·92	5·08	3·66	1·98	—	46·80
	Kotalpur	—	—	—	0·88	1·89	9·64	11·74	8·87	2·02	1·91	1·73	—	38·68
	Anda	—	—	—	1·61	5·07	9·25	11·83	5·08	2·80	4·00	0·80	—	40·45
	Gangajalghati	—	0·38	0·06	0·46	2·50	8·77	9·43	6·92	5·17	2·25	0·60	—	36·54
	Raipore	—	0·70	—	1·05	3·20	9·83	13·49	5·67	10·16	7·24	1·68	—	53·02
	Sonamukhi	—	0·21	—	0·53	4·21	13·05	8·24	4·78	5·30	4·73	2·47	—	41·58
Birbhum	Suri	—	0·81	—	0·50	2·42	16·78	14·69	9·26	5·90	1·74	0·08	—	52·28
	Hetampur	—	0·52	—	0·32	2·83	9·14	16·05	9·62	7·06	4·82	0·15	—	50·76
	Rampur Haut	—	0·93	—	1·70	3·94	10·83	10·10	7·55	7·97	5·46	0·08	—	48·56
	Bolpore	—	0·55	—	0·09	2·50	16·09	9·81	6·32	6·82	0·69	1·28	—	44·63
	Murarai	—	—	—	1·42	6·04	10·03	10·96	5·67	7·75	1·10	—	—	43·97
Murshidabad	Kandi	—	0·55	—	2·62	2·97	8·42	9·60	9·48	7·81	2·31	0·22	—	44·18
	Berhampore	—	0·78	—	2·32	4·64	10·38	9·39	15·78	8·24	1·49	0·14	—	53·16
	Lalbag	—	0·63	1·02	2·15	8·06	11·90	7·16	9·70	7·68	3·26	0·13	—	51·69
	Azimganj	—	0·70	0·17	2·34	5·45	9·09	13·41	3·10	6·82	2·44	—	—	43·52
	Jangipur	—	0·90	0·21	2·73	4·68	5·76	8·84	11·15	5·14	1·39	0·01	—	40·81
	Lalgola	—	0·69	0·25	3·00	5·75	4·45	8·62	12·90	6·00	1·15	—	—	42·72
	Akhriganj	—	0·49	0·68	1·69	5·99	5·38	8·57	4·17	6·50	0·94	0·11	—	35·22
	Patkabari	—	0·30	—	1·82	4·30	7·20	8·00	4·70	3·90	2·80	0·40	—	33·42
NORTH BENGAL.														
Pabna	Pabna	—	0·33	0·27	3·24	8·15	8·13	11·31	6·02	4·91	1·78	0·52	—	44·66
	Sirajganj	—	0·16	1·06	8·30	8·78	11·63	17·95	10·95	5·54	0·73	0·14	—	65·24
Bogra	Sherpur	—	0·33	1·32	7·96	6·16	9·26	14·97	10·36	5·62	1·21	—	—	57·49
	Nowkhilla	—	0·29	0·96	6·52	7·93	11·81	17·47	12·83	10·41	1·41	—	—	69·63
	Bogra	—	0·31	3·66	4·65	6·13	9·49	15·02	15·51	8·23	0·99	0·02	—	62·01
	Panchbibi	—	0·45	1·00	6·83	4·20	12·32	13·82	12·50	5·14	0·91	—	—	57·77
Rajshahi	Boalia	—	0·63	1·10	3·28	4·73	6·09	6·51	11·40	4·93	1·37	0·07	—	40·11
	Nattore	—	0·91	1·07	3·22	9·71	9·95	19·72	9·44	4·48	0·98	0·08	—	59·56
	Naogaon	—	0·40	1·20	2·59	4·14	8·45	13·84	10·47	3·11	1·60	—	—	45·80
	Lalpore	—	0·40	0·54	2·53	5·97	11·28	7·58	8·69	3·01	0·58	—	—	40·58
	Manda	—	0·54	0·95	4·23	3·85	8·07	14·35	16·17	3·10	0·14	—	—	51·40
Malda	Malda	—	0·70	0·97	6·10	0·94	7·66	16·02	8·46	6·60	2·65	—	—	50·10
	Chanchal	—	0·18	0·45	1·57	1·96	4·01	18·23	12·77	2·75	0·27	—	—	42·19
	Gajol	—	0·50	0·25	5·08	2·40	9·44	21·41	14·72	4·67	1·87	—	—	60·43
	Sibgunj	—	0·64	0·13	2·75	4·25	4·42	9·27	8·37	5·92	1·45	0·05	—	37·23

District.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
NORTH BENGAL—*concluded.*														
DINAJPUR	Mahadebpur	—	0·18	1·09	3·01	3·32	8·52	12·26	15·68	5·27	1·68	—	—	51·31
	Churaman	—	0·24	1·06	3·32	3·80	5·51	23·16	17·21	3·92	0·62	—	—	64·83
	Raiganj	—	0·31	0·85	2·14	4·72	8·73	29·63	24·51	7·08	0·84	—	—	78·20
	Dinajpur	—	0·31	1·10	2·53	7·78	13·22	22·27	23·58	2·74	0·59	—	—	74·03
	Balughat	—	0·37	0·74	6·3	2·96	6·45	19·76	14·92	8·42	1·53	—	—	61·48
	Thakurgaon	—	0·18	1·17	1·79	10·15	19·95	22·91	29·93	7·22	0·47	—	—	93·76
RANGPUR	Bhawaniganj (*Gaibanda*)	—	0·30	2·77	5·52	17·33	14·19	13·71	13·29	4·62	0·70	—	—	72·43
	Rangpur	—	0·28	3·70	5·79	18·34	14·23	24·93	28·20	7·43	3·54	—	—	104·44
	Kurigaon	—	0·45	3·85	6·02	17·75	24·52	22·08	23·18	5·63	0·21	—	—	99·9
	Bazd·gra (*Nilphamari*)	—	0·40	1·19	2·86	15·42	10·49	48·76	31·51	6·5	2·21	—	—	119·21
	Ulipur	—	0·39	2·35	4·82	26·61	18·05	18·76	18·83	6·83	0·3	—	—	96·94
JALPAIGURI	Jalpaiguri	—	0·60	0·46	3·52	28·90	18·46	52·82	39·11	17·64	1·54	0·35	0·36	163·76
	Altpore Dooar	—	0·84	0·50	9·65	28·16	27·20	51·81	40·34	14·51	Nil	1·75	0·23	174·28
	Fallacotta	—	1·26	0·49	5·48	28·21	16·79	34·73	50·90	12·24	1·27	0·72	—	152·03
	Debiganj	—	0·31	1·08	4·24	14·44	19·75	26·92	32·73	11·00	1·27	0·60	—	112·39
	Bhagatpur (*Nagrakatta*)	-	2·25	1·14	23·20	38·82	26·21	51·99	36·86	26·70	8·03	1·82	0·62	217·64
KUCH BIHAR	Dinhatta	—	0·21	1·82	1·92	30·86	27·80	52·34	34·10	7·24	0·03	0·44	—	136·76
	Kuch Bihar	—	0·49	1·27	4·10	46·22	29·39	41·05	39·97	19·81	0·33	1·20	—	174·74
	Mekliganj	—	0·46	1·15	5·29	27·77	34·32	35·29	45·64	9·54	1·45	0·03	—	157·94
	Matabhanga	—	0·37	1·20	3·74	31·39	24·53	40·81	37·68	10·79	1·23	0·83	—	152·57
DARJEELING	Baxa	0·76	3·75	1·80	16·54	31·96	44·48	82·09	51·28	44·78	9·77	1·11	1·15	289·47
	Siliguri	—	0·77	0·30	7·49	14·89	32·72	47·74	35·85	18·61	0·99	0·81	0·29	159·90
	Darjeeling	0·59	2·14	0·92	8·30	12·79	25·60	43·23	25·25	12·55	1·02	0·30	0·62	134·31
	Kalimpong	0·14	1·74	0·48	6·21	9·86	15·88	30·82	14·41	11·71	0·14	0·67	0·79	92·83
	Kurseong	0·06	3·16	0·40	9·36	12·28	26·71	53·70	29·73	19·20	2·16	1·15	0·16	158·07
EAST BENGAL.														
CHITTAGONG	Cox's Bazar	—	—	—	4·06	15·03	28·36	32·95	18·64	19·64	17·40	0·90	—	136·98
	Chittagong	—	0·25	0·04	12·2	12·22	9·56	15·81	7·94	17·08	13·45	4·97	—	93·54
	Kutubdia	—	—	—	3·14	11·88	20·77	24·23	15·32	14·03	17·96	5·23	—	112·86
	Satkanya	—	—	—	7·69	9·41	18·53	24·26	9·70	8·47	9·10	2·10	—	89·26
	Fenoa	?	?	?	?	?	?	?	?	?	?	4·47	—	
	Kodalı	?	?	?	?	?	?	?	?	?	?	1·64	—	
CHITTAGONG HILL TRACTS.	Rangamatia	—	1·20	0·42	7·59	15·26	15·39	15·53	10·39	8·79	7·05	3·00	—	84·13
	Bundarban	—	—	—	6·35	11·72	19·21	16·60	12·08	7·48	8·04	2·86	...	84·63
BACKERGUNGE	Patuakhali	—	0·02	—	4·07	4·22	13·46	19·32	15·91	7·92	7·08	2·44	—	74·44
	Pirojpur	—	- -	0·20	1·36	5·44	12·59	11·30	6·33	6·54	5·69	2·76	—	51·80
	Barisal	—	0·26	0·35	2·48	7·31	13·38	12·94	9·46	9·27	5·64	2·11	—	63·59
	Gaurnadi	—	—	0·75	1·87	9·40	9·49	11·80	6·46	4·53	3·10	3·49	—	50·80
	Bhola	—	—	0·22	4·71	5·66	16·07	17·30	8·09	8·14	6·89	2·66	—	70·64
	Daulatkhan	?	?	?	?	9·24	16·33	24·25	11·16	10·52	10·55	5·17	—	87·22?
	Gauphal	—	0·14	—	2·47	10·05	14·64	18·76	13·3	10·35	7·3	2·22	—	79·07
NOAKHALI	Noakhali	—	0·26	0·03	7·25	7·07	25·13	23·88	19·76	14·73	11·19	6·54	—	115·84
	Fenny	—	1·48	1·14	10·66	12·24	17·21	24·29	12·64	10·5	13·22	5·75	—	104·78
	Harishpur	—	0·15	0·01	6·27	9·62	32·37	21·24	34·3	21·66	17·89	6·01	—	148·93
	Ramganj	—	0·51	0·81	4·41	6·11	13·83	13·50	9·96	9·28	6·74	5·99	—	70·74
FARIDPUR	Madaripur	—	0·37	—	4·41	9·71	11·16	10·73	5·08	7·11	3·87	4·45	—	56·89
	Faridpur	—	1·37	0·77	3·23	8·55	8·26	11·64	9·58	7·16	5·56	6·11	—	62·03
	Goalundo	—	0·81	0·47	3·38	7·00	9·59	11·40	9·80	5·76	2·85	3·62	—	54·08
DACCA	Munshiganj	—	0·86	1·38	6·99	10·66	9·53	9·08	9·07	9·44	7·45	3·80	—	67·66
	Dacca	—	1·10	1·22	3·63	9·38	7·51	8·08	6·07	5·23	5·35	7·12	—	54·75
	Narayanganj	—	0·83	1·10	3·64	9·54	9·24	7·87	9·56	9·05	6·11	5·1	—	62·25
	Manikganj	—	1·13	0·85	4·29	6·54	6·79	9·38	8·14	3·86	2·53	4·43	—	48·00
	Jaydebpur	—	1·28	1·66	6·93	9·16	9·63	8·16	7·83	5·77	2·01	2·91	—	54·74
HILL TIPPERA	Agartala	—	0·83	0·51	11·58	12·00	15·98	12·18	6·31	9·42	2·28	4·72	—	76·10
TIPPERA	Comilla	—	0·07	1·33	10·44	11·88	16·35	15·96	7·31	6·56	7·88	3·96	—	81·07
	Chandpur	—	2·15	1·30	13·66	15·52	24·98	19·28	8·34	7·29	5·9	4·2	—	104·82
	Brahmanbaria	—	0·42	1·46	11·39	13·93	17·11	8·14	5·74	12·95	8·99	5·73	—	83·86
	Ramchandrapur	—	0·86	0·83	7·39	4·60	8·15	5·83	1·96	4·00	4·84	3·17	—	41·59
	Nasirnagar	—	1·90	2·30	11·50	9·10	16·88	8·66	6·09	13·60	7·84	3·65	—	81·01
	Dandkandi	—	—	1·36	2·47	7·86	9·62	12·58	3·90	3·74	2·78	2·05	—	46·35
	Kasba	—	—	?	11·61	6·34	12·72	11·73	7·58	6·92	8·30	5·69	—	71·20?
	Laksham	—	1·40	1·50	6·75	11·50	20·70	13·25	10·22	9·25	5·61	4·15	—	84·33
MYMENSINGH	Kishoreganj	—	0·30	0·96	9·09	19·82	15·32	8·11	13·40	9·54	3·19	3·37	—	85·10
	Atia (*Tangail*)	—	0·82	0·84	7·33	9·03	8·40	8·62	6·90	7·25	3·02	0·56	—	52·75
	Mymensingh	—	1·53	1·31	8·17	18·18	14·87	13·51	11·89	7·02	2·00	0·24	—	79·02
	Jamalpur	—	0·29	2·51	2·81	11·39	11·10	16·83	16·16	11·17	2·9	—	—	74·26
	Netrakona	—	1·73	5·37	9·58	22·16	20·83	18·63	19·87	1·55	4·90	0·28	—	115·10
	Subarnakhali	—	0·18	0·90	5·48	6·73	14·98	10·9	11·53	13·32	1·49	0·29	—	61·74
	Durgapur	—	2·02	7·70	7·72	23·68	34·67	26·87	31·20	24·55	7·96	—	—	165·27
	Sherpur Town	—	—	2·27	4·54	14·68	18·34	22·74	19·95	8·55	4·37	—	—	95·40
	Diwanganj	—	0·28	2·18	?	15·75	15·61	10·93	16·07	6·28	1·53	—	—	69·63
NORTH BIHAR.														
PURNEA	Kishanganj	—	0·31	0·90	3·08	6·99	9·09	18·99	39·22	4·69	1·33	—	—	84·51
	Araria	—	0·13	0·64	1·82	5·28	17·21	21·88	32·68	3·19	0·05	—	—	82·88
	Purnea	—	0·08	0·17	2·53	5·24	8·33	22·44	23·10	5·14	0·03	—	—	67·09
	Gondwara (*Korah*)	—	—	0·32	3·73	2·84	7·57	18·4	20·17	3·56	Nil	—	—	56·33
	Barsoe	—	0·20	0·35	2·94	5·14	8·36	29·02	17·20	7·01	Nil	—	—	70·21
	Forbesganj	—	—	0·13	0·89	8·09	10·52	18·26	32·88	2·97	0·12	—	—	74·26
	Kaliaganj	—	0·04	0·18	1·67	11·39	14·40	31·83	29·23	?	Nil	—	—	88·04?
BHAGALPUR	Madhipura	—	0·31	0·35	2·18	2·02	10·63	13·57	16·59	3·38	0·25	—	—	49·58
	Bangaon (*Syfabad*)	—	0·41	0·50	2·00	0·38	6·85	11·88	22·50	2·12	—	—	—	46·64
	Supaul	—	0·23	0·55	1·70	2·71	12·54	11·5	17·39	3·34	—	—	—	50·11
	Protabganj	—	0·33	0·30	0·88	5·41	9·58	15·20	19·09	2·75	—	—	—	53·54
	Bhagalpur	—	0·19	0·57	0·66	0·47	5·20	8·18	14·10	2·34	0·49	—	—	33·00
	Banka	—	0·81	—	0·80	1·20	3·90	17·65	8·94	7·69	1·61	—	—	42·61
	Colgong	—	—	0·11	0·86	0·54	6·89	14·58	9·34	5·06	1·54	—	—	36·92
DARBHANGA	Tajpur	—	0·47	—	0·15	0·50	6·40	9·47	17·50	5·27	—	—	—	39·76
	Darbhanga	0·63	0·91	0·63	0·56	2·00	7·80	11·19	21·15	3·02	0·02	—	—	47·71
	Madhubani	—	0·81	0·59	0·52	2·06	10·08	17·41	16·04	2·15	—	-	—	49·16
	Bahera	—	0·20	0·63	0·47	0·69	9·78	10·57	24·23	4·88	—	—	—	51·36
	Rosera	—	0·49	—	0·16	0·07	3·66	9·31	19·77	2·93	—	—	—	36·30
MUZAFFARPUR.	Sitamarhi	—	0·23	—	1·46	1·81	12·46	13·16	12·11	5·92	—	—	—	47·15
	Muzaffarpur	—	0·82	—	—	0·73	8·39	10·44	12·47	4·09	-	—	—	35·94
	Hajipur	0·08	1·08	—	—	0·26	4·79	9·35	15·97	3·51	0·54	—	—	35·58
	Paru	—	0·70	—	—	1·35	8·21	10·44	18·48	4·13	—	—	—	43·61
	Mahuua	0·65	0·70	—	—	0·38	8·86	9·51	18·75	2·46	0·08	—	—	40·59
	Shiuhar	—	—	—	—	1·28	8·16	15·23	15·17	4·76	—	—	-	44·60
	Pupri	—	0·49	0·28	1·42	1·18	14·40	11·21	?	1·84	—	—	—	?
CHAMPARAN	Motihari	—	0·11	—	0·16	3·54	15·89	19·14	24·18	5·95	—	—	—	68·97
	Bettiah	—	0·15	—	0·12	1·21	10·63	14·42	20·96	4·81	—	—	—	52·10
	Bagaha	—	0·19	—	0·16	0·82	9·87	9·83	29·51	2·83	—	0·09	—	53·21
	Burharwa	—	0·04	—	0·03	0·57	9·65	9·00	21·39	3·41	—	—	—	44·09

District.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
NORTH BIHAR—*concld.*														
SARAN ...	Gopalganj	—	0·15	—	0·15	0·90	5·09	9·96	18·43	6·55	—	—	—	41·22
	Siwan	—	0·94	—	—	0·28	5·17	8·81	17·08	5·25	—	—	—	57·51
	Chapra	—	1·11	—	—	1·22	7·60	6·78	23·43	3·46	0·69	—	—	43·69
SOUTH BIHAR.														
SHAHABAD ...	Buxar	0·06	1·21	—	0·05	0·15	5·32	8·81	21·52	2·72	0·08	0·60	—	40·52
	Dehri	0·04	0·47	—	0·17	0·16	6·98	13·09	12·46	1·52	0·36	—	—	35·25
	Bhabhua	0·43	2·38	—	—	0·29	5·42	8·75	[illegible]·54	2·[illegible]6	0·21	—	—	31·58
	Sasaram	0·06	0·67	—	—	—	7·44	8·86	12·02	2·42	0·23	—	—	31·70
	Arrah	0·09	1·35	—	—	0·70	5·00	10·09	16·56	6·19	0·29	—	—	40·27
	Mohanea	0·21	2·15	—	—	—	1·88	8·11	21·53	2·32	—	—	—	36·20
	Khiri	0·30	4·13	—	—	—	7·53	11·34	22·6[illegible]	2·53	—	—	—	48·43
	Ageaon	0·13	1·36	—	—	—	6·05	11·58	12·08	4·64	—	—	—	35·84
	Ramnagar	0·27	0·84	—	—	—	5·12	8·72	13·48	5·71	—	—	—	34·14
	Koath	0·21	1·60	—	—	0·09	4·53	8·76	12·34	4·09	1·12	—	—	32·74
	Sikroul	—	1·00	—	—	—	1·71	4·43	17·53	2·36	—	—	—	27·03
	Bassowan	0·44	1·98	—	—	—	4·35	13·08	10·98	4·00	1·11	—	—	35·94
	Monaharpur	0·28	2·53	—	0·05	—	5·03	9·72	19·01	1·89	0·08	—	—	38·59
GAYA ...	Aurangabad	0·37	1·21	—	—	0·06	5·18	10·48	12·09	5·28	0·74	—	—	35·41
	Gaya	0·12	0·67	—	—	0·57	5·43	12·08	16·36	5·77	0·41	—	—	42·21
	Nawadah	0·01	0·46	—	—	0·38	6·32	8·38	11·81	6·08	0·81	—	—	34·25
	Jahanabad	—	0·11	—	—	—	2·29	11·22	13·79	6·53	0·16	—	—	34·10
	Arwal	—	1·40	—	—	—	4·93	12·43	10·27	4·35	0·30	—	—	33·68
	Daudnagar	—	0·24	—	—	—	3·75	8·80	9·55	1·69	—	—	—	24·03
	Sherghati	—	1·52	—	—	—	4·13	5·18	14·57	12·98	0·60	—	—	39·37
	Rajauli	1·50	0·60	—	—	0·07	4·03	12·74	16·48	4·08	2·95	—	—	42·45
	Pakri Barawan	—	0·30	—	—	0·15	3·07	9·27	10·85	4·60	0·19	0·23	—	28·66
PATNA ...	Patna	0·06	1·23	—	—	0·45	5·29	11·20	21·57	4·69	0·12	0·02	—	46·63
	Dinapore	0·10	0·68	—	—	0·21	3·94	12·78	37·34	3·39	—	—	—	52·04
	Bihar	—	0·30	—	0·25	0·40	4·72	9·67	18·57	8·15	0·30	—	—	42·36
	Barh	—	0·25	—	—	—	6·76	10·18	16·72	4·72	0·15	—	—	39·08
	Bikram	—	1·95	—	—	0·20	3·71	7·28	11·41	5·94	0·20	—	—	30·63
	Hilsa	—	0·16	—	—	0·80	2·93	6·29	16·82	3·91	0·27	—	—	31·18
MONGHYR ...	Beguserai	—	0·71	—	1·43	0·27	4·39	9·08	11·59	3·09	2·20	—	—	33·28
	Monghyr	—	0·17	—	0·48	0·35	5·32	12·57	12·16	3·69	1·55	—	—	36·29
	Jamui	—	0·40	—	0·50	1·15	5·64	15·38	9·66	4·61	0·84	—	—	38·18
	Gogri	—	—	—	—	0·15	1·56	12·01	10·92	2·13	0·57	—	—	27·37
	Shaikhpura	—	0·23	—	—	0·15	4·77	13·95	11·50	6·42	1·20	—	—	38·22
	Chahai Bamda	?	?	?	?	?	?	?	13·78	4·20	1·22	—	—	
SONTHAL PARGANAS.	Rajmahal	—	0·56	0·29	1·59	0·75	5·65	9·94	10·00	3·23	1·55	—	—	33·56
	Godda	—	0·80	0·30	0·55	1·74	4·57	23·13	7·81	6·97	0·48	—	—	46·35
	Pakour	—	0·23	0·16	1·05	4·10	6·49	7·10	7·73	7·52	5·46	—	—	39·84
	Naya Dumka	—	1·15	—	0·50	3·13	6·73	14·24	6·77	7·65	3·17	0·06	—	43·38
	Deoghur	—	1·01	—	0·27	1·01	5·71	15·91	15·57	6·31	0·50	—	—	46·29
	Jamtara	—	1·13	—	0·65	2·97	4·88	19·36	6·28	11·31	2·09	0·32	—	48·09
	Belbodda	—	?	?	?	?	5·46	13·11	11·63	?	0·97	—	—	?
	Nanihat	—	—	—	—	1·85	4·25	19·90	?	4·55	0·12	—	—	?
CHOTA NAGPUR.														
HAZARIBAGH ..	Pachamba (*Giridi*) ...	—	1·45	—	—	1·36	5·63	11·75	8·54	7·96	3·07	—	—	39·76
	Hazaribagh	—	2·02	—	—	0·88	9·48	17·12	7·24	7·86	2·66	0·02	—	47·28
	Semtagurah	—	1·50	—	—	1·20	5·94	6·80	6·88	6·84	3·77	—	—	35·03
	Mahudi Hills	—	1·05	—	—	0·83	9·84	7·98	12·17	7·17	4·96	0·09	—	44·39
	Jhumra Hills	—	0·70	—	—	2·30	11·80	15·80	7·90	7·80	5·11	0·20	—	51·60
	Barhi	—	1·34	—	—	0·77	5·83	8·58	15·27	6·95	1·24	—	—	39·98
	Chatra	—	1·55	—	—	0·25	7·87	11·52	15·20	6·13	1·45	—	—	43·97
	Karagdeha	—	1·64	—	0·40	1·24	6·97	14·18	13·14	7·33	1·04	0·13	—	46·07
	Ramgar	—	—	—	—	2·00	6·92	10·31	7·67	6·01	3·27	—	—	36·18
LOHARDAGA	Lohardaga	—	1·91	—	—	0·45	9·26	14·02	12·27	4·61	5·82	—	—	48·34
	Ranchi	—	1·55	0·23	0·16	1·11	10·91	11·96	11·82	8·31	5·70	0·78	—	52·53
	Silli	—	0·77	—	—	0·25	11·65	10·55	2·40?	7·75	3·35	—	—	36·72?
PALAMAU ...	Palamau (*Daltonganj*) ...	—	0·40	—	—	0·16	6·28	13·81	14·89	8·30	0·57	—	—	44·41
	Balumath	—	1·18	—	—	0·22	9·03	12·44	19·15	7·52	3·38	0·01	—	53·13
	Hosseinabad	0·50	1·16	—	—	1·00	7·34	12·25	16·71	6·90	0·62	—	—	46·57
	Garhwa	0·10	1·39	—	—	0·15	4·48	16·29	18·86	5·26	1·33	—	—	47·80
SINGHBHUM ...	Chaibassa	—	1·18	—	0·34	2·19	5·98	17·06	5·07	13·05	2·75	3·25	—	50·87
	Chakradharpur	?	?	?	?	?	?	?	3·10?	11·66	4·04	2·13	—	?
	Ghatsila	—	—	—	0·50	1·99	8·63	11·80	5·57	9·35	2·15	2·00	—	41·90
	Baharagura	—	—	—	2·84	1·39	8·31	12·36	9·10	9·31	2·95	3·00	—	49·25
MANBHUM ...	Purulia	—	0·98	—	0·30	1·74	12·46	13·00	3·11	9·23	3·65	0·70	—	45·17
	Gobindpur	—	0·95	—	0·26	2·16	8·39	9·03	8·35	10·16	1·51	0·40	—	42·01
	Raghunathpur	—	0·56	—	0·48	2·64	10·05	17·70	9·83	8·85	1·54	0·15	—	50·80
	Barahbhum	—	1·02	—	—	1·02	14·78	11·90	4·55	7·50	3·83	2·05	—	46·65
	Jhalda	—	1·24	—	0·08	1·02	14·08	6·69	3·51	5·09	2·06	0·42	—	35·99
	Chas	—	0·78	—	—	1·83	5·72	11·60	6·48	14·06	2·5[illegible]	0·23	—	46·29
	Pandra	—	1·12	—	0·22	1·01	7·71	12·30	9·65	11·54	1·32	0·11	—	45·07
CHOTA NAGPUR.	Sirguja	—	1·27	—	—	0·25	10·95	37·16	35·09	7·58	—	—	—	92·30?
	Jashpur	—	2·14	—	—	—	10·82	24·83	11·00	5·76	0·91	0·14	—	61·60
	Gangpur	—	0·79	—	—	—	9·94	35·76	10·92	15·39	1·44	—	—	74·24
ORISSA TRIBUTARY MAHALS	Keonjhur	?	?	?	?	?	?	9·17	4·35	11·32	8·75	0·90	—	?
	Anandpur	?	?	?	?	?	?	?	?	11·63	4·85	—	—	?
	Talcher	—	—	—	0·78	0·60	16·47	18·57	7·19	14·61	1·39	0·44	—	60·05
	Narsingpur	—	0·15	0·12	0·10	0·15	13·75	8·92	6·46	11·36	2·69	—	—	43·70
	Angul	—	—	0·40	0·15	1·25	9·68	12·64	4·46	12·04	2·37	0·61	—	43·39
	Dhenkanal	—	—	0·21	0·02	1·79	8·51	13·41	7·57	10·93	5·84	1·99	—	50·27
	Bispara	—	—	0·70	0·02	1·00	15·72	20·39	8·56	13·76	4·48	—	—	64·33
	Kunjabangar	—	—	?	?	?	?	7·31	4·77	8·43	3·06	—	—	?
	Baramba	—	—	—	—	0·44	12·09	11·02	9·83	8·07	5·67	0·97	—	48·69
DARJEELING ...	Mongpoo	0·14	4·33	2·16	9·44	14·27	26·40	40·28	20·62	12·72	0·32	0·66	0·14	131·48
BRITISH BHUTAN.	Pedong	0·97	1·42	2·79	8·49	12·61	15·82	29·73	17·17	12·27	?	?	0·72	101·99?
SIKKIM ...	Gnatong	0·65	12·29	3·86	15·38	24·95	28·79	32·00	31·98	11·90	?	?	?	161·80?
CHITTAGONG HILL TRACTS	Demagiri	0·10	2·60	0·30	11·16	18·18	14·81	10·15	15·51	13·15	8·02	2·52	—	96·50

METEOROLOGICAL OFFICE, BENGAL,
The 30*th January* 1893.

A. PEDLER,
Meteorological Reporter to the Government of Bengal.

II.—Table showing the Monthly and Annual Average Rainfall at 166 Rainfall-recording Stations in Bengal.

District.	Station.	Number of years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
ORISSA.															
Puri	Puri	18–19	0·25	0·86	0·52	0·55	2·58	7·98	10·39	9·24	10·02	8·81	2·30	0·68	54·18
	Khurda	17–18	0·27	0·68	0·82	0·65	3·51	9·50	12·82	12·43	10·37	6·89	1·64	0·53	60·11
	Banpur	11	0·08	0·59	0·72	0·58	2·06	7·17	10·66	12·1	9·06	6·31	3·09	[illegible]	53·91
	False Point	17–19	0·62	0·81	1·06	2·14	3·84	9·01	14·09	13·72	11·15	10·70	2·24	0·78	70·16
Cuttack	Jagatsingpore	15–18	0·35	0·62	0·81	0·68	2·39	7·23	11·03	10·12	8·50	6·80	1·16	0·39	50·68
	Banki	7–8	0·22	0·65	1·28	0·39	2·09	10·[illegible]8	11·79	10·71	8·84	4·41	2·00	0·76	53·42
	Cuttack	18–19	0·34	0·71	1·27	1·38	4·20	11·52	13·56	11·08	10·07	5·63	1·13	0·36	61·05
	Kendrapara	17–19	0·42	0·73	0·87	1·06	3·91	8·87	12·27	12·56	9·37	6·26	0·86	0·48	57·66
	Jajpur	16–18	0·42	1·25	1·13	1·81	4·49	9·88	13·12	10·70	9·87	5·07	0·68	0·71	59·13
Balasore	Chandbali	15–16	0·51	1·01	1·09	1·02	4·99	7·78	11·89	11·06	11·19	6·46	1·52	0·62	59·14
	Bhadrak	17–18	0·39	1·24	1·38	1·93	5·16	8·91	12·03	10·66	10·65	4·61	0·98	0·38	58·32
	Soro	15–16	0·25	0·84	1·63	1·84	5·09	6·78	12·27	11·03	11·24	5·50	0·75	0·14	57·35
	Balasore	18–19	0·49	1·36	1·35	2·52	4·07	8·71	13·93	12·42	11·91	6·41	0·91	0·37	65·35
	Jellasore	15–16	0·72	1·02	0·99	1·41	3·37	7·97	15·15	10·82	10·48	4·56	0·42	0·11	57·04
	Baripodah	11	0·28	0·80	1·21	1·39	4·91	10·24	12·77	12·46	11·11	3·93	0·98	0·20	60·28
SOUTH-WEST BENGAL.															
Midnapore	Contai	18–19	0·28	1·33	1·05	1·49	4·37	9·51	15·03	13·69	11·27	8·36	0·66	0·40	67·64
	Tamluk	17–18	0·38	1·22	1·77	1·66	5·07	9·26	11·98	13·80	8·52	4·46	0·35	0·26	59·53
	Midnapore	18–19	0·61	0·89	1·46	1·50	5·13	8·82	12·54	12·53	7·17	4·78	0·23	0·37	56·03
	Ghatal	12	0·51	0·89	1·62	1·80	5·38	10·24	13·74	15·46	8·77	3·57	0·12	0·29	62·39
24-Parganas	Saugor Island	18–19	0·37	1·13	1·29	1·59	4·66	10·04	16·53	15·06	11·96	9·60	0·65	0·35	73·09
	Diamond Harbour	17–18	0·63	1·68	1·44	2·27	5·16	9·87	14·81	14·17	11·13	5·13	0·38	0·28	66·95
	Alipore (*Observatory*)	17–18	0·72	1·47	1·69	1·81	5·42	10·37	13·44	13·51	9·91	4·42	0·33	0·35	63·44
	Barrackpore	17–18	0·45	1·27	1·72	1·81	5·24	10·60	12·16	12·07	7·47	3·56	0·50	0·30	57·15
	Dum-Dum	17–18	0·52	1·13	1·57	2·03	5·93	9·94	11·90	12·69	8·86	4·37	0·24	0·32	59·50
	Barasat	17–18	0·59	1·29	1·57	2·03	6·05	9·54	10·89	11·94	9·04	4·51	0·31	0·31	58·07
	Basirhat	17–18	0·41	1·04	2·18	2·10	6·66	10·83	12·60	13·08	8·84	4·41	0·58	0·23	62·81
Howrah	Howrah	18–19	0·59	1·09	1·47	2·12	5·16	9·91	12·51	12·21	8·35	4·34	0·33	0·32	58·40
	Mohesreka	12–13	0·51	1·44	1·18	1·47	6·25	9·03	13·55	13·57	8·60	3·44	0·48	0·32	59·84
Hooghly	Serampore	17–18	0·42	1·24	1·32	2·00	4·98	9·74	12·79	12·34	7·96	4·19	0·21	0·29	57·48
	Hooghly	18–19	0·35	1·25	1·30	2·00	5·77	9·16	12·08	11·91	7·15	4·09	0·23	0·36	55·63
	Jahanabad	17–18	0·39	1·27	1·15	1·98	5·17	9·35	12·48	16·03	9·04	4·40	0·25	0·20	61·71
Nadia	Ranaghat	18–19	0·46	0·93	1·58	2·99	5·26	9·63	10·16	12·56	6·95	3·75	0·38	0·23	54·91
	Krishnagar	18–19	0·30	1·04	1·48	2·47	5·83	8·81	10·14	11·23	7·99	4·19	0·34	0·11	53·84
	Chuadanga	18–19	0·31	1·12	1·88	2·83	7·74	9·24	10·21	12·11	9·71	4·39	0·47	0·16	60·17
	Meherpur	18–19	0·31	1·03	2·17	2·93	5·84	9·72	9·82	12·31	8·06	3·68	0·14	0·19	56·18
	Kushtia	18–19	0·38	1·11	1·87	3·01	7·19	11·21	10·88	11·36	10·33	4·99	0·26	0·20	63·39
Khulna	Satkhira	17–18	0·40	0·93	2·56	2·93	6·24	12·50	12·35	12·41	8·88	4·70	0·38	0·35	64·67
	Bagirhat	17–18	0·69	1·31	1·82	3·31	6·94	14·25	14·74	12·47	10·01	5·25	0·64	0·28	71·71
	Khulna	17–18	0·60	1·12	2·20	3·21	6·62	12·95	11·50	12·17	9·73	4·20	0·44	0·34	65·06
Jessore	Narail	17–18	0·68	1·16	1·94	3·22	6·79	11·21	9·05	10·64	7·31	3·62	0·40	0·24	56·26
	Jessore	18–19	0·61	1·69	2·52	3·95	7·35	12·74	11·35	12·38	8·74	4·38	0·32	0·26	65·70
	Jhenidah	17–18	0·34	1·10	2·44	3·38	6·63	12·75	9·70	12·72	9·11	4·83	0·30	0·18	63·38
	Magura	17–18	0·32	1·05	2·63	3·87	7·05	11·77	10·25	9·88	8·72	3·81	0·22	0·17	60·54
	Bangaon	18–19	0·33	1·10	1·79	2·74	5·88	10·37	10·61	12·98	9·03	4·55	0·30	0·36	60·04
Burdwan	Kalna	17–18	0·40	1·08	1·39	2·39	4·86	8·43	10·57	11·48	6·64	3·92	0·39	0·23	51·79
	Burdwan	18–19	0·32	0·86	1·57	2·29	4·98	8·30	11·22	12·80	8·07	3·95	0·31	0·22	54·89
	Katwa	17–18	0·45	1·16	1·29	1·80	5·31	9·92	9·94	12·03	8·40	4·04	0·25	0·11	54·60
	Raniganj	18–19	0·33	1·19	0·65	1·26	3·13	8·38	13·72	13·60	7·26	3·41	0·20	0·12	53·25
Bankura	Bankura	18–19	0·37	0·87	1·25	1·46	3·87	9·3[illegible]	12·47	14·35	7·98	4·15	0·25	0·22	56·59
	Vishnupur	10–11	0·38	0·70	1·37	1·60	4·79	10·50	12·01	14·02	9·10	2·71	0·37	0·24	57·79
	Maliara	9–11	0·34	0·58	0·67	0·87	3·25	10·30	14·11	13·26	6·52	3·27	0·36	0·21	53·73
	Khatra	9–11	0·44	0·58	1·14	0·83	3·39	11·19	14·58	13·27	9·09	3·71	0·90	0·42	59·54
Birbhum	Suri	18–19	0·45	0·91	0·73	1·03	3·72	10·47	12·70	13·65	10·41	3·67	0·12	0·15	58·01
	Hetampore	12–14	0·51	0·97	0·45	1·06	3·05	11·42	14·44	12·44	10·84	2·87	0·12	0·14	58·31
	Rampur Hat	14–16	0·53	0·83	0·71	1·47	3·67	10·02	10·88	12·72	10·99	3·88	0·16	0·19	56·05
Murshidabad	Kandi	13–15	0·39	0·89	0·90	1·67	4·55	9·54	12·00	11·53	9·57	3·93	0·32	0·27	55·56
	Berhampore	14–19	0·54	1·00	1·08	1·61	5·54	9·27	10·88	12·18	10·91	4·48	0·25	0·17	57·41
	Lalbagh	11–14	0·20	0·72	0·97	1·16	5·49	8·18	10·30	12·28	10·68	4·53	0·34	0·17	55·03
	Azimganj	14–17	0·56	0·76	0·93	1·38	5·25	9·53	10·34	12·70	9·70	4·71	0·19	0·13	56·18
	Jangipur	14–18	0·44	0·71	0·65	1·15	5·00	8·72	10·89	11·59	10·78	3·30	0·10	0·14	53·56
	Lalgola	14–16	0·55	0·65	0·91	1·35	5·72	9·55	11·26	11·02	10·76	4·37	0·21	0·14	56·40
NORTH BENGAL.															
Pabna	Pabna	18–19	0·36	1·09	1·72	3·12	6·95	10·90	10·17	12·78	10·97	4·80	0·15	0·14	63·15
	Shajadpur	18	0·45	1·01	1·28	2·78	7·27	11·40	10·97	11·23	9·87	4·38	0·38	0·14	61·16
Bogra	Sherpur	12–13	0·36	0·90	1·48	1·47	8·48	12·42	13·01	12·25	10·25	4·18	0·57	0·22	65·59
	Nowkhilla	12	0·36	0·85	1·21	1·99	6·92	12·89	11·37	10·81	9·77	5·12	0·53	0·15	61·97
	Bogra	18–10	0·45	0·86	0·82	2·21	8·37	14·27	13·97	11·93	10·75	3·98	0·27	0·43	68·00
	Panchbibi	12–13	0·32	0·52	0·90	1·60	7·40	11·48	12·66	11·53	10·88	4·31	0·02	0·19	61·61
Rajshahi	Boalia	18–19	0·40	0·79	0·81	1·42	5·44	9·65	11·67	12·05	11·27	4·44	0·14	0·11	58·19
	Nator	18–19	0·61	0·89	0·93	2·17	6·82	10·25	11·88	12·16	11·64	4·46	0·26	0·11	62·16
	Naugaon	6–8	0·66	0·35	1·27	0·63	5·36	13·69	11·25	8·75	12·68	2·29	0·17	0·17	57·27
Malda	Malda	18–19	0·43	0·52	0·74	0·94	4·13	11·14	11·41	9·95	11·50	4·38	0·16	0·18	55·48
	Chanchal	11–13	0·51	0·66	0·45	1·01	4·86	12·58	12·66	14·09	10·60	3·00	0·21	0·08	60·61
Dinajpur	Mohadebpore	11–12	0·57	0·64	0·70	0·99	6·24	12·80	11·41	13·54	11·31	3·03	0·10	0·17	61·50
	Churaman	10–12	0·57	0·42	0·43	0·63	4·70	11·87	11·90	10·55	12·68	2·42	0·18	0·16	56·51
	Raiganj	11–12	0·57	0·51	0·62	1·12	6·23	14·35	12·25	12·74	10·61	3·78	0·00	0·15	63·05
	Dinajpur	18–19	0·40	0·50	0·97	1·87	7·22	16·50	13·45	12·17	11·14	5·13	0·09	0·11	69·55
	Balurghat	7–9	0·55	0·26	0·58	0·95	6·09	12·53	11·63	9·62	10·84	3·40	0·12	0·25	56·82
Rangpur	Bhawanigunge (*Gyabanda*)	17–18	0·35	0·51	1·46	2·73	8·89	15·99	12·24	10·23	11·97	5·12	0·11	0·17	69·77
	Rangpur	18–19	0·58	0·59	1·30	3·14	10·22	19·51	16·48	12·06	13·61	5·32	0·10	0·10	82·81
	Kurigaon	12–13	0·51	0·31	1·93	4·79	13·78	23·49	13·49	11·07	12·66	4·41	0·15	0·17	86·76
	Bagdogra (*Nilphamari*)	11–13	0·49	0·52	1·18	3·43	12·03	26·19	13·73	14·92	15·52	4·69	0·02	0·21	92·93
Jalpaiguri	Jalpaiguri	17–18	0·55	0·28	1·80	4·08	11·96	28·42	25·66	24·94	23·93	5·60	0·10	0·09	127·41
Kuch Bihar	Dinhatta	9–11	0·68	0·41	1·70	4·16	13·96	30·03	13·56	17·51	18·53	5·14	0·06	0·23	105·97
	Kuch Bihar	16–17	0·53	0·29	1·93	5·46	14·76	36·84	22·56	21·45	22·78	5·43	0·07	0·11	132·11
	Meckliganj	11	0·56	0·53	1·43	3·84	12·15	28·25	20·44	24·57	19·89	3·97	0·07	0·18	115·88
	Mathabhanga	11	0·48	0·45	2·31	4·18	12·66	31·87	22·39	23·78	19·29	6·30	0·08	0·14	123·93
Darjeeling	Buxa	17–19	1·14	0·86	3·25	8·73	20·33	45·22	48·01	42·05	31·48	10·21	0·47	0·50	212·25
	Siliguri	6–8	0·82	0·24	1·71	3·18	8·80	27·77	32·91	22·33	14·93	4·34	0·32	0·09	117·44
	Darjeeling	17–19	0·64	0·82	1·86	4·40	8·56	24·00	30·07	25·45	17·66	6·96	0·14	0·26	120·84
	Kalimpong	7–9	1·24	0·65	1·76	3·13	5·67	19·43	28·42	18·75	10·48	2·67	0·25	0·30	92·75

District.	Station.	Number of years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
EAST BENGAL.															
Chittagong ...	Cox's Bazar	17—18	0·77	0·49	1·82	2·53	10·36	34·31	40·14	27·13	15·11	7·72	2·68	0·38	143·44
	Chittagong	18—19	0·64	0·96	2·31	3·32	9·63	24·94	21·97	19·77	13·52	5·60	1·59	0·70	104·94
Chittagong Hill Tracts.	Rangamati	18—19	0·59	1·10	3·02	3·56	10·13	18 91	19·04	18·44	12·72	7·01	1·95	0·56	97·03
Backergunge	Patuakhali	16	0·79	1·13	1·81	3·04	8·23	22·46	21·48	17·05	13·36	5·99	1·66	0·47	97·42
	Pirojpur	17—18	0·71	1·29	1·61	2·62	7·10	16·43	16 08	14·76	11·33	5·75	1·21	0·29	79·18
	Burisal	18—19	0·77	1·00	2·72	3·24	8·04	16·59	15·73	12·41	11·68	4·98	1·25	0·32	78·63
	Bhola	11—13	0·58	0·78	2·52	3·59	7·24	21·49	18·62	18·23	12 12	5·49	1·56	0·51	92·73
Noakhali ...	Noakhali	18—19	0·62	0·91	3·55	4·24	9·82	26·07	23·97	25·33	17·80	6·86	1·82	0·59	121·57
	Fenny	11—12	0·79	1·19	4·00	4·87	10·97	28·58	22·.6	24·01	15·71	5·88	3·22	0·91	122 67
Faridpur ...	Madaripur	17—18	0·61	0·97	2·83	3·62	9·24	13·80	11·98	1 ·25	8·50	4·18	0·44	0·14	66·06
	Faridpur	18—19	0·34	1·41	2·93	3·74	8·90	12·49	11·85	12·57	10·04	4·30	0·39	0·15	69·11
	Goalundo	16—17	0·40	1·22	2·35	3·93	7·63	11·86	11·87	11·37	8·61	4·83	0·33	0·14	64·52
Dacca ...	Munshiganj	15—16	0·54	1·35	4 08	4·82	9·43	15·84	15·74	14·88	12·24	5·46	0·84	0·33	85·55
	Dacca	18—19	0·33	1·15	3·01	4·61	8·95	13·37	14·24	12·58	9·97	3·95	0·50	0·19	71·83
	Naryanganj	6—8	0·39	0·99	3·11	4·90	8·20	13·96	15·69	13·46	10·35	4·45	1·28	0·29	77·07
	Manickganj	15—16	0·44	1·15	2·04	3·98	8·85	9·64	11·80	11·53	8·13	3 95	0·46	0·13	62·30
Hill Tippera ...	Agartola	15—19	0·65	1·63	4·44	5·28	10·74	14·44	11·82	13·32	10·50	5 30	0·84	0·37	78·73
Tippera ...	Comilla	15 - 16	0·68	0·57	3·76	5·20	10·35	19 13	16·98	17 05	11·40	4·23	0·94	0·44	91·63
	Chaudpore	11	0·53	0·89	3·27	4·50	8·62	16·77	15 5·	20·23	11·82	6·14	0·56	0·39	89 03
	Brahmanbaria	17—18	0·77	1·30	4 71	5 16	10·81	15·46	10 97	12·67	11 69	4·76	0·57	0·28	79·15
Mymensingh	Kishorganj	17—18	0·57	0·86	3·01	4·99	10·19	19·07	13·04	13 18	13·11	5 30	0·41	0·38	84·09
	Atia (*Tangail*)	17—18	0·43	1·18	1·45	3·5.	7·04	13·16	11·10	12·01	9·80	4·97	0·25	0·10	65·00
	Mymensingh	18—19	0·38	1·01	2·24	3·89	11·04	19·00	14·43	13·78	14·19	5·69	0·30	0·18	86 12
	Jamalpur	17—18	0·45	1·07	1·46	3·26	8·79	14·90	12·47	13 45	14·06	5·08	0·23	0·28	75·52
	Netrakona	7—8	0·19	0·40	2·57	4·24	11·46	21 75	16·86	16·97	14·04	6·06	0·37	0·17	95·11
NORTH BEHAR.															
Purnea ...	Kishanganj	16—17	0·63	0·44	0·66	1·87	6·32	15·33	16·49	16·21	14·08	3·36	0·05	0·15	75·59
	Arraria	16—17	0·48	0·53	0·62	1·50	5·92	12 71	15 98	13 66	13·76	3·53	0·05	0·10	68·84
	Purnea	16—18	0·46	0 56	0 40	1·40	4·51	11·46	13·80	14·44	14·02	3·97	0·08	0·16	65·35
Bhagalpur ...	Madhipura	14—18	0·47	0·56	0·39	1·03	4·06	8·66	11·49	11·79	10·30	4·31	0·06	0·09	53·21
	Supaul	16—17	0·46	0·59	0·40	0·89	3·89	9·33	10·95	12·32	9·77	2·88	0·04	0·12	51·44
	Bhagalpur	18—19	0·48	0 48	0·33	0·77	2·59	7·71	11·16	10·15	7·60	3·20	0·27	0·10	44·84
	Banka	18—19	0 59	0·50	0·34	0·34	2·68	7·78	10·61	11·13	8·23	3·48	0 13	0·14	46 15
Darbhanga ...	Tajpur	17—18	0·64	0·38	0·23	0·36	2·35	7·58	12·19	10·35	8·01	3·16	0·09	0·08	45·42
	Darbhanga	17—18	0·53	0·43	0·29	0·60	2·58	7·02	11·89	11·39	9·38	2·99	0·06	0·17	49·52
	Madhubani	16—18	0·74	0·39	0·39	1·01	2·96	8·59	10·69	10·51	10·17	2·62	0·03	0·09	48·18
Muzaffarpur	Sitamarhi	17—18	0·53	0·30	0·65	1·18	2·66	8·63	10·59	9·75	9·76	2·74	0·01	0·12	46 32
	Muzaffarpur	17—19	0·79	0·41	0·42	0·58	2·72	7·54	11·81	10·34	9·97	3·47	0·09	0·13	48·26
	Hajipur	17	0·65	0·46	0·38	0·19	1·99	6·69	11·85	10·15	7·23	3·98	0·14	0·12	43·83
Champaran ...	Motihari	14—16	0·65	0·35	0·37	0·78	2·50	7·89	10·45	11·53	9·16	3·49	0·02	0 18	47·37
	Bettiah	16—17	0·69	0·41	0·36	0 75	2·68	8·49	12·68	12·34	9·44	3·58	0·01	0·24	51·67
Saran ...	Gopalganj	10—12	0·84	0·53	0·14	0·20	2·64	6·48	12·51	10·18	6·94	5·01	0·13	0·17	45·72
	Siwan	18	0·75	0·48	0·23	0·27	1·84	6·81	11·73	10·78	8·52	4·02	0·11	0·15	45·70
	Chapra	18—19	0·66	0 33	0·29	0·28	1·52	6 02	12·30	9·91	6 90	3·60	0·29	0·18	42·28
SOUTH BEHAR.															
Shahabad ...	Buxar	18—19	0·79	0 36	0·28	0·17	1·03	4·96	11·07	10·22	7·19	3·35	0·17	0·23	39·82
	Dehri	6—8	0·82	0·20	0·70	0·11	1·42	4·65	11·25	12·78	7·67	2·80	0·25	0·57	43·11
	Bhabhua	18—19	0·68	0·49	0·56	0·13	1·16	5·26	12·31	11 71	6·67	3·28	0·49	0·36	43·10
	Sasaram	18—19	0 50	0·46	0·27	0·17	1·17	5·17	11·32	11·89	6·94	3·68	0·21	0·29	42·07
	Arrah	18—19	0 71	0·45	0·34	0·22	1·80	5·95	11·03	10·93	6·87	3·28	0·15	0·21	41·94
Gaya ...	Aurangabad	17—18	0·60	0·33	0·38	0·23	1·68	5·82	12·10	12 52	7·21	2·75	0·24	0·36	44·22
	Gaya	18—19	0·61	0·50	0·35	0·31	1·64	6·16	12·86	11 42	7·32	2·36	0·27	0·25	44·05
	Nawadah	17—18	0·70	0 46	0·47	0·30	2·02	5·45	11·71	10 73	6·97	2·67	0·19	0·23	41·90
	Jahanabad	15—16	0·71	0·40	0·35	0·15	1·74	5·06	12·21	12·23	5·66	3·55	0·23	0·19	42·53
Patna ...	Patna	18—19	0·59	0·38	0·33	0·23	2·20	6·88	11·59	10·62	7·09	3·33	0·15	0·17	43·56
	Dinapore	18—19	0·56	0·30	0·18	0·23	1·69	6·52	11·39	11·33	6·84	3·26	0·14	0·19	4.·64
	Bihar	18—19	0 67	0·52	0·34	0·22	2·20	6·48	12·60	10·60	6·53	3·22	0·24	0·14	43·76
	Barh	18	0·47	0·43	0·34	0·12	2·26	5·08	12·22	9·38	7·70	3·18	0·23	0·13	41·54
Monghyr ...	Begusarai	18	0·56	0·53	0·24	0·36	2·20	6·24	11·11	9·94	7·27	3·17	0 29	0·09	42·09
	Monghyr	18—19	0·48	0·50	0 31	0·42	2·51	6·53	12·35	12·69	9·01	3·52	0·14	0·09	48 57
	Jamui	18—19	0·67	0 60	0·43	0·47	2·19	6·49	12·75	11·41	7·45	2 61	0·09	0·09	45 25
Sonthal Parganas.	Rajmahal	17—18	0·17	0·27	0·33	1·05	5·05	10·46	12·93	9·88	12·24	3·31	0·13	0·06	55·58
	Godda	15—16	0·35	0·54	0·40	0·49	3·60	6·81	11·07	11·70	9·53	3·07	0·10	0·13	47·79
	Pakaur	11—12	0 25	0·32	0·55	0·49	4·31	10·50	12·44	1.·69	12·75	4·51	0·08	0·09	57·98
	Naya Dumka...	16—17	0·58	0·72	0·70	0·99	3·48	8·86	13·44	13·55	10·63	4 68	0·18	0·22	57·23
	Deoghur	18—19	0·44	0·63	0 63	0·88	3·15	8·46	13·60	12·27	8·73	4·33	0 16	0·18	53·46
	Jamtara	12—15	0·41	0·35	0·72	0 61	3·45	8·60	13·66	12·60	7·36	3·23	0·29	0·15	51·42
CHOTA NAGPUR.															
Hazaribagh...	Pachamba (*Giridih*) ...	16—18	0·40	0·66	0·64	0·64	2·29	8·20	12·55	12·34	8·82	3·16	0·22	0 18	50·10
	Hazaribagh	17—19	0·60	0·72	0·70	0·37	2·34	7·12	12·99	13·41	8·55	3·26	0·26	0·31	50·66
	Semtagurah	11	0·51	0·51	1·18	0·30	2·58	7·61	12·81	11·02	8·17	2·96	0·32	0·32	48·29
	Mahudi Hills	11	0·83	0·58	0·74	0·10	2 21	7·57	12·36	14·74	8·88	2·55	0·46	0·30	51·32
	Jhumra Hill	7—10	0·70	0·41	0·73	Nil	2·89	10·34	16·87	16·38	10·92	2 93	0·48	0·29	62·94
Lohardaga ...	Lohardagga	6—7	0·84	0·49	0·63	0·26	2 53	7·83	12·49	15·21	9·70	2·37	0·50	0·51	53·36
	Ranchi	18—19	0·64	1·10	1·09	0·64	3·17	8·65	13·72	14·31	9·17	2 98	0·40	0 29	56·16
Palamau ...	Palamau (*Daltonganj*) ...	17—18	0·77	0·49	0·65	0·29	1·41	6·04	12·56	11·56	7·82	2·81	0·45	0·30	46·15
Singhbhum ...	Chaibassa	17—19	0·73	0·84	1·21	0·67	4·17	8·30	14·27	13·83	8·32	2·95	0·24	0·37	55·90
Manbhum ...	Purulia	17—19	0·46	0·99	1·03	0·85	3·57	8·68	12·22	13·91	8·13	3·09	0·21	0·24	53·38
	Gobindpur	12—18	0·51	0·88	0 50	0 63	1·96	7·45	11·92	12·50	7·25	3·58	0·15	0·19	47·55

Meteorological Office, Bengal;
The 30th January 1893.

A. Pedler,
Meteorological Reporter to the Government of Bengal.

III.—Comparison Table of the Rainfall of 1892 *at* 166 *Rainfall-recording Stations in Bengal with the Average of previous years.*

District.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
ORISSA.														
Puri	Puri	−0·25	−0·86	−0·52	−0·55	−2·59	+3·38	−1·63	−2·28	−1·78	−1·84	+1·06	−0·68	− 8·53
	Khurda	−0·27	−0·67	−0·72	−0·65	−2·14	+3·17	−2·10	−2·72	−1·93	−2·11	−1·47	−0·53	−12·23
	Bhanpur	−0·08	−0·43	−0·71	−1·49	−1·45	+4·97	+1·21	−1·17	+2·67	−0·19	−3·09	−1·18	+ 0·16
	False Point	−0·62	−0·39	−1·05	−2·14	−1·67	+6·63	−5·19	−8·05	+4·28	−5·52	+1·05	−0·78	−13·40
Cuttack	Jagatsingpur	−0·35	−0·19	−0·81	−0·69	−2·65	+0·11	+3·38	+0·23	+1·95	+2·22	−0·40	−0·39	+ 2·42
	Banki	−0·22	−0·65	−1·23	−0·35	−0·24	−1·14	+3·55	−0·13	−0·64	−0·76	−1·06	−0·76	− 3·03
	Cuttack	−0·34	−0·71	−1·27	−1·23	−2·45	+0·26	−0·91	−4·71	−0·87	+6·84	−0·77	−0·36	− 6·52
	Kendrapara	−0·42	+0·18	−0·81	−1·05	−3·37	+1·47	+0·07	−4·33	−1·60	+0·03	+0·07	−0·48	−10·27
	Jajpur	−0·42	−1·25	−1·13	−1·74	−2·22	+0·91	−4·07	−0·13	+4·20	−1·67	−0·56	−0·71	− 8·79
Balasore	Chandbali	−0·51	−0·77	−1·09	−1·02	−3·49	+8·10	−3·74	−2·54	−6·38	−3·11	−0·16	−0·62	−15·53
	Bhadrak	−0·19	−1·06	−1·58	+2·66	−2·24	+9·07	−3·97	−0·57	−0·19	+1·51	−0·65	−0·38	+ 2·41
	Soro	−0·25	−0·59	−1·63	−1·58	−1·14	+8·46	−6·17	−6·10	−0·52	+0·23	0	−0·14	− 9·43
	Balasore	−0·49	−0·98	−1·35	−2·48	−2·39	+0·78	−6·39	−6·88	+0·43	+3·32	+0·18	−0·37	−16·62
	Jellasore	−0·72	−1·02	−0·99	−1·21	−0·58	+0·63	−6·73	−2·53	−2·74	−1·00	+0·58	−0·11	−16·61
	Baripada	−0·28	−0·24	−1·21	−0·76	−0·56	−4·10	+1·37	−9·44	−2·34	+3·54	−0·56	−0·20	−14·76
SOUTH-WEST BENGAL.														
Midnapore	Contai	−0·28	−1·33	−1·05	−0·68	−1·46	−1·23	−7·51	−7·44	−1·69	−4·33	+5·83	−0·40	−21·57
	Tamluk	−0·58	−1·02	−1·77	+0·07	−0·81	−4·78	−3·06	−7·01	−1·49	−2·11	+3·05	−0·26	−19·48
	Midnapore	−0·61	−0·71	−1·46	+0·20	−1·84	−2·10	−6·27	−7·02	−0·35	−1·63	+4·65	−0·37	−17·46
	Ghatal	−0·51	−0·89	−1·62	−0·55	+1·73	−3·05	−1·87	−11·79	−3·10	−1·38	+6·05	−0·29	−17·18
24-Parganas	Saugor Island	−0·37	−1·13	−1·20	−1·34	−2·97	−2·60	−9·82	−5·07	+1·91	−2·38	+6·77	−0·35	−18·64
	Diamond Harbour	−0·63	−1·68	−1·40	−1·67	+2·73	−1·17	+7·05	−1·18	−1·44	−2·94	+5·79	−0·28	+ 3·18
	Alipore Observatory	−0·72	−1·47	−1·69	−0·04	−0·97	−1·37	−3·18	−1·65	−2·31	−1·07	+1·41	−0·35	−16·41
	Barrackpore	−0·45	−1·06	−1·72	+0·54	−2·57	−4·40	−2·11	−4·47	−1·62	+1·17	+3·42	−0·30	−13·55
	Dum-Dum	−0·52	−0·91	−1·57	+0·71	−2·03	+0·06	+1·82	−7·73	+2·39	−1·89	+1·86	−0·32	− 8·22
	Barasat	−0·59	−0·62	−1·57	+0·63	−1·45	−1·86	−0·65	−7·56	−0·69	+0·68	+1·82	−0·31	−12·17
	Basirhat	−0·41	−0·99	−2·18	+1·23	−3·35	−2·74	+5·67	−6·60	−3·58	+2·82	+0·91	−0·23	− 9·43
Howrah	Howrah	−0·59	−1·08	−1·47	−0·59	−2·14	−0·54	−1·65	−5·91	−1·98	−2·79	+1·21	−0·32	−17·85
	Mohesreka	−0·51	−1·49	−1·18	−0·19	−3·27	−3·31	−4·93	−9·92	−3·51	−0·74	+2·67	−0·32	−26·61
Hooghly	Serampore	−0·42	−1·06	−1·32	+1·49	−1·41	−3·13	−1·64	−4·06	−3·29	+0·32	+5·64	−0·29	− 9·17
	Hooghly	−0·38	−1·29	−1·30	+1·73	−0·59	−4·42	−4·47	−7·16	+0·29	−0·14	+3·82	−0·36	−14·18
	Jahanabad	−0·39	−1·23	−1·15	−0·93	+0·61	−1·60	+1·60	−12·10	−2·65	−2·53	+2·98	−0·20	−17·94
Nadia	Ranaghat	−0·46	−0·79	−1·58	−0·46	+0·12	−0·92	+0·31	−8·07	−1·32	+0·03	+2·33	−0·23	−10·99
	Kisnnagar	−0·30	−1·01	−1·48	+1·71	−3·59	−0·20	−3·86	−7·85	−3·35	−0·67	+2·28	−0·11	−18·43
	Chuadanga	−0·31	−1·08	−1·88	−1·78	+2·00	−1·84	−5·14	−6·43	?	?	?	?	−16·46?
	Meherpur	−0·51	−0·67	−2·17	−2·75	−1·35	+0·04	−1·79	−2·18	−0·07	−1·84	+0·29	−0·10	−12·99
	Kushtia	−0·38	−0·87	−0·74	+3·15	+1·56	−4·59	−0·26	−5·16	−2·77	−2·69	+0·54	−0·20	−15·41
Khulna	Satkhira	−0·40	−0·81	−2·56	+0·10	−0·71	−6·82	−2·34	−4·23	−0·40	+1·62	+0·30	−0·35	−16·60
	Bagerhat	−0·69	−1·31	−1·82	−2·85	−0·28	−5·57	−1·08	−1·67	−3·05	+2·78	+1·03	−0·28	−14·79
	Khulna	−0·65	−0·93	−2·20	−0·58	−1·17	−3·96	+3·26	−4·53	−4·53	+2·36	+1·16	−0·34	−12·06
Jessore	Narail	−0·68	−1·09	−1·04	+1·17	−0·40	−0·27	+3·06	−4·05	−4·50	+2·39	+2·94	−0·24	− 3·61
	Jessore	−0·61	−1·06	−2·52	−2·13	+0·77	−2·20	−2·90	−7·77	−2·78	+2·25	+7·39	−0·26	−11·82
	Jhenidah	−0·34	−0·93	−2·41	+0·47	+2·27	−4·15	+0·43	−2·65	−3·34	+3·94	+1·85	−0·18	− 5·07
	Magura	−0·32	−0·81	−2·43	−0·83	−1·33	−1·77	+2·54	+0·43	−5·27	+1·43	+3·54	−0·17	− 4·99
	Bangaon	−0·33	−1·10	−1·79	−0·42	+0·09	−3·78	−1·16	−6·50	−0·52	+2·92	+3·95	−0·36	− 9·00
Burdwan	Kalna	−0·40	−1·06	−1·39	+1·98	−1·06	+0·58	+0·11	−4·09	−1·39	+2·19	+2·94	−0·23	− 1·82
	Burdwan	−0·32	−0·71	−1·57	−0·37	−1·06	+2·43	−3·28	−9·32	−1·26	−0·03	+1·62	−0·22	−14·09
	Katwa	−0·45	−1·01	−1·29	−0·33	−2·16	−4·42	+3·90	−5·32	−1·91	−0·95	+0·59	−0·11	−13·46
	Raniganj	−0·33	−0·50	−0·65	+0·75	−0·45	+5·01	−5·35	−6·06	+2·47	−0·13	−0·01	−0·12	− 5·37
Bankura	Bankura	−0·37	−0·63	−1·25	−0·62	+1·43	+0·68	−3·14	−10·47	−1·41	+0·14	+1·65	−0·22	−14·21
	Vishnupur	−0·38	−0·25	−1·37	−0·42	+0·33	−2·49	−1·61	−8·05	−0·63	+0·74	+2·07	−0·24	−12·20
	Maharu	−0·33	+0·10	−0·67	−0·15	−1·65	−1·52	−6·94	−6·06	+0·25	−2·20	−0·04	−0·21	−19·42
	Khatra	−0·41	−0·23	−1·14	−0·13	+1·01	−1·47	−2·11	−6·13	+1·55	+0·59	+1·94	−0·42	− 6·98
Birbhum	Suri	−0·45	−0·10	−0·73	−0·53	−1·30	+6·31	+1·99	−4·29	−4·51	−1·93	−0·04	−0·15	− 5·73
	Hetampur	−0·51	−0·45	−0·45	−0·74	−0·22	−1·98	+1·56	−2·82	−3·78	+1·95	+0·03	−0·14	− 7·55
	Rampur Hát	−0·53	+0·10	−0·71	+0·23	+0·27	+0·83	−0·78	−5·19	−3·02	+1·58	−0·05	−0·19	− 7·49
Murshidabad	Kandi	−0·39	−0·34	−0·90	+0·95	−1·58	−1·12	−2·20	−2·05	−1·76	−1·62	−0·10	−0·27	−11·38
	Berhampore	−0·54	−0·22	−1·08	+0·71	−0·91	+1·11	−0·99	+5·60	−2·67	−2·89	−0·11	−0·17	− 4·25
	Lalbag	−0·20	−0·09	+0·05	+0·99	+2·57	+3·72	−3·14	−2·58	−3·00	−1·27	−0·21	−0·17	− 3·33
	Azimganj	−0·56	−0·06	−0·76	+0·96	+0·20	−0·44	+3·07	−9·60	−2·88	−2·27	−0·19	−0·13	−12·66
	Jangipur	−0·44	+0·19	−0·44	+1·58	−0·32	−2·96	−2·15	−0·43	−5·64	−1·91	−0·09	−0·14	−12·75
	Lalgola	−0·55	−0·05	−0·63	+1·65	+0·03	−5·10	−2·64	+1·88	−4·76	−3·22	−0·21	−0·14	−13·77
NORTH BENGAL.														
Pabna	Pabna	−0·36	−0·76	−1·45	+0·12	+1·20	−2·77	+1·14	−6·76	−6·06	−3·03	+0·37	−0·14	−18·49
	Sirajganj	−0·43	−0·85	−0·22	+5·52	+1·51	+0·23	+6·98	−0·30	−4·33	−3·65	−0·24	−0·14	+ 4·06
Bogra	Sherpur	−0·36	−0·57	−0·16	+6·49	−2·02	−3·16	+1·96	−1·89	−4·63	−2·97	−0·57	−0·22	− 8·10
	Nowkhilla	−0·36	−0·56	−0·25	+4·53	+1·01	−1·08	+6·10	+2·02	+0·64	−3·71	−0·53	−0·15	+ 7·66
	Bogra	−0·45	−0·54	+2·84	+2·44	−2·24	−4·78	+1·05	+1·58	−2·52	−2·99	−0·25	−0·18	− 5·99
	Panchbibi	−0·32	−0·07	+0·70	+5·23	−3·29	+0·84	+1·16	+0·97	−5·54	−3·40	−0·02	−0·19	− 3·84
Rajshahi	Boalia	−0·40	−0·16	+0·29	+1·86	−0·71	−3·56	−5·18	−0·65	−6·34	−3·07	−0·07	−0·11	−18·08
	Nator	−0·61	+0·02	+0·14	+1·05	+2·89	−0·30	+7·86	−2·72	−7·16	−3·48	−0·18	−0·11	+ 2·60
	Naugaon	−0·66	+0·05	−0·07	+1·96	−1·22	−5·24	+2·59	+1·72	−9·57	−0·69	−0·17	−0·17	−11·47
Malda	Malda	−0·43	+0·18	+0·23	+5·16	−3·19	−3·48	+4·81	−1·49	−4·90	−1·73	−0·16	−0·18	− 5·38
	Chanchal	−0·51	−0·48	0	+0·56	−2·90	−8·57	+5·67	−1·32	−7·85	−2·73	−0·21	−0·08	−18·42
Dinajpur	Mahadebpur	−0·57	−0·16	+0·39	+2·62	−2·92	−4·28	+0·85	+2·14	−6·01	−1·35	−0·10	−0·17	−10·19
	Churaman	−0·57	−0·18	+0·63	+2·69	−0·90	−6·36	+17·26	+6·65	−8·76	−1·80	−0·18	−0·16	+ 8·32
	Raiganj	−0·57	−0·21	+0·23	+1·02	−1·51	−5·65	+16·78	+11·77	−3·53	−2·94	−0·05	−0·15	+15·15
	Dinajpur	−0·40	−0·19	+0·13	+0·46	+0·76	−3·28	+8·32	+11·41	−8·40	−1·33	−0·05	−0·11	+ 4·48
	Balughat	−0·55	+0·11	+0·16	+5·28	−3·13	−6·08	+8·13	+5·30	−2·42	−1·77	−0·12	−0·25	+ 4·66
Rangpur	Bhawaniganj (*Gabianda*)	−0·35	−0·21	+1·31	+2·79	+8·44	−1·80	+1·47	+3·08	−7·35	−4·12	−0·11	−0·17	+ 2·66
	Rangpur	−0·58	−0·11	+2·40	+2·65	+6·12	−5·28	+8·45	+16·14	−6·18	−1·78	−0·10	−0·10	+21·63
	Kurigram	−0·51	+0·14	+1·92	+1·23	+3·97	−2·97	+8·59	+12·11	−7·03	−4·20	−0·15	−0·17	+12·93
	Bagdogra (*Nilphamari*)	−0·19	−0·12	+1·01	−0·57	+3·39	−15·79	+35·03	+16·58	−8·97	−2·48	−0·02	−0·21	+26·36
Jalpaiguri	Jalpaiguri	−0·55	+0·32	−1·34	−0·56	+16·94	−9·90	+27·16	+14·17	−6·29	−4·06	+0·25	+0·27	+36·35
Kuch Bihar	Dinhatta	−0·68	−0·29	+0·12	−2·24	+16·90	−2·23	+18·78	+16·59	−11·29	−5·11	+0·39	−0·23	+30·79
	Kuch Bihar	−0·43	+0·11	−0·66	−1·36	+31·46	−7·45	+18·49	+18·52	−11·97	−5·10	+1·13	−0·11	+42·63
	Mekhliganj	−0·56	−0·07	−0·28	+1·45	+15·62	+2·07	+15·85	+21·07	−10·35	−2·52	−0·04	−0·18	+42·06
	Mathabhanga	−0·48	−0·08	−1·11	−0·44	+18·75	−7·34	+18·44	+13·90	−8·50	−5·07	+0·75	−0·14	+28·64
Darjeeling	Buxa	−0·38	+2·89	−1·45	+7·81	+11·63	−0·74	+34·08	+0·23	+13·30	−0·44	+0·64	+0·65	+77·22
	Siliguri	−0·82	+0·53	−1·41	+4·31	+6·99	+4·95	+11·87	+13·52	+3·08	−3·35	+0·49	+0·20	+42·46
	Darjeeling	−0·05	+1·32	−0·94	+3·90	+4·21	+1·60	+13·16	+0·30	−5·11	−5·94	+0·15	+0·36	+13·47
	Kalimpong	−1·10	+1·09	−1·28	+3·11	+4·19	−3·55	+2·40	−4·34	+1·23	−2·53	+0·43	+0·49	+ 0·13

District.	Station.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
EAST BENGAL.														
Chittagong ...	Cox's Bazar	−0·77	−0·49	−1·82	+1·53	+4·67	−5·95	−7·19	−8·49	+4·53	+9·68	−1·78	−0·38	− 6·46
	Chittagong	−0·63	−0·71	−2·27	+8·89	+2·59	−15·38	−6·16	−11·83	+3·56	+7·86	+3·38	−0·70	−11·40
Chittagong Hill Tracts.	Rangamati	−0·59	+0·10	−2·60	+3·94	+5·13	−3·52	−3·51	−8·05	−4·33	+0·04	+1·05	−0·56	−12·90
Backergunge	Patuakhali	−0·79	−1·11	−1·81	+1·03	−4·06	−3·90	−2·16	−1·14	−5·44	+1·09	+0·78	−0·47	−22·98
	Pirojpur	−0·71	−1·29	−1·41	−1·26	−1·67	−4·24	−4·78	−8·43	−4·79	−0·06	+1·55	−0·29	−27·38
	Barrisal	−0·77	−0·74	−2·37	−0·76	−0·72	−3·12	−2·79	−2·95	−2·41	+0·60	+1·16	−0·32	−15·13
	Bhola	−0·58	−0·78	−2·30	+1·12	−1·58	−5·42	−1·32	−9·24	−3·98	+1·40	+1·10	−0·51	−22·09
Noakhali ...	Noakhali	−0·62	−0·65	−3·52	+3·02	−2·75	−0·04	−0·09	−5·57	−3·07	+4·33	+4·72	−0·59	− 5·73
	Fenny	−0·79	+0·29	−2·86	+5·79	+1·27	−11·35	−2·27	−11·37	−5·56	+7·84	+2·53	−0·91	−17·89
Faridpur ...	Madaripur	−0·61	−0·60	−2·83	+0·79	+0·47	−2·14	−1·25	−7·17	−1·39	−0·31	+4·01	−0·14	−11·17
	Faridpur	−0·34	−0·04	−2·16	−0·51	−0·35	−4·23	−0·21	−2·99	−2·88	+1·06	+5·73	−0·15	− 7·08
	Goalundo	−0·40	−0·41	−1·86	−0·55	−0·63	−2·27	−0·47	−1·57	−2·85	−1·98	+2·69	−0·14	−10·44
Dacca ...	Munshiganj	−0·54	−0·49	−2·70	+2·17	+0·63	−6·31	−6·66	−5·81	−2·80	+1·99	+2·96	−0·33	−17·89
	Dacca	−0·33	−0·05	−1·79	−0·92	+0·43	−5·86	−5·16	−6·49	−4·74	+1·40	+6·62	−0·19	−17·08
	Narayanganj	−0·39	−0·16	−2·01	−1·26	+1·14	−4·72	−7·82	−3·90	−1·30	+1·66	+4·23	−0·29	−14·82
	Manikganj	−0·44	−0·02	−1·19	+0·31	−2·31	−3·05	−2·42	−3·39	−4·27	−1·36	+3·97	−0·13	−14·30
Hill Tipperah	Agartala	−0·65	−0·20	−3·98	+6·60	+1·26	+1·54	+0·36	−7·02	−1·08	−3·02	+3·88	−0·37	− 2·63
Tipperah ...	Comilla	−0·68	−0·80	−2·40	+5·24	+1·53	−2·58	−1·02	−10·34	−4·84	+3·65	+2·12	−0·44	−10·56
	Chandpur	−0·53	+1·26	−1·97	+9·36	+6·90	+8·21	+3·77	−11·89	−4·53	−1·05	+3·65	−0·39	+12·79
	Brahmanbaria	−0·77	−0·88	−3·25	+6·23	+3·12	+1·65	−2·83	−6·93	+1·26	+4·23	+3·16	−0·28	+ 4·71
Mymensingh	Kishorganj	−0·57	−0·56	−2·05	+4·10	+9·63	−3·75	−4·97	+0·22	−3·57	−2·11	+2·96	−0·32	− 0·99
	Atia (*Tangail*)	−0·43	−0·34	−0·61	+3·82	+1·99	−4·76	−2·48	−5·11	−2·57	−1·95	+0·31	−0·10	−12·25
	Mymensingh	−0·38	+0·52	−0·93	+4·28	+7·45	−4·13	−0·92	−1·89	−7·17	−3·69	−0·06	−0·18	− 7·10
	Jamalpore	−0·43	−0·87	+1·05	−0·45	+2·60	−3·89	+4·36	+2·71	−2·89	−2·94	−0·23	−0·28	− 1·26
	Netrokona	−0·19	+1·33	+3·00	+5·34	+10·70	−0·95	+1·77	+2·90	−2·49	−1·16	−0·09	−0·17	+19·99
NORTH BIHAR.														
Purnea ...	Kishanganj	−0·63	−0·13	+0·24	+1·21	+0·67	−6·24	+2·41	+23·01	−9·39	−2·03	−0·05	−0·15	+ 8·92
	Araria	−0·48	−0·40	+0·02	+0·32	−0·64	+4·50	+5·90	+19·02	−10·57	−3·48	−0·05	−0·10	+14·04
	Purnea	−0·46	−0·48	−0·23	+1·13	+0·73	−3·10	+8·55	+8·66	−8·88	−3·94	−0·08	−0·16	+ 1·74
Bhagalpur ..	Madhipura	−0·47	−0·25	−0·04	+1·45	−2·04	+1·97	+2·08	+4·80	−0·92	−4·06	−0·06	−0·09	− 3·63
	Supaul	−0·46	−0·16	+0·15	+0·81	−1·18	+1·31	+0·40	+5·27	−6·43	−2·83	−0·04	−0·12	− 1·33
	Bhagalpur	−0·48	−0·29	+0·24	−0·11	−2·12	−2·51	−2·98	+4·75	−5·26	−2·71	−0·27	−0·10	−11·84
	Banka	−0·59	+0·31	−0·34	+0·26	−1·48	−3·88	+7·05	−2·19	−0·54	−1·87	−0·13	−0·14	− 3·54
Darbhanga ...	Tajpur	−0·64	+0·09	−0·23	−0·21	−1·85	−1·18	−2·72	+7·15	−2·74	−3·16	−0·09	−0·08	− 5·66
	Darbhanga	−0·50	+0·48	−0·26	−0·13	−0·58	−0·12	−0·70	+12·76	−6·56	−2·97	−0·06	−0·17	+ 1·10
	Madhubani	−0·74	+0·42	0	−0·49	−0·90	+1·49	+6·72	+5·53	−8·02	−2·62	−0·03	−0·08	+ 1·28
Muzaffarpur	Sitamarhi	−0·53	−0·07	−0·65	+0·28	−0·85	+4·43	+2·57	+2·36	−3·84	−2·74	−0·01	−0·12	+ 0·83
	Muzaffarpur	−0·79	+0·41	−0·42	−0·58	−1·99	+0·86	−1·37	+2·13	−5·88	−3·47	−0·09	−0·13	−11·32
	Hajipur	−0·57	+0·62	−0·38	−0·19	−1·73	−1·90	−2·50	+5·82	−3·72	−3·44	−0·14	−0·12	− 8·25
Champaran ...	Motihari	−0·65	−0·24	−0·37	−0·62	+1·04	+8·00	+8·69	+12·65	−3·21	−3·49	−0·02	−0·18	+21·60
	Bettiah	−0·69	−0·26	−0·36	−0·63	−1·47	+1·94	+1·74	+8·62	−4·63	−3·58	−0·01	−0·24	+ 0·43
Saran	Gopalganj	−0·84	−0·38	−0·14	−0·05	−1·74	−1·35	−2·55	+8·25	−0·39	−5·01	−0·13	−0·17	− 4·50
	Siwan	−0·76	+0·46	−0·23	−0·27	−1·58	−1·64	−2·92	+6·30	−3·27	−4·02	−0·11	−0·15	− 8·19
	Chapra	−0·66	+0·78	−0·29	−0·28	−0·30	+1·58	−5·52	+13·52	−3·44	−3·51	−0·29	−0·18	+ 1·41
SOUTH BIHAR.														
Shahabad ...	Buxar	−0·73	+0·85	−0·28	−0·12	−0·88	+0·36	−2·23	+11·30	−4·47	−3·27	+0·43	−0·23	+ 0·70
	Dehri	−0·58	+0·27	−0·70	+0·06	−1·26	+2·33	+1·84	−0·32	−6·15	−2·53	−0·25	−0·57	− 7·86
	Bhabhua	−0·25	+1·89	−0·56	−0·13	−0·87	+0·16	−3·56	−0·17	−4·11	−3·07	−0·49	−0·36	−11·52
	Sasaram	−0·44	+0·21	−0·27	−0·17	−1·17	+2·27	−2·40	+0·13	−4·52	−3·45	−0·21	−0·29	−10·37
	Arrah	−0·62	+0·90	−0·34	−0·22	−1·10	−0·95	−0·94	+5·63	−0·68	−2·99	−0·15	−0·21	− 1·67
Gaya	Aurangabad	−0·23	+0·88	−0·38	−0·23	−1·62	−0·64	−1·62	−0·43	−1·93	−2·01	−0·24	−0·36	− 8·81
	Gaya	−0·49	+0·17	−0·35	−0·31	−1·07	−1·83	+0·12	+4·94	−1·55	−1·95	−0·27	−0·25	− 1·84
	Nawada	−0·69	0	−0·47	−0·30	−1·64	+0·87	−3·33	+1·08	−0·89	−1·86	−0·19	−0·23	− 7·65
	Jahanabad	−0·71	−0·29	−0·35	−0·15	−1·74	−2·77	−1·02	+1·56	+0·87	−3·39	−0·25	−0·19	− 8·43
Patna	Patna	−0·53	+0·85	−0·33	−0·23	−1·75	−1·59	−0·39	+12·95	−2·40	−3·21	−0·13	−0·17	+ 3·07
	Dinapore	−0·46	+0·38	−0·18	−0·23	−1·48	−2·58	+1·39	+19·61	−3·45	−3·26	−0·14	−0·19	+ 9·41
	Bihar	−0·67	−0·22	−0·34	+0·03	−1·80	−1·76	−2·93	+7·97	+1·62	−2·92	−0·24	−0·14	− 1·40
	Barh	−0·47	−0·18	−0·34	−0·12	−2·26	+1·68	−2·04	+7·34	−2·98	−2·73	−0·23	−0·13	− 2·46
Monghyr ..	Begusarai	−0·56	+0·18	−0·24	+1·07	−2·02	−1·85	−2·03	+1·65	−3·66	−0·97	−0·29	−0·09	− 8·81
	Monghyr	−0·48	−0·33	−0·31	+0·06	−2·16	−1·23	+0·22	−0·53	−5·32	−1·97	−0·14	−0·09	−12·28
	Jamui	−0·67	−0·20	−0·45	+0·03	−1·04	−0·85	+2·63	−1·75	−2·84	−1·77	−0·09	−0·09	− 7·07
Sonthal Parganas.	Rajmahal	−0·17	+0·29	−0·04	+0·54	−4·30	−4·81	−2·99	+0·12	−9·01	−1·76	−0·13	−0·06	−22·32
	Godda	−0·35	+0·26	−0·10	+0·06	−1·85	−2·24	+12·06	−3·89	−2·56	−2·59	−0·10	−0·13	− 1·44
	Pakour	−0·25	−0·09	−0·39	+0·56	−0·21	−4·01	−5·31	−3·96	−5·23	+0·95	−0·08	−0·09	−18·14
	Naya Dumka	−0·58	+0·41	−0·70	−0·49	−0·35	−2·13	+0·80	−6·58	−2·98	−0·91	−0·12	−0·22	−13·85
	Deoghur	−0·44	+0·38	−0·63	−0·61	−2·14	−2·75	+2·31	+3·30	−2·42	−3·83	−0·16	−0·18	− 7·17
	Jamtara	−0·41	+0·78	−0·72	+0·04	−0·48	−3·72	+5·70	−6·32	+3·95	−1·13	+0·03	−0·15	− 2·48
CHOTA NAGPUR.														
Hazaribagh ...	Pachamba (*Giridi*) ..	−0·40	+0·79	−0·64	−0·64	−0·93	−2·57	−0·80	−3·80	−0·86	−0·09	−0·22	−0·18	−10·34
	Hazaribagh	−0·60	+1·30	−0·70	−0·37	−1·46	+2·36	+4·13	−6·17	−0·72	−0·60	−0·24	−0·31	− 3·38
	Semtagurah	−0·51	+0·99	−1·18	−0·30	−1·38	+1·33	−6·01	−4·14	−1·33	+0·81	−0·32	−0·32	−12·36
	Mahudi Hills	−0·83	+0·47	−0·74	−0·10	−1·38	+2·27	−4·38	−2·27	−1·71	+2·41	−0·37	−0·30	− 6·93
	Jhumrah Hill	−0·70	+0·29	−0·73	0	−0·59	+1·46	−1·07	−8·48	−3·12	+2·17	−0·28	−0·29	−11·34
Lohardaga	Lohardaga	−0·84	+1·42	−0·63	−0·26	−2·08	+1·43	+1·53	−2·94	−5·09	+3·45	−0·50	−0·51	− 5·02
	Ranchi	−0·64	+0·45	−0·86	−0·48	−2·06	+2·26	−1·76	−2·49	−0·86	+2·72	+0·38	−0·49	− 3·63
Palamau ...	Palamau (*Daltonganj*) ...	−0·77	+0·28	−0·65	−0·29	−1·25	+0·24	+1·25	+3·33	+0·48	−2·24	−0·45	−0·30	− 0·37
Singhbhum ...	Chaibassa	−0·73	+0·34	−1·21	−0·33	−1·98	−2·32	+2·79	−8·76	+4·73	−0·20	+3·01	−0·37	− 5·03
Manbhum ...	Purulia	−0·46	−0·01	−1·03	−0·55	−1·83	+3·78	+0·78	−10·80	+1·10	+0·56	+0·49	−0·24	− 8·21
	Govindpur	−0·51	+0·07	−0·50	−0·37	+0·20	+0·91	−2·89	−3·55	+3·11	−2·07	+0·25	−0·19	− 5·54

Meteorological Office, Bengal,
The 30th January 1893.

A. Pedler,
Meteorological Reporter to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS. Air pressure. Mean barometric height, 8 A. M. reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. Prevailing direction.	Mean wind velocity.	Temperature. Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri ...	30·008	29·957	—	N	237	79·1	27th Jan.	53·6	28th Jan.	76·2	60·1	68·2
		Gopalpore ...	30·016	29·979	—·034	NNW	240	85·7	27th ,,	52·0	28th ,,	78·2	59·0	68·6
		False Point ...	30·006	29·970	—·048	NW	195	82·4	27th ,,	49·5	28th ,,	75·2	56·0	65·6
	Cuttack	Cuttack ...	29·945	29 972	—·035	Calm	51	80·1	26th ,,	51·4	28th ,,	76 5	57·1	66·8
	Balasore	Balasore ...	29·971	29·976	—·055	Nly	80	77·3	26th ,,	46·4	28th ,,	73·7	55·4	64·6
South-West Bengal.	Midnapore	Midnapore ...	29·880	29·984	—·047	N	220	79·3	25th ,,	45·1	28th ,,	75·5	53·3	64·5
	24-Parganas	Calcutta ...	30·012	29·980	—·037	Calm	48	75·2	22nd ,,	45·7	28th ,,	71·4	52·8	62·1
		Saugor Island	29·999	29·969	—·039	NEly	233	77·2	22nd ,,	48·1	28th ,,	72·5	56 1	64·3
	Howrah													
	Hooghly													
	Nadia	Krishnagar ...	29·981	29·981	—·021	Variable	85	76·9	25th ,,	40·5	28th ,,	73·2	48·6	61·0
	Khulna													
	Jessore	Jessore ...	29 996	29·978	—·034	Calm	71	75·2	22nd ,,	43·4	28th ,,	71·0	49·7	60·3
	Burdwan ...	Burdwan ..	29·929	29·983	—·045	Calm	32	77·1	25th ,,	45·1	28th ,,	72 7	52·7	62·7
		Raniganj ...	29·695	30·012	—·057	Calm	37	75·7	25th ,,	44·7	28th ,,	71·5	52·1	61·8
	Bankura	Bankura ...	29·694	29·963	—·052	W	56	76·2	25th ,,	45·1	28th ,,	72·3	53·0	62·7
	Birbhum													
	Murshidabad	Berhampore...	29 957	29·977	—·045	Variable	53	76·1	25th ,,	45·6	28th ,,	70·5	51·7	61·1
	Pabna	Sirajganj ...	29·967	29·966	—·041	SW	31	75·9	22nd ,,	40·1	28th ,,	70·1	48·6	59·4
North Bengal.	Bogra	Bogra ...	29·950	29·968	—·025	Variable	61	74·3	24 & 25 ,,	41·2	28th ,,	70·4	48·1	59·3
	Rajshahi	Rampur Boalia.	29·949	29·972	—·024	Calm & Wly.	75	74·6	25th ,,	41·1	28th ,,	69·4	49·3	59·3
	Malda	Malda ...	29·941	29·978	—	Variable	95	70·8	25th ,,	39·5	28th ,,	70·8	48·0	59·4
	Dinajpur	Dinajpur ...	29·896	29·976	—·019	Variable	53	73·1	25th ,,	40·5	28th ,,	69·5	48·5	59·0
	Rangpur	Rangpur ...	29·889	29·975	—·031	Ely	52*	71·8	22 & 25 ,,	40 1	28th ,,	68·7	46·4	57·5
	Jalpaiguri	Jalpaiguri ...	29·717	29 974	—·033	Variable	51	72·4	22nd ,,	42·6	28th ,,	67·3	47·8	57·6
	Kuch Bihar													
	Darjeeling	Darjeeling ...	22·846	—	—·093	N	184	38·0	22nd ,,	25·7	27th ,,	35·0	25·1	31·5
	Sikkim	Gnatong ...	19·007	—	—	ESE	103	36·3	24th ,,	—5·5	27th ,,	27·5	1·9	14·8
East Bengal.	Chittagong	Chittagong ...	29·927	29·966	—·047	Calm	43	78 2	26th ,,	46·1	28th ,,	73·7	52·0	62·9
	Chittagong Hill Tracts	Demagiri ...	Observations not received.											
	Backergunge	Barisál ...	·30·010	29·969	—·030	Calm	51	77·3	22nd Jan.	44·6	28th ,,	70·7	51·5	61·1
	Noakhali	Noakhali ...	29·980	29·972	—·025	N	87	76·3	22nd ,,	43·0	28th ,,	71·7	49·8	60·3
	Faridpur	Faridpur ...	29·993	29·990	—·019	Calm	44	74·0	22nd ,,	44·0	28th ,,	67·2	50·1	58·7
	Dacca	Dacca ...	29·994	29·965	—·045	Ely	78	76·1	22nd ,,	46·2	28th ,,	73·2	51·6	61·9
	Tippera	Comilla ...	29 979	29·964	—·036	Calm	37	77·4	22nd ,,	44·1	28th ,,	72·1	49·9	61·0
	Mymensingh	Mymensingh	29·949	29·967	—·047	Wly	59	74·3	22nd ,,	43·1	28th ,,	69·6	49·2	59·4
North Bihar.	Purnea	Purnea ...	29·878	29·967	—·060	Calm	53	73·2	23 & 25 ,,	39·[illegible]	28th ,,	68 8	44·9	56·9
	Bhágalpur	Bhagalpur ...	29·841	29·963	—·054	Calm	41	74·8	25th ,,	40·5	28th ,,	69·2	48·9	59·1
	Darbhanga	Darbhanga ...	29·853	29 985	—·054	WSW	111	72·0	23rd ,,	45·1	27 & 28 ,,	68 0	47·9	58·0
	Muzaffarpur	Muzaffarpur...	29·833	29·979	—	Wly	129	72·2	25th ,,	41·8	28th ,,	67·2	47·2	57·2
	Champaran	Motihari ...	29·766	29·964	—·057	WSW	160	72·2	22nd ,,	39·0	28th ,,	68·2	44·5	56·4
	Saran	Chapra ...	29·825	29·973	—·030	Variable	125	73·8	25th ,,	42·2	28th ,,	69·1	47·2	58·2
South Bihar.	Shahabad	Dehri ...	29·641	29·971	—·069	SW	76	76·9	25th ,,	43·0	28th ,,	70·1	50·7	60·4
		Buxar ...	29·752	29·963	—·071	Variable	130	73·4	25th ,,	43·4	25 & 28 ,,	67·1	48·0	57·5
		Arrah ..	29·812	29·968	—·040	Wly	80	75·5	25th ,,	40·5	28th ,,	69·6	47·8	58·7
	Gaya	Gaya ...	29·621	29·973	—·065	SW	164	77·7	25th ,,	43·0	28th ,,	70·9	50·3	60·6
	Patna	Bankipore ...	29·841	29·989	—·056	Nly	160	75·0	25th ,,	41·7	28th ,,	68·3	48·4	58·3
	Monghyr													
	Sonthal Parganas ...	Naya Dumka	29·512	29·993	—·032	WNW	50	75·0	25th ,,	41·0	28th ,,	69·4	49·4	59·5
Chota Nagpur.	Hazaribagh	Hazaribagh ...	27·928	29·987	—·066	SWly	222	72·2	25th ,,	40·2	28th ,,	65·5	47·1	56·3
	Lohardaga	Ranchi ...	27·806	29·980	—·057	Calm	151	71·5	25th ,,	40·5	27th ,,	65·3	46·8	56·1
	Palamau													
	Singhbhum	Chaibassa ...	29·210	29·962	—·050	Variable	34	77·6	25th ,,	43·6	28th ,,	73·8	52·0	62·9
	Manbhum													

* Mean of 6 days.

Explanation.— *Summary.*—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period
The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 10
rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station
district, i.e. from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one on

for the week ending Saturday, the 28th of January 1893.

					DISTRICT OBSERVATIONS.										DISTRICT.
					Of week.				Rainfall.						
									Since 1st of month.			Since 16th October 1892.			
Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.	
—	64·4	77	2·1	1·50	1·37	0·12	1·00	0·18	2·08	0·36	+1·72	9·28	6·46	+2·82	Puri.
—2·9	62·6	86	1·7	0·74											
—3·6	62·4	80	2·6	2·31											
—6·1	61·0	72	1·4	1·33		0·18		0·30		0·45			4·30		Cuttack.
—3·7	59·7	84	1 7	0·79		0·27		0·39		0·53			3·19		Balasore.
—2·5	58·6	80	2·4	0·33	0·43	0·18	1·75	0·37	0·43	0·46	—0·03	8·36	3·07	+5·29	Midnapore.
—4·4	56·9	88	2·9	0·70	0·75	0·21	2·00	0·41	0·75	0·55	+0·20	7·87	2·97	+4·90	24-Parganas.
—4·5	60·0	86	3·0	0·88											
					0·27	0·15	1·50	0·45	0·27	0·47	—0·20	3·83	2·26	+1·57	Howrah.
					0·57	0·18	2·00	0·40	0·62	0·50	+0·12	7·76	2·07	+5·69	Hooghly.
—3·2	54·3	85	3·3	0·30	0·33	0·16	1·00	0·32	0·36	0·38	—0·02	4·60	1·96	+2·64	Nadia.
					0·15	0·24	1·00	0·46	0·15	0·63	—0·48	7·07	2·97	+4·10	Khulna.
—5·5	55·1	88	2·6	0·26	0·22	0·19	1·00	0·37	0·33	0·50	—0 17	9·52	2·43	+7·09	Jessore.
—4·4	55·2	74	3·3	0·73	0·47	0·17	1·00	0·32	0·53	0·45	+0·08	5·02	1·90	+3·12	Burdwan.
—3·9	56·8	74	1·3	0·43											
—2·6	56·8	79	3·4	0·51	0·51	0·08	1·50	0·23	0·88	0·39	+0·40	5·34	1·97	+3·37	Bankura.
					0·70	0·14	1·00	0·32	0·79	0·50	+0·29	4·01	1·46	+2·55	Birbhum.
—4·1	53·5	92	4·0	0·51	0·54	0·09	1·00	0·29	0·67	0·44	+0·23	2·50	1·33	+1·17	Murshidabad.
—3·6	53·7	89	4·4	0·47	0·37	0·13	1·50	0·31	0·61	0·42	+0·19	1·72	1·90	—0·18	Pabna.
—4·1	53·3	84	4·3	0·22	0·20	0·13	0 75	0·36	0·33	0·41	—0·08	1·25	1·48	—0·23	Bogra.
—2 3	56·3	82	3·9	0·24	0·23	0·20	1·00	0·32	0·47	0·55	—0·08	0·99	1·65	—0 66	Rajshahi.
—	54·0	79	4·0	0·07	0·14	0·14	0·50	0·38	0·26	0·52	—0·26	1·05	1·75	—0·70	Malda.
—2·5	53 7	84	3·1	0·20	0·13	0·22	0·40	0·33	0·48	0·55	—0·07	0·91	1·29	—0·38	Dinajpur.
—3·4	51·4	91	1·6	0·31	0·23	0·13	1·50	0·34	0·59	0·51	+0·08	1·69	1·65	+0·04	Rangpur.
—3·4	51·9	90	6·3	0·45	0·46	0·20	2·00	0·41	0·55	0·64	—0·09	1·68	2·89	—1·21	Jalpaiguri.
—7·1	31·4	95	6·7	0·55	0·39	0·22	2·00	0·37	0·68	0·54	+0·14	1·56	1·54	+0·02	Kuch Bihar.
					1·14	0·33	2·00	0·68	1·95	0·95	+1·00	5·36	3·19	+2·17	Darjeeling.
—	19·2	75	2·1	1·40											Sikkim.
—3·7	57·3	90	4 4	0·01	0·06	0·23	0·50	0·18	0·08	0·73	—0·65	12·86	5·60	+7·26	Chittagong.
					Nil	0·21	0·00	0·40	1·92	0·62	+1·30	8·61	4·89	+3·72	Chittagong Hill Tracts.
—3·1	57·2	84	2·9	0·08	0·06	0·10	0·25	0 39	0·35	0·63	—0·28	8·29	4·18	+4·02	Backergunge.
—3·9	57·3	85	1·0	Nil	Nil	0·21	0·00	0·43	0·24	0·61	—0·37	15·66	5·40	+10·26	Noakhali.
—3·3	55·0	88	3·1	0·19	0 20	0·24	0·67	0·52	0·20	0·55	—0·35	7·43	2·09	+5·34	Faridpur.
—4·8	54·9	85	5·0	0·32	0·27	0·25	1·00	0·69	0·38	0·51	—0·13	9·14	2·75	+6·39	Dacca.
—3·3	55·8	86	2·7	0·25	0·33	0·25	1·25	0·54	0·53	0·65	—0·12	8·90	2·95	+5·95	Tippera.
—3·6	53·6	89	4·9	0·51	0·31	0·15	1·20	0·27	0 55	0·43	+0·12	3·41	2·24	+1·17	Mymensingh.
—4·7	49·8	90	3·0	0·54	0·48	0·13	2·00	0·37	0·79	0·57	+0·22	0·81	1·83	—1·02	Purnea.
—2·4	54·2	78	4·6	0·22	0·51	0·14	1·50	0·41	0·82	0·50	+0·32	1·35	1·55	—0·20	Bhagalpur.
—4·1	52·2	86	4·0	1·19	0·99	0·11	1·33	0·32	1·49	0·60	+0·89	1·50	1·48	+0·02	Darbhanga.
—	50·9	93	3·4	1·12	0·84	0·10	1·00	0·41	1 17	0·63	+0 54	1·21	1·65	—0·44	Muzaffarpur.
—3·0	50·6	89	3·7	0·53	0·65	0·12	1·00	0·55	0·75	0·70	+0·05	0·75	1·24	—0·49	Champaran.
—3·1	51·3	85	1·3	1·00	0·69	0·15	1·00	0·35	1·15	0·75	+0·40	1·18	1·66	—0·48	Saran.
?	54·8	76	4·0	0·26											
—4·1	54·9	85	3 9	0·34	0·25	0·11	1·00	0·44	0·73	0·68	—0·05	1·13	2·08	—0·95	Shahabad.
—2·1	52·7	81	1·9	0 27											
—3·4	55·0	75	3·1	0·26	0·27	0·15	0·75	0·38	0·55	0·70	—0·15	1·08	1·74	—0·66	Gaya.
—3·0	54·5	75	3·1	0·56	0·37	0·11	1·00	0·43	0·59	0·57	+0·02	0·82	1·82	—1·00	Patna.
					0·30	0·18	1·00	0·43	0·42	0·63	—0·21	1·75	1·87	—0·12	Monghyr.
—3·8	54·9	76	3·5	0·41	0·55	0·10	1·33	0·25	0·76	0·41	+0·35	2·21	1·55	+0·66	Sonthal Parganas.
—5·5	51·9	76	4·9	1·05		0·10		0 20		0·55			1·80		Hazaribagh.
—5·1	53·0	74	3·7	0·53	0·77	0·13	2·00	0·28	0·93	0·66	+0·33	7·15	2·41	+4·74	Lohardaga.
					0·88	0·15	3·00	0·32	1·07	0·72	+0·35	1·64	2·16	—0·52	Palamau.
—4·1	55·8	84	3·6	0·23	0·23	0·24	1·00	0·45	0·53	0·79	—0·26	6·53	2·58	+3·95	Singhbhum.
					1·05	0·16	1·00	0·32	1·31	0·58	+0·73	4·34	1·81	+2·53	Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater.
he numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of
for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the
which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 28th of January 1893.

Meteorological Division.	District.	Station.	Rainfall.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th October 1892.	Average rainfall from 16th October to date.
			Sunday, 22nd.	Monday, 23rd.	Tuesday, 24th.	Wednesday, 25th.	Thursday, 26th.	Friday, 27th.	Saturday, 28th.							
Orissa ..	Puri ...	Puri ...	1·50	...	...	...	...	...	...	1	1·50	0·21	2·18	0·35	12·23	7·18
		Khurda ...	0·80	...	...	...	...	...	...	1	0·80	0·15	1·60	0·37	5·72	4·93
		Banpur ...	0·85	...	...	...	..	...	...	1	0·85	Nil	1·57	0·06	7·36	5·99
		False Point ...	2·22	0·09	...	..	...	...	...	1	2·31	0·11	3·56	0·65	11·80	7·73
		Gop ...										?		?		?
		Satpara ..	0·66	...	...	...	...	...	...	1	0·66	?	0·66	?	8·54	?
		Pipli ..	1·22	...	...	...	...	...	...	1	1·22	?	1·53	?	6·61	?
	Cuttack ...	Jagatsingpore	0·02	...	..	...	..	0·06	...	Nil	0·08	0·09	2·60	0·38	11·00	4·12
		Banki .	1·22	..	...	...	.	...	...			0·12		0·30		4·31
		Cuttack ...	1·35	...	...	...	...	...	...			0·20		0·47		4·47
		Kendrapara ...	1·16	0·02	...	...	...	0·01	...	1	1·19	0·09	1·85	0·44	7·94	4·51
		Jajpur ...	0·92	0·05	...	...	...	...	..			0·39		0·61		3·99
		Dharmsala ...							...			?		?		?
		Salipore .	0·14	...	...	...	...	...	...			?		?		?
		Pul Lahara ...										?		?		?
	Balasore ...	*Akhyapada* ...	0·43	..	...	...	...	...	...			?		?		?
		Chandbali ..	0·49	...	...	...	...	...	...			0·25		0·66		4·46
		Bhadrak ...	0·62	...	..	...	...	0·13	...	2	0·75	0·13	1·53	0·65	7·48	3·40
		Soro ...		...	..	...	0·80	...	...	1	0·80	0·26	1·30	0·13	7·78	3·08
		Balasore ..	0·53	0·02	...	...	0·27	...	...	2	0·82	0·22	0·82	0·52	10·84	4·03
		Jellasore ...						..	...			0·38		0·61		2·02
		Baripodah .						...	...			0·07		0·24		2·06
South-West Bengal.	Midnapore	Contai ..	0·44	...	...	...	...	...	...	1	0·44	0·19	0·44	0·32	10·68	5·14
		Tamluk ..	0·18	...	...	...	0·27	...	...	2	0·45	0·25	0·45	0·50	5·80	2·98
		Midnapore ..	0·13	...	..	...	0·23	...	...	2	0·36	0·19	0·36	0·62	8·18	2·80
		Ghatal .	0·18	...	...	...	0·30	...	...	2	0·48	0·09	0·48	0·39	8·77	1·28
		Kukrahaty ...	0·46	...	...	...	0·85	...	...	2	1·31	?	1·40	?	4·91	?
		Garhbeta ...	0·20	...	...	...	0·40	...	...	2	0·60	?	0·70	?	4·01	?
	24-Parganas ...	Saugor Island	0·29	0·03	...	...	0·56	...	...	2	0·88	0·23	0·88	0·47	15·54	5·35
		Diamond Harbour ..	0·40	...	...	...	0·27	...	...	2	0·67	0·25	0·67	0·75	7·30	3·25
		Canning Town	0·30	...	.	...	0·38	...	..	2	0·68	?	0·68	?	9·92	?
		Alipore Observatory ...	0·16	0·04	...	...	0·50	...	...	2	0·70	0·23	0·70	0·55	5·55	2·89
		Barrackpore...	0·20	...	..	...	0·51	...	...	2	0·71	0·15	0·71	0·53	8·50	2·16
		Dum-Dum ..	0·37	...	...	...	0·46	...	...	2	0·83	0·14	0·83	0·48	4·61	2·38
		Barasat ..	0·32	...	...	...	0·70	..	...	2	1·02	0·22	1·02	0·64	6·80	2·50
		Basirhat ...	..	0·13	...	...	0·28	...	...	2	0·41	0·25	0·41	0·46	6·67	2·30
	Howrah ...	Howrah	...	0·19	...	..	0·10	...	...	2	0·29	0·17	0·29	0·49	3·38	2·61
		Mohesreka ...	0·18	..	...	...	0·06	...	...	1	0·24	0·15	0·24	0·44	4·26	1·90
		Ulubaria ...	0·22	...	...	...	0·08	...	...	1	0·30	?	0·30	?	4·16	?
	Hooghly ..	Serampore ...	0·16	...	...	...	0·61	...	...	2	0·77	0·20	0·83	0·52	9·46	2·11
		Hooghly ...	0·22	..	...	...	0·30	...	...	2	0·52	0·13	0·56	0·47	8·37	2·12
		Jahanabad .	0·14	...	.	...	0·27	...	...	2	0·41	0·22	0·45	0·52	5·42	2·00
	Nadia ...	Ranaghat	0·08	...	..	...	0·21	..	...	1	0·29	0·19	0·29	0·49	6·25	2·22
		Krishnagar ...	0·05	..	...	...	0·25	...	..	1	0·30	0·15	0·32	0·36	6·28	1·53
		Chuadanga ..	0·04	0·02	...	...	0·22	...	...	1	0·28	0·16	0·35	0·37	?	2·19
		Meherpore ...	...	...	...	...	0·30	...	...	1	0·30	0·12	0·30	0·23	2·39	1·76
		Kushtia	...	...	..	...	0·45	0·05	...	1	0·50	0·20	0·54	0·41	3·47	2·08
	Khulna ..	Satkhira	0·15	...	...	...	0·15	...	...	2	0·30	0·14	0·30	0·41	5·24	2·67
		Bazerhat .	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	0·80	8·65	3·08
		Khulna ..	...	0·03	...	...	0·11	...	...	1	0·14	0·26	0·14	0·64	7·34	3·12
		Nakipur ..										?		?		?
		Rampal ...	...	...	..	...	...	0·13	...	1	0·13	?	1·09	?	6·75	?
	Jessore ...	Narail	...	0·07	.	...	0·10	...	...	1	0·17	0·26	0·33	0·69	9·48	3·06
		Jessore	0·06	0·04	.	...	0·16	...	...	1	0·26	0·23	0·32	0·60	11·24	2·79
		Jhenidah .	0·07	.	...	...	0·11	...	...	1	0·18	0·06	0·24	0·34	8·81	2·16
		Magura .	0·08	0·02	...	...	0·14	...	...	1	0·22	0·16	0·24	0·36	7·30	1·88
		Bangaon	0·04	...	...	...	0·25	...	...	1	0·29	0·24	0·29	0·54	7·77	2·41
	Burdwan .	Kalna	0·09	...	..	..	0·29	...	...	1	0·38	0·14	0·38	0·32	7·77	2·05
		Burdwan ..	0·07	...	...	...	0·66	...	...	1	0·73	0·18	0·81	0·41	5·87	1·98
		Katwa .	0·02	...	...	...	0·31	...	...	1	0·33	0·21	0·46	0·49	4·27	2·05
		Raniganj .	0·02	...	...	...	0·41	...	...	1	0·43	0·14	0·45	0·36	2·14	1·53
		Mankur ..	...	...	...	...	0·39	...	...	1	0·39	?	0·39	?	2·12	?
	Bankura	Bankura .	0·05	...	...	...	0·46	...	...	1	0·51	0·14	1·17	0·40	5·67	2·02
		Vishnupur ...	0·21	...	...	...	0·72	...	...	2	0·93	0·08	1·09	0·38	6·51	1·85
		Maliara ..	0·05	..	...	...	0·31	...	...	1	0·36	0·07	0·49	0·34	1·82	1·52
		Khatra ..	0·10	...	..	...	0·14	...	...	2	0·24	0·04	0·76	0·45	7·35	2·48
		Indas	0·12	...	..	...	0·27	...	...	2	0·39	?	0·49	?	5·01	?
		Kotalpur .	...	...	..	...	0·56	...	...	1	0·56	?	0·56	?	4·12	?
		Onda	...	...	...	...	0·42	...	...	1	0·42	?	0·53	?	5·33	?
		Gangajalghati	...	...	...	...	0·37	...	...	1	0·37	?	0·57	?	2·37	?
		Raipur ..	...	...	...	...	0·48	...	...	1	0·48	?	0·18	?	8·84	?
		Sonamukhi ...										?		?		?
	Birbhum ...	Suri	0·01	...	...	...	0·71	...	...	1	0·72	0·23	0·90	0·57	2·51	1·84
		Hetampore .	0·03	...	...	...	0·81	...	...	1	0·84	0·06	0·88	0·44	5·39	1·05
		Rampur Hat...	...	...	...	0·08	0·47	...	...	1	0·55	0·14	0·62	0·51	4·18	1·50
		Bolpur	...	...	..	...	0·41	...	...	1	0·41	?	0·41	?	2·66	?
		Murarai .	...	...	...	0·09	0·48	...	...	1	0·57	?	0·64	?	1·54	?
	Murshidabad	Kandi .	...	..	...	...	0·80	...	...	1	0·80	0·10	0·93	0·39	3·40	1·49
		Berhampore ...	...	0·01	...	...	0·51	...	...	1	0·51	0·13	0·84	0·51	2·31	1·50
		Lalbagh ...	...	...	...	...	0·56	...	...	1	0·56	0·02	0·71	0·22	3·72	1·01
		Azimganj ...	...	...	...	...	0·35	...	...	1	0·35	0·14	0·35	0·59	1·89	1·51
		Jangipur .	...	...	...	0·05	0·42	...	...	1	0·47	0·10	0·37	0·48	1·97	1·19
		Lalgola ..	..	...	...	...	0·55	...	...	1	0·55	0·06	0·55	0·45	1·70	1·26
		Akhriganj ...	...	...	...	...	0·27	...	...	1	0·27	?	0·39	?	1·34	?
		Patkabari	...	...	...	...	0·50	...	...	1	0·50	?	0·50	?	2·80	?
North Bengal.	Pabna ...	Pabna .	...	0·05	...	...	0·32	0·10	...	2	0·47	0·14	0·73	0·38	2·71	1·73
		Sirajganj ...	...	0·04	...	...	0·23	...	...	1	0·27	0·12	0·45	0·45	0·72	2·03
	Bogra ...	Sherepore ..	...	...	...	...	0·31	...	...	1	0·31	0·04	0·58	0·36	1·36	1·65
		Nowkhilla ...	...	0·03	...	...	0·24	...	...	1	0·27	0·05	0·36	0·33	1·45	1·40
		Bogra ...	...	...	...	...	0·22	...	...	1	0·22	0·30	0·26	0·62	1·16	1·93
		Panchbibi ...	...	...	...	...	...	...	...	Nil	Nil	0·13	0·11	0·34	1·02	0·82
	Rajshahi ...	Boalia ...	0·01	...	...	...	0·22	...	...	1	0·23	0·17	0·31	0·18	1·53	1·56
		Nator ...	0·02	...	...	...	0·20	...	...	1	0·22	0·11	0·64	0·56	1·01	1·94
		Naugaon ...	...	...	...	...	0·25	...	...	1	0·25	0·33	0·48	0·65	0·48	1·43
		Lalpore ...	...	...	...	...	0·26	...	...	1	0·26	?	0·40	?	0·98	?
		Manda ...	...	...	...	...	0·25	...	...	1	0·25	?	0·30	?	0·44	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 28th of January 1893—*contd.*

Meteorological Division.	District.	Station.	Rainfall. Sunday, 22nd.	Monday, 23rd.	Tuesday, 24th.	Wednesday, 25th.	Thursday, 26th.	Friday, 27th.	Saturday, 28th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BENGAL—*concld.*	Malda	Malda	...	...	...	0·06	0·01	...	...	Nil	0·07	0·09	0·15	0·45	1·47	1·98
		Chanchal	0·05	...	...	0·10	0·05	...	...	1	0·20	0·19	0·36	0·60	0·62	1·46
		Gajol	...	...	...	...	0·04	...	...	Nil	0·04	?	0·01	?	0·38	?
		Sibganj	...	...	...	0·05	0·56	...	...	1	0·61	?	0·76	?	1·36	?
	Dinajpur	Mohadebpore	...	...	...	...	0·10	...	...	1	0·10	0·26	0·10	0·56	0·61	1·00
		Churaman	...	...	...	0·09	...	...	...	Nil	0·09	0·27	0·40	0·60	0·69	1·03
		Raiganj	...	...	...	...	0·21	...	...	1	0·21	0·08	1·05	0·57	1·56	0·93
		Dinajpur	...	...	...	0·08	0·08	...	...	Nil	0·16	0·16	0·60	0·49	0·88	3·44
		Balurghat	...	...	...	...	0·07	...	...	Nil	0·07	0·32	0·07	0·55	0·62	1·09
		Thakurgaon	...	...	...	0·19	0·16	...	...	2	0·35	?	0·56	?	0·56	?
	Rangpur	Bhawanigunge (*Gyabanda*)										0·07		0·34		1·67
		Rangpur	...	...	...	0·19	0·12	...	...	2	0·31	0·10	1·11	0·62	4·03	2·22
		Kurigaon	...	...	...	0·14	0·09	...	...	1	0·23	0·15	0·45	0·54	0·66	1·48
		Bagdogra (*Nilphamari*)	...	...	...	0·15	0·14	...	...	2	0·29	0·19	0·66	0·55	1·39	1·23
		Ulipore	...	...	...	...	0·10	...	...	1	0·10	?	0·10	?	0·10	?
	Jalpaiguri	Jalpaiguri	...	...	...	0·18	0·25	0·03	...	2	0·46	0·20	0·55	0·64	1·68	2·89
		Alipore Dooar	...	...	...	0·30	...	...	...	1	0·30	?	0·39	?	2·20	?
		Fallacotta	...	...	...	0·41	...	...	...	1	0·41	?	0·54	?	1·65	?
		Debiganj	...	...	...	0·27	0·18	...	...	2	0·45	?	0·65	?	1·25	?
		Bhagatpore (Nagrakatta)	...	...	...	...	0·38	0·22	...	2	0·60	?	2·02	?	8·20	?
	Kuch Bihar	Dinhatta	...	...	...	0·16	0·18	...	...	2	0·34	0·31	0·47	0·65	1·28	1·59
		Kuch Bihar	...	...	...	0·08	0·20	0·04	...	1	0·32	0·10	0·53	0·48	1·73	1·67
		Mekliganj	...	...	...	0·17	0·18	0·16	...	3	0·51	0·24	0·78	0·55	1·60	1·55
		Mathabhanga	...	0·05	...	0·10	0·20	0·05	...	2	0·40	0·23	0·54	0·47	1·57	1·26
	Darjeeling	Buxa	...	1·69	...	0·09	0·28	0·58	...	3	2·64	0·25	5·28	1·11	14·63	4·62
		Siliguri	...	0·04	...	0·22	0·42	0·04	...	2	0·72	0·42	1·05	0·82	2·91	1·60
		Darjeeling	...	0·05	...	0·06	0·44	...	...	1	0·55	0·22	0·64	0·60	1·56	4·40
		Kalimpong	...	...	...	0·21	0·45	...	...	2	0·66	0·43	0·97	1·25	2·43	2·11
		Kurseong	...	...	...	0·31	...	0·30	0·21	3	0·82	?	1·22	?	3·18	?
EAST BENGAL	Chittagong	Cox's Bazar										0·31		0·76		0·73
		Chittagong	...	0·02	...	...	...	...	...	Nil	0·02	0·14		0·67		4·40
		Kutubdia										?		?		?
		Satkanya										?		?	?	?
		Kodala										?		?	?	?
		Fenoa										?		?	?	?
		Mirsarai	...	0·01								?				
	Chittagong Hill Tracts.	Rangamati	...	...	...	...	...	...	...	Nil	Nil	0·21	1·92	0·62	8·61	4·89
		Bundarban	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·70	?
	Backergunge	Patuakhali	0·05	...	...	...	...	0·04	...	Nil	0·09	0·14	1·04	0·57	8·98	4·61
		Pirojpur	...	...	...	...	...	...	...	Nil	0·13	0·24	0·19	0·74	8·05	3·94
		Barisal	...	...	...	...	0·13	...	...	1	Nil	0·24	Nil	0·76	7·30	4·21
		Gournaddi	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·83	?
		Bhola	...	...	...	...	...	...	...	Nil	Nil	0·15	0·15	0·45	8·33	3·90
		Daulatkhan	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	11·60	?
		Bauphal	...	...	...	...	...	...	...	Nil	Nil	?	0·42	?	8·91	?
	Noakhali	Noakhali	...	...	...	...	...	...	...	Nil	Nil	0·19	0·13	0·55	16·34	4·66
		Fenny	...	...	...	...	...	...	...	Nil	Nil	0·24	0·32	0·66	14·98	6·10
		Harishpore	...	...	...	...	...	...	...	Nil	Nil	?	0·21	?	19·67	?
		Ramganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	10·73	?
	Faridpur	Madaripur	...	...	...	...	0·02	...	...	Nil	0·02	0·21	0·02	0·62	6·11	2·25
		Faridpur	...	0·03	...	...	0·16	...	...	1	0·19	0·22	0·19	0·18	10·89	2·01
		Goalundo	...	...	...	...	0·40	...	...	1	0·40	0·28	0·40	0·53	5·32	1·99
	Dacca	Munshiganj	...	...	...	...	0·17	...	...	1	0·17	0·20	0·17	0·57	7·26	3·06
		Dacca	...	...	...	...	0·31	...	...	1	0·31	0·16	0·54	0·38	12·05	2·03
		Narayanganj	...	...	...	...	0·11	...	...	1	0·11	0·33	0·13	0·61	10·13	3·91
		Manikganj	...	0·03	...	...	0·44	...	...	1	0·47	0·22	0·50	0·47	6·93	1·91
		Joydebpore	...	...	...	...	0·20	0·11	...	2	0·31	?	0·48	?	4·14	?
	Hill Tippera Tippera	Agartola	...	...	...	...	0·30	0·28	...	2	0·58	0·24	0·77	0·62	7·41	3·45
		Comilla	...	...	...	...	0·05	0·24	...	1	0·29	0·23	0·52	0·66	9·22	3·10
		Chandpore	...	0·06	...	...	0·02	...	...	Nil	0·08	0·28	0·26	0·57	8·01	2·45
		Brahmanbaria	...	...	...	...	0·22	0·15	...	2	0·37	0·26	0·57	0·74	10·94	2·10
		Ramchandrapore	...	...	...	...	0·15	...	...	1	0·15	?	0·16	?	8·13	?
		Nasirnagar	...	...	...	...	0·10	...	...	1	0·10	?	0·34	?	10·81	?
		Daudkandi	...	...	...	...	0·15	...	...	1	0·15	?	0·25	?	4·70	?
		Kasba	...	...	...	...						?		?		?
		Laksham	...	...	...	...						?		?		?
	Mymensingh	Kishorganj	...	...	...	...	0·17	...	...	1	0·17	0·12	0·61	0·55	6·55	2·26
		Atia (*Tangail*)	...	...	...	...	0·28	0·05	...	1	0·33	0·20	0·18	0·43	3·24	1·85
		Mymensingh	...	0·03	...	...	0·27	0·21	...	2	0·51	0·23	0·57	0·44	1·18	2·35
		Jamalpur	...	...	...	...	0·29	...	...	1	0·29	0·19	0·29	0·49	2·03	2·09
		Netrakona	...	...	...	...	0·27	...	...	1	0·27	0·02	0·81	0·20	4·08	2·59
		Subornakhally	...	...	...	...	0·28	...	...	1	0·28	?	0·28	?	0·69	?
		Durgapore	...	...	...	...	0·50	0·33	...	2	0·83	?	0·85	?	2·47	?
		Sherepore Town	...	...	...	...	0·19	...	...	1	0·19	?	0·25	?	3·51	?
		Dowanganj										?		?		?
NORTH BIHAR	Purnea	Kishanganj	...	...	...	0·22	0·26	...	...	2	0·48	0·11	0·73	0·64	0·76	1·62
		Araria	...	...	...	0·28	0·15	...	...	2	0·43	0·17	0·61	0·56	0·61	1·52
		Purnea	...	...	...	0·25	0·29	...	...	2	0·54	0·12	1·06	0·51	1·09	2·10
		Gondwara (Korah)	...	...	0·90	0·16	...	...	...	2	1·06	?	1·46	?	1·46	?
		Barsoe	...	...								?		?		?
		Forbesganj	...	...	...	0·27	0·20	...	...	2	0·47	?	0·58	?	0·58	?
		Kaliaganj	...	...	...	0·20	0·10	...	...	2	0·30	?	0·35	?	0·35	?
	Bhágalpur	Madhipura	...	...	...	0·35	0·25	...	...	2	0·60	0·06	0·95	0·44	0·95	1·43
		Bongaon (Sujabad).	...	...	...	...	0·50	...	...	1	0·50	?	1·10	?	1·10	?
		Supaul	...	...	...	0·64	0·16	...	...	2	0·80	0·10	1·47	0·47	0·47	1·38
		Protabganj	...	...	...	0·57	...	...	...	1	0·57	?	0·73	?	0·73	?
		Bhagalpur	...	...	...	0·21	0·01	...	...	1	0·22	0·21	0·29	0·56	0·78	1·66
		Banka	...	...	...	0·35	0·06	...	...	1	0·41	0·23	0·56	0·56	2·17	1·73
		Colgong	0·08	...	...	0·13	0·01	...	...	1	0·22	?	0·65	?	2·19	?
	Darbhanga	Tajpur	...	...	...	0·47	...	...	...	1	0·47	0·07	0·84	0·53	0·84	1·47
		Darbhanga	...	...	...	0·81	0·38	...	...	2	1·19	0·12	1·95	0·58	1·98	1·40
		Madhubani	...	...	...	1·04	...	...	...	1	1·04	0·14	1·67	0·60	1·67	1·56
		Bahera	...	...	...	1·00	...	...	...	1	1·00	?	1·77	?	1·77	?
		Roshera	...	...	...	0·20	...	...	...	1	0·20	?	0·64	?	0·64	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 28th of January 1893—concld.

Meteorological Division.	District	Station.	Rainfall. Sunday, 22nd.	Monday, 23rd.	Tuesday, 24th.	Wednesday, 25th.	Thursday, 26th.	Friday, 27th.	Saturday, 28th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
North Bihar—concluded.	Muzaffarpur...	Sitamarhi ...	...	...	..	1·26	...	...	...	1	1·26	0·10	1·45	0·48	1·43	1·21
		Muzaffarpur	...	...	..	0·77	...	...	...	1	0·77	0·09	1·33	0·71	1·34	2·21
		Hajipur ...	...	...	...	0·49	...	...	...	1	0·49	0·11	0·74	0·68	0·86	1·48
		Paru ...	...	...	...	0·67	...	...	...	1	0·67	?	0·67	?	0·67	?
		Mahua ...	...	...	..	0·25	...	...	...	1	0·25	?	0·77	?	0·85	?
		Siuhar ...	...	...	...	0·04	..	...	...	Nil	0·04	?	0·14	?	0·14	?
		Pupri ...										?		?		?
	Champaran ..	Motihari .	...	...	..	0·53	...	...	...	1	0·53	0·12	0·68	0·68	0·68	1·20
		Bettiah ..	...	...	..	0·76	.	...	...	1	0·76	0·12	0·80	0·73	0·89	1·25
		Bagaha ...	.	...	...	1·13	.	...	...	1	1·13	?	1·32	?	1·41	?
		Burhurwa .	...	...	...	0·23	...	0·02	...	1	0·25	?	0·46	?	0·46	?
	Saran ..	Gopalganj ...	...	...	...	0·48	.	...	...	1	0·48	0·27	0·84	0·86	0·84	1·24
		Siwan .	...	...	...	0·58	..	...	...	1	0·58	0·18	1·30	0·76	1·30	1·98
		Chapra ...	...	...	...	0·99	0·01	...	...	1	1·00	0·11	1·28	0·65	1·37	1·80
South Bihar	Shahabad ...	Buxar ...	...	...	...	0·29	0·05	...	...	1	0·34	0·10	0·66	0·76	1·34	2·06
		Dehri ...	...	...	..	0·26	..	...	...	1	0·26	0·09	0·98	0·66	1·34	2·14
		Bhabhua ...	...	...	..	0·17	0·03	...	...	1	0·20	0·08	0·70	0·70	0·91	2·27
		Sasuram ...	...	...	...	0·20	.	...	...	1	0·20	0·13	0·73	0·54	0·96	2·[illegible]7
		Arrah ...	..	...	...	0·27	..	..	...	1	0·27	0·14	0·59	0·68	0·88	1·77
		Mohanea .	.	...	...	0·04	...	..	...	Nil	0·04	?	0·09	?	0·09	?
		Khiri ...	...	...	...	0·30	...	...	...	1	0·30	?	0·50	?	0·50	?
		Ageaon ...	...		...	0·34		...	..	1	0·34	?	0·34	?	0·34	?
		Ramnagar ...	...	...	...	1·25	..	...	...	1	1·25	?	1·5[illegible]	?	1·50	?
		Koath ...	...	...	...	0·10	0·03	...		1	0·13	?	0·22	?	1·34	?
		Sikroul ...	...	..	...	0·50	..	.		1	0·50	?	0·50	?	0·50	?
		Bassowan ...	...		...	0·10	.	...	...	1	0·10	?	0·32	?	1·43	?
		Monaharpur										?		?		?
	Gaya ...	Aurangabad ...	...	...	...	0·38	..	...	...	1	0·38	0·12	1·00	0·62	1·74	1·50
		Gaya ...	..	...	...	0·26	.	...	...	1	0·26	0·16	0·46	0·61	0·87	1·83
		Nawadah ...	...	...	..	0·32	0·01	...	...	1	0·33	0·17	0·49	0·80	1·21	1·84
		Jahanabad ...	...	...	...	0·09	...	...	...	Nil	0·09	0·16	0·31	0·75	0·13	1·74
		Arwal	...	...	...	0·13	...	...	...	1	0·13	?	0·13	?	0·43	?
		Daudnagar ...	...	...	...	0·15	..	...	...	1	0·15	?	0·35	?	0·35	?
		Sherghati	...	...	..	0·85	0·19	...	...	2	0·04	?	1·04	?	2·03	?
		Rajauli ...	...	...	...	0·40	0·05	...	...	1	0·45	?	0·49	.	3·44	?
		Pakri Barawan	...	...	..	0·20	...	...	...	1	0·20	?	0·2[illegible]	-	0·62	?
	Patna ...	Patna .	...	...	...	0·56	...	...	...	1	0·56	0·11	0·83	0·58	0·97	1·82
		Dinapore ...	..	...	...	0·47	0·03	...	...	1	0·50	0·05	0·82	0·[illegible]3	0·82	1·69
		Bihar ...	...	...	...	0·11	..	...	...	1	0·11	0·18	0·25	0·71	0·55	1·99
		Barh ...	..	...	...	0·30	...	...	...	1	0·30	0·10	0·35	0·17	0·80	1·77
		Bickram .	..	...	...	0·48	...	...	...	1	0·48	?	0·56	?	0·76	?
		Hilsa	..	...	...	0·43		...	...	1	0·43	?	0·47	?	0·74	?
	Monghyr ..	Begusarai ..	...	..	..	0·35	...	...	...	1	0·35	0·18	0·55	0·70	2·75	2·18
		Monghyr ...	...	...	...	0·24	.	...	..	1	0·24	0·12	0·28	0·49	1·23	1·85
		Jamui	...	...	...	0·31	..	...	...	1	0·31	0·23	0·44	0·70	1·28	1·60
		Gogri	...	...	...	0·32	...	..	...	1	0·32	?	0·32	?	0·89	?
		Shaikpura .	...	..	...	0·45		..	...	1	0·45	?	0·15	?	1·65	?
		Chahai Bamda	...	...	...	0·43	0·17	...	...	2	0·60	?	0·78	?	2·00	?
	Sonthal Parganas.	Rajmahal ..	..	...	...	0·07	..	..	...	Nil	0·07	0·08	0·18	0·23	0·86	1·29
		Godda	...	...	...	0·20	0·05	...	...	1	0·25	0·16	0·66	0·46	1·14	1·30
		Pakour	...	...	...	0·25	0·74	...	...	2	0·99	Nil	1·11	0·24	4·49	1·03
		Naya Dumka	...	...	...	0·19	0·22	..	...	2	0·41	0·11	0·80	0·56	2·25	1·85
		Deoghur.	...	...	...	0·27	0·17	...	...	2	0·44	0·19	0·67	0·57	1·17	2·13
		Jamtara ...	...	...	..	..	1·12	...	..	1	1·12	0·04	1·12	0·30	3·31	1·70
		Belbodda ..	...	...	.	..		...	0·14	1	0·14	?	0·14	?	10·14	?
		Nanihat ...	...	...	...	...	0·50	...	...	1	0·50	?	0·50	?	0·62	?
Chota Nagpur	Hazaribagh ..	Pachamba (Giridih).	...	...	...	0·20	0·21	...	...	2	0·41	0·18	0·58	0·46	3·65	1·68
		Hazaribagh	0·03	...	...	0·14	0·83	...	...	2	1·05	0·13	1·37	0·53	4·05	1·93
		Semtakuran										0·[illegible]2		0·45		1·48
		Mahudi Hills	...	...	...	0·35	...	...	...	1	0·55	0·07	0·80	0·63	5·85	1·79
		Jhumra Hill	...	...	...							0·1[illegible]		0·62		2·02
		Farhi ...	...	...	...	0·07	0·30	...	...	1	0·37	?	0·59	?	1·83	?
		Chatra ...	...	...	...	0·13	0·20	...	...	2	0·33	?	0·86	?	2·31	?
		Karagaeha	...	...	...	0·31	0·12	...	...	2	0·43	?	0·60	?	1·77	?
		Ramgar ...	...	...	...	0·73	...	...	...	1	0·73	?	0·78	?	4·05	?
	Lohardaga ..	Lohardaga ...	0·16	...	...	0·51	0·33	...	...	3	1·00	0·04	1·29	0·37	7·11	2·59
		Ranchi ...	0·03	...	..	...	0·50	..	...	1	0·53	0·22	0·68	0·75	7·16	2·22
		Silli ...										?		?		?
	Palamau ...	Palamau (Daltonganj).	0·31	...	..	0·37	0·29	...	...	3	0·88	0·15	1·07	0·72	1·64	2·16
		Falumatu	0·05	...	...	0·46	0·38	...	...	2	0·89	?	1·03	?	4·62	?
		Husainabad	...	..	...	0·45						?		?		?
		Garhwa	0·13	...	...	0·32	0·20	...	...	3	0·65	?	0·86	?	2·19	?
	Singhbhum ...	Chaibassa	0·08	...	...	...	0·15	...	...	1	0·23	0·24	0·53	0·79	0·53	2·58
		Chakardharpur.	0·05	...	...	...	0·13	...	...	1	0·18	?	0·27	?	6·34	?
		Ghatsila	...	...	...	...	0·85	...	...	1	0·85	?	0·85	?	5·00	?
		Baharagura										?		?		?
	Manbhum	Purulia ...	...	...	...	...	1·00	..	...	1	1·00	0·18	1·35	0·57	5·70	1·79
		Gobindpur	...	.	...	...	1·11	...	...	1	1·11	0·14	1·28	0·57	2·98	1·80
		Raghunathpore	...	...	...	...	0·90	...	...	1	0·90	?	0·95	?	2·61	?
		Barahabhum	0·05	...	...	...	0·25	...	...	1	0·30	?	0·54	?	5·71	?
		Jhalda ...	...	...	...	0·60	..	...	...	1	0·60	?	0·60	?	2·48	?
		Chas .	...	...	...	0·13	0·43	...	...	2	0·56	?	0·91	?	3·52	?
		Pandra ...	..	...	...	0·15	0·59	...	...	2	0·74	?	1·04	?	2·12	?

Explanation.— .. indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the* 31st *January* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 28TH OF JANUARY 1893.

At the close of the previous week weather was fairly fine and settled in all districts except Orissa, where a local disturbance existed. On the 22nd, or the first day of the week under review, pressure began to fall slowly in all districts, except Orissa and part of South-West Bengal. Disturbed conditions over Orissa, however, still existed, and moderate general rain was reported on this day in this division, and in the neghbouring districts of South-West Bengal. On the 23rd again a rapid fall of pressure occurred in Bengal, except at the eastern stations, but the weather in Orissa had cleared up and practically rainfall was wholly absent from the province. On the 24th a slight to rather rapid increase of pressure took place, the increase being largest in North-East Bengal, while in the west of Bihar and Chota Nagpur pressure was even falling. This was succeeded on the 25th by a very rapid fall, the fall in the west and north of the province exceeding a tenth of an inch. These changes were due to the fact that on the 23rd a severe barometric depression or storm had entered North-Western India and was on that day near Jacobabad. On the 24th it had advanced rather rapidly in an easterly direction and was over Rajputana, while a deep secondary depression had appeared near Rawalpindi. On the 25th these depressions had again advanced eastward. and the original depression was shown as a shallow storm over part of the North-West and Central Provinces and the west of Bengal, while the second depression had either advanced along the line of the hills, or perhaps may have merged itself into the primary depression. Hence very rough weather was reported in the hills to the north of Bengal, and at Darjeeling there was almost a gale of wind with snow, while over the greater part of Bengal the sky became almost overcast, and rain was reported on the 25th in Bihar and Chota Nagpur, and over parts of North Bengal. On the 26th a further rapid fall of pressure took place over Bengal, the fall over a large part of the province exceeding a tenth of an inch, and the barometric depression had passed over South Bengal and the north and north-west of the Bay, and at such stations as Calcutta, Saugor Island, and False Point there was a defect of almost a fifth of an inch. Hence general, and in many cases rather heavy, rain was reported on the 26th in South-West Bengal, North Bengal, and Chota Nagpur, over a large part of East Bengal and parts of Bihar, but Orissa was to a great extent rainless. On the 27th the barometric depression had again advanced rather rapidly in an easterly direction and was probably over Upper Burma, and pressure had risen quickly over Bengal, the increase ranging up to nearly 0·17" at Cuttack. With the disappearance of the depression the sky cleared rapidly, rainfall ceased except for a few showers in and near the hills, and weather became again fine and settled, while a steady dry westerly and north-westerly current flowed over the province. On the 28th a further rapid increase of pressure occurred, equalling about a sixth of an inch at the northern stations, and pressure became moderately in excess of the normal, while again a strong north-westerly wind current prevailed over the province.

The principal feature of the weather during the week has therefore been the passage of the barometric depression from North-Western India through the province, which gave general rain on the 25th or 26th instant. In front of this depression the usual large increase of temperature and humidity took place, and in the middle of the week temperature was rather high and above the normal, while the air was exceedingly moist. Immediately, however, the depression had passed away, it was followed by an exceedingly cool wave of air produced to a considerable extent probably by the heavy fall of snow which had occurred in the hills, and thus at the close of the week temperature was largely below the normal, the defect in the mean temperature on the 28th exceeding 10° at such stations as Calcutta, Jessore, Saugor Island, Dacca, Gaya, Hazaribagh, Ranchi, and Cuttack. Hence both the temperature and pressure changes were unusually large during the week.

Pressure.—The mean pressure for the week has been in defect of the normal in all districts, the defect ranging from about 0·02" in parts of North Bengal to about 0·06" to 0·07" in the west of the province, the general defect equalling about 0·04".

Temperature.—The mean temperature for the week has been from 3° to 4° below the normal, the defect being largest in Chota Nagpur, where it has equalled nearly five degrees.

The distribution of temperature for the week and its variation from the normal value are best seen in the table below, where the average maximum, minimum and mean temperatures for the week at nine typical stations in different districts of the province are compared with their normal values for the same period. It will be seen that the largest variations have taken place in the day or maximum temperatures, which in some cases have been 8° and 9° below the normal :—

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 28th January 1893.

	Normal mean maximum temperature for the week ending 28th January.	Actual mean maximum temperature for the week ending 28th January 1893.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 28th January.	Actual mean minimum temperature for the week ending 28th January 1893.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 28th January.	Actual mean daily temperature for the week ending 28th January 1893.	Variation of actual mean from the normal.
Cuttack	85·7	76·5	—9·2	60·0	57·1	—2·9	72·9	66·8	—6·1
Calcutta	77·3	71·4	—5·9	55·8	52·8	—3·0	66·6	62·1	—4·5
Dacca	78·6	72·2	—6·4	54·7	51·6	—3·1	66·7	61·9	—4·8
Burdwan	79·0	72·7	—6·3	54·6	52·7	—1·9	66·8	62·7	—4·1
Patna	72·9	68·3	—4·6	49·7	48·4	—1·3	61·3	58·3	—3·0
Gaya	76·1	70·9	—5·2	51·8	50·3	—1·5	64·0	60·6	—3·4
Purnea	74·7	68·8	—5·9	48·4	44·9	—3·5	61·6	56·9	—4·7
Hazaribagh	71·6	65·5	—6·1	50·6	47·1	—3·5	61·1	56·3	—4·8
Darjeeling	43·8	35·0	—8·8	33·4	28·1	—5·3	38·6	31·5	—7·1

Rainfall.—The falls in Orissa have averaged nearly an inch, those in Chota Nagpur and North Bihar about two-thirds of an inch, in South-West Bengal about half an inch, in South Bihar a third of an inch, while in East and North Bengal the falls have only been about a quarter of an inch. The fall over the whole province has hence been rather considerably in excess of the normal. In the case of the smaller districts average falls exceeding an inch have occurred in Puri, Cuttack, Darjeeling, and Manbhum, and falls of half to one inch in Balasore, 24-Parganas, Hooghly, Bankura, Birbhum, Murshidabad, Bhagalpur, Darbhanga, Muzaffarpur, Champaran, Saran, Sonthal Parganas, Lohardaga, and Palamau., On the other hand, practically no rain has fallen in Chittagong, Chittagong Hill Tracts, Noakhali, and Backergunge.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 28th of January 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th Oct. 1892.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	85·7	46·4	76·0	57·5	66·8	—4·1	0·92	0·20	+0·72	1·07	0·30	+0·77	1·55	0·40	8·12	4·44
South-West Bengal ...	79·3	40·5	72·3	52·2	62·3	—3·9	0·47	0·16	+0·31	1·35	0·35	+1·00	0·54	0·47	6·10	2·23
North Bengal	76·8	39·5	69·5	48·1	58·8	—3·2	0·25	0·17	+0·08	1·12	0·35	+0·77	0·51	0·51	1·32	1·62
East Bengal	78·2	43·1	71·0	50·6	60·8	—3·7	0·20	0·21	—0·01	0·80	0·44	+0·36	0·45	0·56	8·41	3·32
North Bihar	74·8	39·0	68·4	46·8	57·6	—3·4	0·67	0·13	+0·54	1·33	0·39	+0·94	1·05	0·62	1·19	1·56
South Bihar	77·7	40·5	69·2	49·1	59·2	—3·3	0·36	0·12	+0·24	1·05	0·37	+0·68	0·62	0·57	1·42	1·76
Chota Nagpur	77·6	40·2	68·2	48·6	58·4	—4·9	0·67	0·14	+0·53	1·73	0·27	+1·46	0·94	0·61	5·01	1·99

METEOROLOGICAL OFFICE, BENGAL,
The 31st January 1893.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 22nd to 28th January 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Temperature. Maximum.	Temperature. Range.	Temperature. Minimum.	Hygrometry. Mean wet bulb.	Hygrometry. Vapour tension.	Hygrometry. Dew point.	Hygrometry. Humidity.	Wind. Prevailing direction.	Wind. Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
Jan.	22nd	97·7	0·9	30·010	61·3	64·9	8·5	56·4	58·2	0·445	55·7	82	NNW and calm ...	40	0·20	Cloudy, o, d, p.
"	23rd	129·5	9·5	29·983	61·3	73·5	22·8	50·7	56·7	·403	53·0	76	WNW and calm ...	21	Nil	Chiefly clear, ⌓, ≡.
"	24th	131·7	9·0	·996	62·5	73·6	21·4	52·2	58·1	·432	54·9	77	Variable and calm	13	"	Chiefly clear, ⌓.
"	25th	127·7	6·8	·928	64·1	74·4	21·6	52·8	59·1	·441	55·4	75	Variable and calm	27	"	Partially cloudy, o, ⌓.
"	26th	125·7	3·5	·864	64·9	69·9	10·3	59·6	60·9	·485	58·1	79	NNE, NNW and variable.	64	0·50	Chiefly cloudy, o, g, d, p.
"	27th	125·3	9·7	·971	58·8	68·5	16·5	52·0	50·6	·262	41·4	53	NNW and WNW	88	Nil	Clear, ⌓.
"	28th	124·4	9·5	30·029	56·7	68·2	22·3	45·9	50·0	·273	42·5	59	Variable and calm	37	"	Clear, ⌓.

	Inches.
The mean pressure of the seven days	29·969
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	29·996
	Hours.
The total number of hours of bright sunshine	48·9
The maximum possible number of hours of sunshine	76·9
	°
The mean temperature of the seven days	61·4
The average temperature of the corresponding period for 24 years, S.-G.'s Office	68·5
The extreme variation of temperature	28·5
The maximum temperature	74·4
	Miles.
The highest velocity of the wind in one hour	11
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	72
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	70
	Inches.
The total fall of rain from 22nd to 28th January 1893 ...	0·70
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·11
The total fall from 1st to 28th January 1893	0·70
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·28

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; d, drizzling rain; p, passing temporary shows; ⌓, dew; ≡, fog.

C. LITTLE,

For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;

Calcutta, the 30th January 1893.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 22nd to 28th January 1893.

Month	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature.				Hygrometry.					Rainfall at 10 A.M. for past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
January ...	22nd ..	30·006	61·4	66·9	11·0	55 9	60·5	58·7	·473	57·4	90	0·20
" ...	23rd ...	·060	63·7	75 9	24·4	51·5	66 3	60·7	·459	56·5	70	"
" ...	24th ..	·085	64 4	75·9	23 0	52·9	69 6	62·7	·479	57·7	66	"
" ...	25th ...	·003	64·9	75·9	22·0	53·9	69·6	62·7	·479	57·7	66	"
" ...	26th ...	29·909	64·9	69·9	10·0	59·9	65 6	62·7	·532	60·7	84	"
" ...	27th ...	30·024	60 9	69·9	18·8	51 1	64·6	53·7	·270	42·2	44	0·34
" ...	28th ...	·120	58 5	69·9	22·9	47·0	62·5	51·7	·243	39·5	43	"

	Inches.
The mean 10 A.M. pressure of the seven days	30·038
	°
The mean temperature of the seven days	62·7
The extreme variation of temperature	28·9
The maximum temperature	75·9
	%
The mean 10 A.M. relative humidity of the seven days	66
	Inches.
The total fall of rain from 22nd to 28th January 1893	0·54

The daily mean temperatures are the crude means of maximum and minimum temperatures.

C. LITTLE,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 30th January 1893.

Vital statistics of the Districts of Bengal for the month of December 1892.

Divisions.	Districts.	Population under registration.	BIRTHS. Number registered.	BIRTHS. Ratio per 1,000 of population per annum.	DEATHS. Cholera. Number registered.	Cholera. Ratio per 1,000 of population per annum.	Small-pox. Number registered.	Small-pox. Ratio per 1,000 of population per annum.	Fever. Number registered.	Fever. Ratio per 1,000 of population per annum.	Dysentery and Diarrhœa. Number registered.	Dysentery and Diarrhœa. Ratio per 1,000 of population per annum.	Injury. Number registered.	Injury. Ratio per 1,000 of population per annum.	Other causes. Number registered.	Other causes. Ratio per 1,000 of population per annum.	Total of all causes. Number registered.	Total of all causes. Ratio per 1,000 of population per annum.	Average of corresponding month of previous five years. Number registered.	Average of corresponding month of previous five years. Ratio per 1,000 of population per annum.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Burdwan ...	Burdwan	1,391,880	2,351	20·16	460	3·96	...	...	2,426	20·88	103	·84	6	·04	480	4·08	3,475	29·88	3,[illegible]42	30·48	
	Bankura	1,069,068	1,543	17·28	22	·24	4	·03	1,174	13·08	23	·24	9	·09	263	2·88	1,495	16·68	1,827	20·40	
	Birbhum	797,833	1,949	29·28	482	7·20	...	...	1,568	23·52	14	·12	10	·12	367	5·40	2,441	36·60	2,357	35·40	
	Midnapore	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Return not received up to date.
	Hooghly including Serampore	1,076,710	2,598	28·80	159	1·68	...	...	2,266	25·20	179	1·92	25	·24	410	4·44	3,029	33·72	3,332	37·08	
	Howrah	721,211	2,055	34·08	135	2·16	...	...	960	15·96	267	4·44	19	·24	358	5·88	1,739	28·92	2,170	36·00	
Presidency ...	24-Parganas	1,892,043	3,983	25·20	521	3·24	12	·07	3,233	20·40	185	1·08	55	·24	388	2·40	4,304	27·84	5,592	35·40	
	Nadia	1,644,108	4,680	34·08	592	4·32	...	...	3,199	23·28	25	·12	17	·12	411	2·88	4,244	30·96	6,924	50·52	
	Jessore	1,888,627	4,619	29·28	401	2·52	...	...	5,802	36·84	12	·07	31	·12	318	1·92	6,564	41·64	9,339	59·28	
	Murshidabad	1,250,946	4,076	39·00	64	·60	7	·06	2,668	25·56	4	·03	15	·12	247	2·16	3,005	28·80	3,935	37·68	
	Khulna	1,177,652	3,144	31·92	494	4·92	...	...	3,058	31·08	7	·06	22	·12	555	5·64	4,135	42·12	4,339	44·16	
Rajshahi ...	Dinajpur	1,555,835	3,509	27·00	40	·24	9	·06	4,270	32·88	7	·04	9	·06	257	1·92	4,592	35·40	5,712	44·28	
	Rajshahi	1,313,336	4,024	36·72	176	1·56	8	·07	4,580	41·76	2	·01	21	·12	269	2·40	5,056	46·08	5,717	52·20	
	Rangpur	2,065,464	4,364	25·32	44	·24	...	...	5,244	30·36	4	·01	16	·08	213	1·20	5,521	32·04	7,239	42·00	
	Bogra	817,494	1,779	26·04	67	·84	11	·12	1,565	22·92	4	·04	23	·24	370	5·40	2,010	29·88	2,371	34·80	
	Pabna	1,362,392	4,279	37·68	435	3·72	7	·06	3,197	28·08	35	·24	17	·12	144	1·20	3,835	33·72	4,595	40·44	
	Darjeeling	223,314	252	13·44	...	...	5	·24	441	23·64	53	2·76	3	·12	168	9·00	670	36·00	429	23·04	
	Jalpaiguri	681,352	1,262	22·20	1	·01	...	...	1,613	28·32	4	·06	10	·12	22	·36	1,650	29·04	2,109	38·16	
Dacca ...	Dacca	2,420,656	8,503	42·48	892	4·32	100	·48	4,301	21·24	232	1·08	37	·12	1,186	5·76	6,748	33·36	7,561	37·44	
	Faridpur	1,797,320	6,685	44·52	628	4·08	21	·12	4,693	31·32	53	·24	20	·12	679	4·44	6,094	40·68	6,224	41·52	
	Backergunge	2,153,965	7,851	43·68	1,026	5·64	...	...	6,891	38·28	105	·48	57	·24	2,486	13·80	10,565	58·80	8,321	46·32	
	Mymensingh	3,472,186	8,893	30·72	598	2·04	36	·12	5,830	20·04	50	·12	22	·07	826	2·76	7,302	25·44	7,463	25·68	
Chittagong ...	Chittagong	1,290,167	3,234	30·00	194	1·80	8	·07	2,096	19·44	31	·24	54	·48	218	1·92	2,601	24·12	2,677	24·84	
	Noakhali	1,009,693	4,031	47·88	215	2·52	...	...	2,128	25·20	13	·12	31	·36	304	3·60	2,631	31·92	2,838	33·60	
	Tippera	1,782,935	6,794	45·72	275	1·80	8	·04	2,527	16·92	20	·12	19	·12	697	4·68	3,546	23·76	4,322	29·04	
Patna ...	Patna	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto.
	Gaya	2,138,331	5,341	29·88	13	·07	100	·48	3,911	21·84	36	·12	62	·24	460	2·52	4,582	25·68	4,572	25·56	
	Shahabad	2,043,069	4,974	29·16	4	·01	32	·12	5,240	30·72	23	·12	39	·12	609	3·48	5,947	34·92	4,360	25·56	
	Muzaffarpur	2,711,445	7,091	31·32	26	·10	11	·04	5,649	24·96	88	·36	31	·12	651	2·88	6,456	28·56	4,424	19·56	
	Darbhanga	2,801,953	6,514	27·84	137	·48	5	·01	5,652	24·12	94	·36	27	·10	595	2·52	6,510	27·84	4,238	18·12	
	Saran	2,467,477	6,884	33·36	10	·04	13	·06	2,595	12·60	154	·72	38	·12	2,507	12·12	5,317	25·80	4,072	19·80	
	Champaran	1,859,465	3,967	25·56	...	...	...	...	4,197	27·00	14	·08	32	·12	830	5·28	5,073	32·64	3,900	25·08	
Bhagalpur ...	Monghyr	2,036,021	5,332	31·32	1	·004	13	·07	4,174	24·60	25	·12	31	·12	478	2·76	4,722	27·72	5,270	30·96	
	Bhagalpur	2,032,696	5,193	30·60	38	·12	14	·07	4,676	27·60	48	·24	22	·12	512	3·12	5,340	31·44	5,029	29·64	
	Purnea	1,944,658	3,308	20·40	64	·36	9	·04	4,711	29·04	1	·006	16	·09	42	·24	4,843	29·88	5,846	36·00	
	Malda	814,919	2,155	31·68	8	·10	...	...	2,289	33·60	12	·12	4	·04	114	1·56	2,427	35·64	3,204	47·04	
	Sonthal Parganas	1,754,196	3,306	22·56	29	·12	1	·006	2,325	15·84	18	·12	13	·08	145	·96	2,531	17·28	2,072	14·16	
Orissa ...	Cuttack	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto.
	Puri	944,998	1,968	24·96	230	2·88	176	2·16	644	8·16	213	2·64	18	·12	1,256	15·84	2,537	32·16	2,719	34·44	
	Balasore	994,625	2,022	24·36	128	1·44	10	·12	1,252	15·00	423	5·04	21	·24	758	9·12	2,592	31·20	3,103	37·32	
Chota Nagpur.	Hazaribagh	1,164,321	2,815	28·92	25	·24	35	·36	2,205	22·68	16	·12	50	·48	336	3·36	2,667	27·18	2,593	26·64	
	Lohardaga	1,131,171	2,509	26·52	...	...	27	·24	1,168	12·36	107	1·08	14	·12	734	7·68	2,050	21·72	1,550	16·44	
	Palámau	594,484	1,377	27·72	...	...	46	·84	1,183	23·76	6	·12	18	·36	140	3·00	1,402	28·20	1,392	28·08	
	Singhbhum	545,488	1,118	24·48	...	...	3	·06	508	11·16	19	·36	10	·12	79	1·68	619	13·56	840	18·36	
	Manbhum	1,193,329	2,168	21·72	10	·09	8	·07	1,387	13·68	26	·24	13	·12	281	2·76	1,705	17·04	1,740	17·40	
	Total ...	64,029,615	164,590	30·84	8,644	1·56	739	·12	129,476	24·24	2,755	·48	1,007	·12	22,192	4·08	164,813	30·84	171,945	32·16	
Average of the corresponding month of previous five years			Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		13,727	2·52	415	·07	130,119	24·36	3,887	·72	1,006	·12	22,791	4·20	171,945	32·16	—	—	
Difference + or —			......		—5,083	—·96	+324	+·05	—643	—·12	—1,132	—·24	+1	equal	—599	—·12	—7,132	—1·52	—	—	

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,
The 28th January 1893.

W. H. GREGG, *Surgeon-Lieut.-Col.,*
Dip. Publ. Health, Camb., Sanitary Commr. for Bengal.

Vital Statistics of Towns in Bengal with a population of 20,000 and over during the month of December 1892.

DISTRICTS.		TOWNS.	Population under registration.	BIRTHS. Number registered.	BIRTHS. Ratio per 1,000 of population per annum.	DEATHS. Cholera. Number registered.	DEATHS. Cholera. Ratio per 1,000 of population per annum.	DEATHS. Small-pox. Number registered.	DEATHS. Small-pox. Ratio per 1,000 of population per annum.	DEATHS. Fever. Number registered.	DEATHS. Fever. Ratio per 1,000 of population per annum.	DEATHS. Dysentery and Diarrhœa. Number registered.	DEATHS. Dysentery and Diarrhœa. Ratio per 1,000 of population per annum.	DEATHS. Injury. Number registered.	DEATHS. Injury. Ratio per 1,000 of population per annum.	DEATHS. Other causes. Number registered.	DEATHS. Other causes. Ratio per 1,000 of population per annum.	DEATHS. Total of all causes. Number registered.	DEATHS. Total of all causes. Ratio per 1,000 of population per annum.	Average of corresponding month of previous five years. Number registered.	Average of corresponding month of previous five years. Ratio per 1,000 of population per annum.	REMARKS.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Burdwan ...	1	Burdwan	34 477	69	24·00	..	.	..	...	74	25·68	10	3·48	...	..	22	7·56	106	36·84	100	34·80	
Midnapore .	2	Midnapore ...	...	...		...		..	...	...		...	...	...	..	..		..	..	...	..	*Return not received up to date.*
Hooghly ..	3	Hooghly and Chinsura	32,562	92	33·84	6	2·16	...	...	62	22·80	26	9·48	...	..	28	10·20	122	44·88	158	58·20	
	4	Serampore	35,952	72	24·00	35	11·64	...	..	70	23·28	24	7·92	3	·96	13	4·32	145	48·36	150	50·04	
Howrah ...	5	Howrah	116,606	242	24·84	20	2·04	...	...	83	8·52	56	5·76	6	·60	66	6·72	231	23·76	239	24·48	
24-Parganas ..	6	Cossipore-Chitpur ..	31,423	43	16·32	1	·36	...	...	38	14·40	4	1·44	2	·72	14	5·28	59	22·44	145	55·32	
	7	Maniktala	32,865	31	11·28	3	1·08	...	...	33	12·00	9	3·24	..	..	8	2·88	53	19·32	69	25·08	
	8	Barnagore	31,278	62	21·60	5	1·68	..	...	37	12·84	10	3·36	1	·24	14	4·80	67	23·40	128	44·76	
	9	South Suburban ...	69,612	181	31·44	17	2·88	...	...	100	17·16	30	5·16	1	·12	13	2·16	161	27·72	111	19·08	
	10	Khorda or South Barrackpore.	35,647	38	12·72	6	1·92	...	...	85	28·44	16	5·28	1	·24	13	4·32	121	39·00	98	32·88	
	11	Naihati	29,724	53	21·36	7	2·76	...	...	41	16·44	6	2·40	..	...	12	4·80	66	26·64	86	34·68	
	12	Nawabganj or North Barrackpore.	20,980	38	21·72	11	6·24	...	...	45	2·14	8	4·56	...	...	2	1·08	66	37·68	94	53·76	
Nadia ...	13	Krishnagar	25,560	65	30·48	39	18·24	...	...	38	17·88	...	...	1	·36	8	3·72	86	40·44	72	33·84	
	14	Santipur ...	30,437	91	35·76	2	·72	...	...	58	22·80	...	..	...	...	7	2·64	67	26·40	57	22·44	
Murshidabad	15	Murshidabad City ...	35,576	67	22·56	...	...	...	...	98	33·00	1	·24	..	...	1	·24	100	33·72	130	43·80	
	16	Berhampore	23,715	54	27·48	.	...	...	...	68	34·68	1	·48	...	.	...	.	69	35·16	79	40·20	
Rajshahi ...	17	Rampur Boalia ...	21,417	53	29·64	...	...	...	...	55	30·72	...	..	2	1·08	4	2·16	61	34·08	97	54·36	
Pabna ...	18	Sirajganj	23,267	109	56·16	21	10·80	...	...	55	28·32	4	2·04	...	.	5	2·52	85	43·80	36	18·48	
Dacca ...	19	Dacca	118,408	209	21·12	9	·84	...	...	123	12·36	18	1·80	1	·09	42	4·20	193	19·44	207	20·88	
Chittagong ...	20	Chittagong	24,060	54	26·88	...	...	..	.	46	22·92	1	·48	2	·96	1	·48	50	24·84	35	17·40	
Patna	21	Patna City	... ..	...	..	...	...	...	...	...	..	...		...	...	..	...	...	...	...	...	*Ditto ditto.*
	22	Bihar	.. ..	...	...	...	...	.	...	...	..	...	...	...	...	...	...	...	...	...	...	*Ditto ditto.*
	23	Dinapore	.. ...	...	.	...	..	...	...	...	...	...	..	..	...	...	...	...	..	...	..	*Ditto ditto.*
Gaya ...	24	Gaya	80,383	188	27·96	4	·48	2	·24	163	24·24	10	1·44	3	·36	60	8·88	242	36·12	208	30·96	
Shahabad ...	25	Arrah	46,905	187	47·76	...	...	...	...	82	20·88	2	·48	1	·24	19	4·80	104	26·52	61	15·60	
	26	Sasaram	22,713	61	32·16	...		...	...	61	32·16	1	·48	1	·48	1	·48	64	33·84	40	21·12	
Muzaffarpur	27	Muzaffarpur	49,192	144	35·04	...		...	...	91	22·08	8	1·92	1	·24	32	7·80	132	32·16	55	13·32	
	28	Hajipur	21 487	56	31·20	1	·48	...	...	36	20·04	14	7·80	...	...	25	13·92	76	42·36	44	24·48	
Darbhanga ...	29	Darbhanga	73,561	186	30·24	...	...	...	...	99	16·08	33	5·28	2	·24	65	10·56	199	32·40	160	26·04	
Saran	30	Chapra	57 352	141	29·40	...	..	...	...	20	4·08	8	1·56	1	·12	38	7·92	67	13·92	76	15·84	
Champaran ...	31	Bettiah	22,780	49	25·80	...	.	...	...	37	19·44	2	·96	1	·48	12	6·24	52	27·36	73	38·40	
Monghyr ...	32	Monghyr	57,077	180	37·80	1	·12	..	..	74	15·48	19	3·96	4	·84	51	10·68	149	31·32	123	25·80	
Bhagalpur ...	33	Bhagalpur	69,106	173	30·00	20	3·36	7	1·20	187	32·40	22	3·72	1	·12	59	10·20	296	51·36	138	23·88	
Cuttack ...	34	Cuttack	.	...	.	...	..	...	..	...		...	...	...	...	...	.	...	...	...	...	*Ditto ditto.*
Puri ..	35	Puri	28,794	64	26·64	2	·72	3	1·20	20	8·28	8	3·24	...	...	43	17·88	76	31·56	112	46·56	
Balasore ...	36	Balasore	20,775	41	23·64	..	...	...	...	19	10·92	6	3·36	...	...	5	2·88	30	17·28	45	25·92	
Lohardaga ...	37	Ranchi	20,306	34	20·04	...	...	...	...	17	9·96	...	...	1	·48	12	7·08	30	17·64	24	14·16	
		Total ..	1,346,766	3,029	26·88	210	1·80	12	·09	2,115	18·84	337	3·12	36	·24	695	6·12	3,425	30·48	3,250	28·92	
		Average of the corresponding month of previous five years.	...	Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		390	3·36	30	·24	1,568	13·92	433	3·84	40	·24	789	6·96	3,250	28·92	...	...	
		Difference + or − ...	...	...	...	−180	−1·56	−18	−·15	+547	+4·92	−76	−·72	−4	Equal	−94	−·84	+175	+1·56	...	...	

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,
The 28th January 1893.

W. H. GREGG, *Surgeon-Lieut.-Col.,*
Dip. Publ. Health, Camb., Sanitary Commissioner for Bengal.

Supplementary Vital Statistics for November 1892 received too late for publication with the figures of that month on the 31st December 1892.

Divisions.	Districts.	Population under registration.	Births.		Deaths.														Average of corresponding month of previous five years.	
					Cholera.		Small-pox.		Fever.		Dysentery and Diarrhœa.		Injury.		Other causes.		Total of all causes.			
			Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Burdan ...	Midnapore	2,631,518	5,788	26·28	108	·48	55	·24	4,631	21·00	177	·72	28	·12	799	3·60	5,798	26·40	5,956	27·12
Patna ...	Saran	2,467,477	5,716	27·72	161	·72	7	·02	3,362	16·32	243	1·08	54	·24	2,770	13·44	6,599	32·04	4,124	20·04
Monghyr ...	Sonthal Parganas	1,754,198	3,823	25·04	54	·36	....	..	2,643	18·00	7	·03	9	·06	168	1·08	2,881	19·68	2,010	13·08
Chota Nagpur ...	Palamau	594,481	1,244*	25·08	1	·01	17	·24	1,419	28·56	4	·07	17	·24	182	3·60	1,640	33·00	1,446	29·16
	Total ...	7,447,073	16,570	26·64	324	·48	79	·12	12,055	19·32	433	·60	108	·12	3,919	6·24	16,918	27·24	13,536	21·60
	Averaze of corresponding month of previous five years.	......	Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		406	·60	68	·10	9,332	15·00	572	·84	128	·12	3,030	4·80	13,536	21·60	......	......
	Difference + or −	......	...	...	−82	−·12	+11	+·02	+2,723	+4·32	−139	−·24	−20	Equal	+889	+1·44	+3,382	5·64	......	......
	Total for the Province ..	70,368,267	198,221	33·72	10,559	1·80	627	·09	161,620	27·48	3,629	·60	1,303	·12	26,622	4·44	204,360	34·80	161,044	27·36
	Average of corresponding month of previous five years.	......	Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		7,737	1·20	309	·04	125,967	21·48	3,982	·60	1,481	·24	21,568	3·60	161,044	27·36	......	......
	Difference + or −	......	......	......	+2,822	+·60	+318	+·05	+35,653	+6·00	−353	Equal	−178	−·12	+5,054	+·84	+43,316	+7·44	......	......

* Excluding the birth statistics of the Garhwa thana, which have not yet been furnished.

OFFICE OF SANITARY COMMISSIONER, BENGAL,
The 28th January 1893.

W. H. GREGG, *Surgn.-Lieut.-Col.,*
Dip. Publ. Health, Camb., Sanitary Commissioner for Bengal.

IRRIGATION DEPARTMENT, BENGAL.

Abstract statement showing Tollage on Canals in Bengal classed as Major Works for the month of November 1892, as compared with that of the corresponding month of the previous year.

Canals.	Tollage, 1892-93. During the month.			Tollage, 1892-93. To end of the month.			Tollage, 1891-92. During the month.			Tollage, 1891-92. To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Orissa Circle.												
Taldanda Canal System	150	0	3	5,444	4	6	107	5	5	3,224	6	9
Kendrapara ditto ...	6,942	6	1	39,845	2	8	7,994	10	10	57,351	14	7
High Level, Range I	1,193	6	9	8,577	9	6	989	4	3	6,512	12	6
Ditto " II	314	3	0	1,563	7	9	230	7	3	1,414	2	6
Ditto " III	165	12	1	869	12	10	141	6	8	1,021	13	11
Jajpur Canal ...	27	5	3	132	9	9	23	3	0	150	14	3
Total Orissa Circle ...	8,823	1	5	56,432	15	0	9,486	5	5	69,706	0	6
South-Western Circle.												
Midnapore Canal ...	7,647	9	6	77,653	2	3	9,687	15	9	68,391	9	9
Hidgellee Tidal Canal	2,299	7	0	35,072	10	3	2,668	13	3	16,410	8	9
Total South-Western Circle	9,947	0	6	1,12,725	12	6	12,356	13	0	84,802	2	6
Sone Circle.												
Patna Canal System ...	1,132	15	6	14,654	5	6	866	5	3	17,435	13	0
Arrah ditto ...	831	3	3	12,093	15	9	693	10	6	15,225	8	6
Buxar ditto ...	732	7	9	7,116	15	9	449	5	6	7,364	9	0
Total Sone Circle ...	2,696	10	6	33,865	5	0	2,009	5	3	40,025	14	6
Grand Total ...	21,466	12	5	2,03,024	0	6	23,852	7	8	1,94,534	1	6

Government Transport Service.

Canal.	Tollage, 1892-93. During the month. Passengers.	Goods.	Total receipts.			Tollage, 1892-93. To end of the month. Passengers.	Goods.	Total receipts.			Tollage, 1891-92. During the month. Passengers.	Goods.	Total receipts.			Tollage, 1891-92. To end of the month. Passengers.	Goods.	Total receipts.		
	No.	Mds.	Rs.	A.	P.	No.	Mds.	Rs.	A.	P.	No.	Mds.	Rs.	A.	P.	No.	Mds.	Rs.	A.	P.
Orissa Circle.																				
High Level ...	2,363	3,154	2,367	11	3	9,*98	6,984	9,585	5	6	1,062	944	*1,141	5	5	7,008	6,(29	6,959	13	4
Total Orissa Circle ...	2,363	3,154	2,367	11	3	9,398	6,984	9,585	5	6	1,062	944	1,141	5	5	7,008	6,059	6,959	13	4

* This is the correct figure.

Total Navigation Receipts.

Canals.	Earnings, 1892-93. During the month.			Earnings, 1892-93. To end of the month.			Earnings, 1891-92. During the month.			Earnings, 1891-92. To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Orissa Canals ...	11,190	12	8	66,018	4	6	10,627	10	10	76,665	13	10
Midnapur Canal ...	7,647	9	6	77,653	2	3	9,687	15	9	68,391	9	9
Hidgellee Tidal Canal ...	2,299	7	0	35,072	10	3	2,668	13	3	16,410	8	9
Sone Canals ...	2,696	10	6	33,865	5	0	2,009	5	3	40,025	14	6
Total ...	23,834	7	8	2,12,609	6	0	24,993	13	1	2,01,493	14	10

CALCUTTA,
The 31st January 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

IRRIGATION DEPARTMENT, BENGAL.

Abstract Statement showing Tollage on Canals in Bengal classed as Minor Works and Navigation for the month of November 1892, as compared with that of the corresponding month of the previous year.

CANALS.	TOLLAGE, 1892-93.						TOLLAGE, 1891-92.					
	During the month.			To end of the month.			During the month.			To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Calcutta and Eastern Canals	37,578	4	9	1,87,415	15	6	36,418	1	3	2,16,853	10	3
Tolly's Nala ...	6,792	12	9	50,013	5	0	8,503	2	9	68,408	11	9
Total ...	44,371	1	6	2,37,429	4	6	44,921	4	0	2,85,262	6	0
Orissa Coast Canal ...	3,763	13	3	32,695	14	0	3,155	11	3	32,026	7	3
Nadia Rivers ..	13,706	0	6	1,26,825	9	3	13,639	13	6	1,55,952	12	0
GRAND TOTAL ...	61,840	15	3	3,96,950	11	9	61,716	12	9	4,73,241	9	3

CALCUTTA,
The 31*st January* 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 21*st January* 1893, *as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 21ST JANUARY 1893.			WEEK ENDING SATURDAY, THE 23RD JANUARY 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	1,692	3,22,225	5,605	1,752	5,00,645	8,559
Jute	214	91,775	1,548	38	21,875	384
Firewood	106	69,800	1,046	87	60,300	864
Other articles	936	2,03,830	3,095	856	2,09,055	2,733
Total ...	2,998	6,87,630	11,294	2,733	7,91,875	12,540

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 28*th January* 1893, *as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 28TH JANUARY 1893.			WEEK ENDING SATURDAY, THE 30TH JANUARY 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	1,464	3,93,173	6,629	1,574	4,02,333	6,952
Jute	198	1,01,450	1,728	26	15,400	283
Firewood	106	44,205	665	94	54,100	835
Other articles	760	1,50,625	2,287	956	2,07,973	3,065
Total ...	2,528	6,89,353	11,309	2,050	6,79,896	11,135

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 21st January 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*317,882	*3,46,601 15 0	25,94,536 10	5,91,602 4 0	17,734 4 0	9,55,938 7 0	74,773	106,716	181,489
Or per mile of railway	......	215 3 5	......	367 5 6	11 0 2	593 9 1	......	......	......
For previous 2 weeks of half-year	525,188	6,16,551 11 0	55,38,016 20	11,87,589 13 0	37,238 9 0	18,41,330 1 0	152,400½	223,657½	376,058½
Total for 3 weeks ...	843,070	9,63,153 10 0	81,32,552 30	17,79,192 1 0	54,972 13 0	27,97,318 8 0	227,173½	330,373½	557,547½
Comparison.									
Total for corresponding week of previous year	260,397½	3,02,018 11 0	25,60,142 20	6,00,151 8 10	15,458 2 11	9,17,628 6 9	76,125	92,406	168,531
Per mile of railway corresponding week of previous year ...	......	190 13 0	......	379 2 9	9 12 3	579 12 0	......	......	......
Total for corresponding 3⅞ weeks of previous year	835,549½	9,33,001 1 11	83,63,619 30	19,65,441 12 3	47,202 2 3	29,46,305 0 5	248,358	317,209	565,567

* The increase is due to movements in connection with the "Magh Mela" at Allahabad, the most important day "Amaboshya" having fallen in this week.

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 21st January 1893, on 22½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	19,913	4,735 12 0	9,624 30	348 10 0	11 0 0	5,095 6 0	860	108	968
Or per mile of railway ...	......	212 13 6	......	15 10 8	0 7 11	229 0 1	......	......	......
For previous 2 weeks of half-year	37,065	9,189 3 0	18,805 20	709 0 0	30 0 0	9,928 3 0	1,742	266	2,008
Total for 3 weeks ..	56,978	13,924 15 0	28,690 10	1,057 10 0	41 0 0	15,023 9 0	2,602	374	2,976
Comparison.									
Total for corresponding week of previous year ...	20,476½	5,070 11 5	14,084 10	520 6 9	9 4 9	5,600 7 2	879	89	968
Per mile of railway corresponding week of previous year	......	227 14 4	......	23 6 3	0 6 8	251 11 3	......	......	......
Total for corresponding 3⅞ weeks of previous year ...	62,817	15,272 13 2	38,907 30	1,433 14 9	42 6 0	16,749 1 11	2,893	297	3,190

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 21st January 1893, on 161⅝ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	16,212	9,703 8 0	56,444 0	8,429 9 0	37 0 0	18,170 1 0	5,104½	3,204	8,308½
Or per mile of railway ...	......	60 1 11	......	52 3 8	0 3 8	112 9 3	......	......	......
For previous 2 weeks of half-year	30,994	21,957 4 0	97,270 20	*17,086 8 0	119 0 0	*39,162 12 0	10,575	6,615	17,190
Total for 3 weeks ...	47,206	31,660 12 0	1,53,714 20	25,516 1 0	156 0 0	57,332 13 0	15,679½	9,819	25,498½
Comparison.									
Total for corresponding week of previous year	12,551	8,691 3 7	47,416 30	7,495 6 0	52 1 3	16,238 10 10	5,774	2,353	8,130
Per mile of railway corresponding week of previous year	......	53 13 7	......	46 7 0	0 5 2	100 9 9	......	......	......
Total for corresponding 3⅞ weeks of previous year	42,444	30,922 11 8	1,50,257 30	25,569 0 0	185 11 0	56,077 6 8	19,522	7,024	26,546

* Rs. [illegible] deducted being excess included in week ended 14th January 1893.

EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., DACCA, K.-D., AND ASSAM-BIHAR SECTIONS.)

Approximate Return of Traffic for the week ended 21st January 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	167,774	84,110 0 0	6,56,850 0	1,34,170 0 0	17,210 0 0	2,35,490 0 0	27,346	35,542	62,888
Or per mile of railway	216	108 0 0	845 0	173 0 0	*3 0 0	284 0 0	......	......	......
For previous 2 weeks of half-year	376,930	1,61,850 0 0	12,83,897 0	2,28,640 0 0	27,950 0 0	4,18,440 0 0	55,854	63,690	119,544
Total for 3 weeks ...	544,704	2,45,960 0 0	19,40,753 0	3,62,810 0 0	45,160 0 0	6,53,930 0 0	83,200	99,232	182,432
Comparison.									
Total for corresponding week of previous year	157,070	87,229 0 0	4,91,164 0	78,522 0 0	11,195 0 0	1,76,946 0 0	27,492	29,367	56,859
Per mile of railway corresponding period of previous year ...	202	112 0 0	619 0	101 0 0	*2 0 0	215 0 0	......	......	......
Total to corresponding date of previous year	541,276	2,53,673 0 0	16,97,678 0	2,80,748 0 0	36,955 0 0	5,71,376 0 0	88,866	94,951	183,817

* Excluding steamer earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 21st January 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	28,276	11,020 0 0	65,179 0	3,620 0 0	430 0 0	15,070 0 0	3,811	1,861	5,672
Or per mile of railway	226	88 0 0	521 0	29 0 0	4 0 0	121 0 0	......	......	......
For previous 2 weeks of half-year	60,364	22,010 0 0	92,713 0	6,220 0 0	330 0 0	28,560 0 0	7,610	3,734	11,344
Total for 3 weeks ...	88,640	33,030 0 0	157,892 0	9,840 0 0	760 0 0	43,630 0 0	11,421	5,595	17,016
Comparison.									
Total for corresponding week of previous year	27,508	10,605 0 0	56,581 0	3,738 0 0	100 0 0	14,443 0 0	3,811	1,861	5,672
Per mile of railway corresponding week of previous year ...	220	85 0 0	453 0	30 0 0	1 0 0	116 0 0	......	......	......
Total to corresponding date of previous year	90,586	33,614 0 0	195,093 0	11,536 0 0	312 0 0	45,462 0 0	12,106	6,565	18,671

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 21st January 1893, on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	18,632	6,120 0 0	18,593 0	1,580 0 0	190 0 0	7,890 0 0	2,504	720	3,224
Or per mile of railway	217	71 0 0	216 0	19 0 0	2 0 0	93 0 0	......	......	......
For previous 2 weeks of half-year	35,421	11,560 0 0	39,938 0	3,780 0 0	310 0 0	15,650 0 0	4,974	1,474	6,448
Total for 3 weeks ...	54,053	17,680 0 0	58,534 0	5,360 0 0	500 0 0	23,540 0 0	7,478	2,194	9,672
Comparison.									
Total for corresponding week of previous year	17,240	5,313 0 0	8,163 0	827 0 0	84 0 0	6,224 0 0	2,504	720	3,224
Per mile of railway corresponding week of previous year ...	200	62 0 0	95 0	9 0 0	1 0 0	72 0 0	......	.....	....
Total to corresponding date of previous year	56,263	17,913 0 0	26,347 0	2,921 0 0	247 0 0	21,084 0 0	8,197	2,369	10,566

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No. 6 of 1893.



SUPPLEMENT TO
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WEDNESDAY, FEBRUARY 8, 1893.

OFFICIAL PAPERS.

Non-Subscribers to the GAZETTE *may receive the* SUPPLEMENT *separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

CONTENTS.

Abstract of the Proceedings of the Council of the Lieutenant-Governor of Bengal, assembled for the purpose of making Laws and Regulations under the provisions of the Act of Parliament, 24 and 25 Vic., Cap. 67.

THE Council met at the Council Chamber on Saturday, the 4th February, 1893.

Present:

The HON'BLE SIR CHARLES ALFRED ELLIOTT, K.C.S.I., Lieutenant-Governor of Bengal, *presiding*.
The HON'BLE J. T. WOODROFFE, *Offg. Advocate-General.*
The HON'BLE T. T. ALLEN.
The HON'BLE H. J. S. COTTON, C.S.I.
The HON'BLE H. H. RISLEY, C.I.E.
The HON'BLE J. LAMBERT, C.I.E.
The HON'BLE H. LEE.
The HON'BLE DR. MAHENDRA LAL SIRCAR, C.I.E.
The HON'BLE A. H. WALLIS.
The HON'BLE GONESH CHUNDER CHUNDER.
The HON'BLE P. PLAYFAIR.
The HON'BLE MAULVI SYED FAZL IMAM, KHAN BAHADUR.

LICENSED WAREHOUSE AND FIRE-BRIGADE BILL.

The HON'BLE MR. COTTON in presenting the Report of the Select Committee on the Bill for the regulation of Warehouses and the maintenance of a Fire-brigade said:—

"It will be within the recollection of hon'ble members that this Bill was introduced into Council by the late Sir Henry Harrison, who, as President of the Fire-brigade Committee appointed by the Government, and as Chairman of the Corporation and Commissioner of Police in Calcutta for many years, was peculiarly qualified to advise and guide the Council in its deliberations on this Bill. On his death the charge of this measure devolved on me under the Lieutenant-Governor's orders. I cannot mention the name of my dear and lamented friend without expressing my sense of the extreme loss which the Council has sustained by his death. In all departments of Government administration his loss is deeply felt, but nowhere more than in this Council, where his sound and mature judgment, his persuasive eloquence and distinguished ability in argument and debate were for many years the pride and admiration of his colleagues. I am sure that I echo the sentiments of every member of this Council in paying this tribute of respect to his memory.

"Hon'ble members will observe that the Report of the Select Committee on this Bill is not unanimous. The difference of opinion relates to a question of principle, and I feel it right in presenting the Report of the Committee to detain you for a few moments by explaining the character of the difference between the majority of the Committee and its dissentient members. The dissent is signed by the hon'ble member who represents the Chamber of Commerce in this Council and by the Advocate-General. The ground taken up is that the cost of the fire-brigade, which is maintained for the public good and public convenience, should be borne by the community at large, and not by any particular section of it. This principle so broadly stated has much to commend it. But when more closely pressed, I think the Council will agree with me in recognising that it is a principle which can only be accepted subject to very considerable limitations. It is a fact that in other large cities where a fire-brigade is maintained, it is invariably or nearly invariably the rule to impose the whole burden of taxation for supporting the fire-brigade on the general community. This is the case certainly in the metropolis of England, where the duty of maintaining a fire-brigade rests on the London County Council, who are empowered to impose taxation to support the fire-brigade. No limit is imposed on the rate which may be levied for this purpose. And so in India in large cities like Bombay, there is a three-fourth per cent. rate levied on the population of the city, and in Rangoon also there is a general rate levied on the rate-payers as a body, and this undoubtedly is the course which it would be most easy to adopt in Calcutta. The Select Committee would have saved itself an immense amount of trouble if it had accepted this principle unreservedly and ruled that the whole cost of the fire-brigade should be borne by the rate-payers, and that it should rest on the Municipality to levy a special rate, the proceeds of which would be sufficient to maintain the fire-brigade. This would have been the simplest form of legislation that we could have adopted. But to the majority of the Select Committee this course did not seem to be a fair one. It appeared to us that, in imposing a tax for the maintenance of a particular object, the fair and reasonable principle would be to apportion that tax on different members of the community in proportion to the advantages which it is estimated they will gain from that object. If this principle could have been followed in other cities, I have no doubt it would have been adopted, but it seems that in other cities the difficulty of doing so has been found insuperable. In London, for instance, fires occur more often in residential dwelling-houses and in lodging-houses than they do anywhere else, and the fire-brigade is more largely employed in extinguishing fires which break out in residential dwelling-houses than in extinguishing fires in large warehouses. The chief object of the brigade is to extinguish the numerous fires which break out every day in various parts of that large metropolis. Similarly, in Bombay and especially in Rangoon, residential dwelling-houses are constructed of inflammable materials, and the risk of fire in them is considerable. It has therefore been found impossible to make any fair apportion-

ment in those cities of the amount of rate which should be levied from ordinary citizens and from those engaged in trade or in commercial enterprizes which involve the construction of large warehouses. But in Calcutta the circumstances are very different. It was only twenty years ago since there were no fire-engines in this city. There were merely a few hand engines in use, and the whole establishment maintained did not cost more than Rs. 478 per mensem. About that time the jute business extended rapidly; and as jute is an exceedingly inflammable material, large fires were found to occur in jute warehouses where jute was stored, and the Chamber of Commerce and other public bodies addressed the Government, pointing out the risk run, the great losses sustained, and the necessity of maintaining an efficient fire-brigade to extinguish fires. After due deliberation a law was passed, which established a fire-brigade more or less on its present footing, and imposed the whole burden of maintaining the brigade on the jute industry. This law, subject to minor variations, has remained in force up to the present time, and it is still the case that the fire-brigade in Calcutta is entirely maintained by rates levied from jute warehouses. The Chamber of Commerce have for several years been representing that this is unfair. A Special Committee was appointed to enquire into the whole question, and the result is the preparation of this Bill, which is intended to meet the grievance from which the jute industry undoubtedly suffers.

"In the Report which I now have the honour to lay on the table, we have stated that we think that it is unfair to levy the whole rate on any one industry. At the same time I must distinctly affirm that the fire-brigade was established in Calcutta in order to meet the requirements of the jute trade, and that the great majority of important fires occur, and always have occurred, in jute warehouses. If it were not for these jute warehouses I do not hesitate to say that the maintenance of the fire-brigade on anything like its present scale would be unnecessary. I do not know whether I am justified in saying that this city would be in a position to go back to the state of things which existed twenty years ago, but certain it is that the brigade, in its present state of efficiency and completeness, would not be required. It is on account of the jute warehouses that the brigade is maintained in its present organisation. For these reasons the majority of the Committee considered that the jute industry should still continue to pay a large proportion of the funds required for the maintenance of the fire-brigade. We have added to jute various other commodities which may be described as of a highly inflammable character, and have laid down in the Bill that these commodities shall be kept in warehouses for which a special fee shall be levied and paid to the Municipality. The scale of these fees is indicated in the Bill, and we have imposed as a limit to the total amount to be levied from warehouses the condition that they shall not exceed one-half of the total sum required for maintaining the fire-brigade in any particular year. The most important items added to jute are hay, straw, wood and other things which, under the present municipal law, are liable to special taxation by the Municipality. We have repealed the provision of the Municipal Act, which enables a special tax to be levied on those goods for general purposes. They will now be liable to taxation for a special purpose, namely, the maintenance of the fire-brigade. The reason why they are included is that they are such inflammable materials as in our opinion justify their being placed in the same category as loose jute. The fees from these warehouses will form the bulk of the assets of the Fire-brigade Fund; but the aggregate of them will not be allowed to exceed half of the expenditure required for maintaining the fire-brigade. The remaining half of the assets will be supplied by rates imposed on the general community. We thought it fair that a special rate should be imposed on bustee owners. It is well known to all of you that the number of fires which occur in the clumps of huts in this city, known as bustees, are numerous and a source of great danger to the community. If they spread, no doubt the risk becomes very great indeed, and it is one of the duties of the fire-brigade to prevent these small fires which occur in these huts from spreading over a larger area. The existence of these bustees in a large city like Calcutta is a source of danger, and we consider it fair and reasonable that the owners of these bustees should pay a special rate, which we have limited in the Bill to eight annas per cent. of their assessable value, for the maintenance of the brigade. The

remaining sum which may be required for supporting the brigade, will be borne by a general tax imposed on the rate-payers of the town, excluding those who are already called upon to pay either on account of their warehouses or as owners of bustees. This general rate will be a very low cne. We have proposed that the maximum shall not exceed one-eighth per cent. on all lands and houses assessed under the Municipal Act. The fairness of this rate lies in this, that the general community are undoubtedly protected by the existence of a fire-brigade. The individual risk which any individual house-owner may run in this city may be infinitesimal. Residential house-owners in Calcutta do not insure their houses, either in the north of the town, where the permanent residents of Calcutta mostly dwell, or in the south, where European residents live, and I believe I am well within the truth in saying that the insurance of houses and furniture in this city is practically unknown. This in itself marks the radical difference between Calcutta and cities elsewhere. Everyone among you who has a house in London knows very well that he insures the value of the house and of the furniture and fixtures and other things in it. This is the invariable rule in London, and it is the invariable rule in Calcutta not to insure. This is the main reason why a general rate is not unfair in London, and why it would be harsh and oppressive in Calcutta. But the circumstances are amply sufficient to justify the Legislature in imposing a very low rate on the rate-payers at large to assist in meeting any deficit which the other means of taxation placed in the hands of the Municipality may fail to supply. The protection which ordinary householders derive from fires not being allowed to spread may be inappreciable in any particular case, but it is obvious that such a general risk exists, and that it is at all times within possibility that fires may break out in residential houses. In order to meet such risk and in recognition of the immunity which the fire-brigade affords to the general public, we have considered it fair that a low rate should be levied.

"These are the main reasons which have actuated the Select Committee in apportioning the taxation, from which the funds for the maintenance of the brigade shall be met, on different classes of the community. We have imposed on the owners of warehouses and places where inflammable goods are stored a heavier burden than we have laid on other persons, but we have largely reduced that burden from what it is under the existing law. It is estimated that the amount to be paid by jute warehouses under the Bill will perhaps be less than one-third of what they now pay, and this will be a very great gain to the jute industry which has, I certainly do think, been unjustly charged with the whole cost for so long a period. Next the owners of bustees will pay their share, and finally a small proportion, which is very small in comparison to the large number of persons interested, will be contributed by the general rate-payer.

"Now, Sir, in making this apportionment we have attempted an extremely difficult task—so difficult that I believe no other city under the British Empire has been able successfully to cope with it. We are making an initial attempt to be fair and just in the imposition of this special taxation for the maintenance of a special department. It is a very easy thing to impose a rate on the general community sufficient to bear the whole cost; it is very easy to single out a particular industry and make it bear the whole burden. But it is very difficult to apportion the cost among different sections of the community in proportion to the benefit which it is estimated they derive. It is this task we have attempted, and I trust that the assistance we shall receive from the members of this Council in considering the detailed clauses of this Bill will enable us to remedy and perfect any defects which may be detected in the measure as it now stands.

"I have prepared, for the information of the Council, two statements which have been circulated and laid before hon'ble members this morning. The first of them shows the estimate of receipts for the current year for the maintenance of the fire-brigade, the whole of which is paid by jute warehouses, and which has been sanctioned by Government under the existing law: the second statement shows the amounts which it is estimated will be borne by fees from warehouses and by special and general rates under the Bill as now framed. Both estimates are calculated to meet an expenditure of abont Rs. 60,000 a year for the maintenance of the brigade. The estimate assumes that the jute industry of Calcutta, which now contributes a grand total of Rs. 28,000 for the

maintenance of the fire-brigade, will henceforward pay Rs. 8,000 towards that object; that the sum of Rs. 8,000 will be levied from other warehouses in Calcutta; and that the total sum of Rs. 16,500 will be levied from Calcutta on account of warehouses as they are defined in the Bill. It is estimated that a sum of Rs. 25,000 will be levied from Calcutta by means of a special rate on bustees and a general rate. The total contribution from the town of Calcutta would amount then to Rs. 41,600 as against Rs. 28,000 now levied, the increase being entirely from bustee owners and warehouses other than jute warehouses and from the general rate-payers who, we consider, should pay some share of the cost. As regards other municipalities, the amounts they pay would be largely reduced. The sum paid by the Cossipore-Chitpore Municipality, which is entirely from jute at present, is Rs. 33,000, but it would be reduced to Rs. 10,500, that is to say Rs. 10,000 from jute warehouse and Rs. 500 from other warehouses; the Manicktollah Municipality, which pays Rs. 15,000 at present entirely from jute, would pay Rs. 6,000, of which Rs. 500 will be from other warehouses; and Howrah, which pays Rs. 6,250 from jute alone, would be reduced to Rs. 3,000, of which Rs. 200 will be from other warehouses. These estimates, which are put forward on my own authority and by way of illustration only, cannot of course bind the Government or Municipalities concerned, but they will assist hon'ble members in judging of the changed incidence of taxation which is likely to arise if the Bill, as now drafted, is passed.

"I do not wish to detain the Council in regard to any of the minor points contained in the present Bill. The most important is, I suppose, that which lays down that warehouses shall be open to the inspection of an officer appointed by the Commissioner of Police, provided that such officer shall be a member of the fire-brigade, and not a member of any police force. The effect of this provision is that the Inspector of Warehouses will, in future, not be a Municipal Officer, but will be an officer who will work under the orders of the Commissioner of Police. The executive control of the fire-brigade will be left, as it is now, entirely in the hands of the Commissioner of Police, and the funds will, as they are now, be collected by the Municipal Commissioners; only their powers for this purpose will be greatly enlarged and changed. The apportionment of the taxation among the several municipalities interested—Calcutta and the municipalities in its immediate vicinity—is not laid down in the Bill itself, but is left to the Government to decide.

"For the rest the changes are described in the Report of the Select Committee. The intricacies of the Bill are considerable, and I have no doubt that hon'ble members would wish for some time to consider it for themselves, and also to consult their constituents as to how they are affected by the changes proposed. Today, therefore, I intend to merely lay the Report of the Committee on the table. At the next meeting of the Council we shall proceed to consider the Report and to discuss the Bill in its several clauses. It will remain for the President to decide the date on which we shall meet again for this purpose."

The Council adjourned to Saturday, the 11th February, 1893.

C. H. REILY,
Assistant Secretary to the Govt. of Bengal,
Legislative Department.

CALCUTTA;
The 7th February, 1893.

By subsequent order of the President the Council was postponed to Saturday, the 18th February, 1893.

C. H. REILY,
Assistant Secretary to the Govt. of Bengal,
Legislative Department.

CALCUTTA;
The 7th February, 1893.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 4th February, 1893.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.			
BURDWAN DIVN.			
1	Burdwan Feb. 4, '93 Kalna ... Katwa ... Raniganj ...	Nil Nil Nil Nil	Weather—fair and cool. Prospects of *rabi* crops and sugarcane fair, except in parts of Sadar subdivision. Condition of cattle good. Supply of fodder sufficient except in parts of Sadar subdivision. Prices of common rice :— Srs. Burdwan ... ... 11 to 13 } Kalna ... ... 11 to 13 } per rupee. Katwa ... ... 13½ } Raniganj ... ... 13 }
2	Bankura „ 4, '93	Nil	Weather—seasonable. Prospects of *rabi* continue fair. Supply of fodder and water plentiful. Prices of common rice :— Srs. Sadar ... ... 12 } per rupee. Vishnupur ... ... 12 }
3	Birbhum „ 4, '93 Rampur Hát ...	Nil Nil	Weather—cold. Prospects of *rabi* crops continue good. Common rice sells at from 13 to 15 seers per rupee.
4	Midnapore „ 4, '93	Nil	Weather—cool. In some parts of the district there has been rain. Harvesting is ended. Prices of common rice :— Srs. Sadar ... ... 11½ } Contai ... ... 13 to 16 } per rupee. Tamluk ... ... 12 to 14 } Garhbeta ... ... 12 to 13 }
5	Hooghly „ 4, '93 Jahanabad ...	Nil Nil	Weather—exceptionally cold for time of year. *Rabi* doing well. Potatoes and sugarcane being gathered. Cattle-disease increasing in severity. The prices of rice given below do not indicate any great fall on previous prices, but merely that the police have been at last induced to report the price of rice eaten by the poorest working labourers :— Srs. Sadar ... ... 10 to 11½ } Serampore ... ... 10 to 11½ } per rupee. Jahanabad ... ... 11 to 13 }
6	Howrah „ 4, '93 Ulubaria ...	Nil Nil	Weather—seasonable and cold. Harvesting of *aman* paddy nearly finished. Spring crops doing well. Condition of cattle good. Fodder and water-supply sufficient except that tanks in Howrah Municipality are drying up too quickly. Price of rice 11 to 11½ seers per rupee.
PRESIDENCY DIVN.			
7	24-Parganas „ 6, '93	Nil	Weather—cold and seasonable, but latterly cloudy. Harvesting of *aman* completed. Prospects of *rabi* crops good. Sugarcane still being pressed. No complaints of lack of fodder or water. No cattle-disease prevalent. Common rice sells at from 11 seers 14 chitaks to 14 seers 8 chitaks per rupee.
8	Nadia „ 4, '93 Kushtia ... Meherpur ... Chuadanga ... Ranaghat ...	Nil 0·05 Nil Nil Nil	Weather—bright and very cold. Prospects of *rabi* crops good. Price of rice stationary. Health of cattle good except in two or three villages of thanas Chapra and Krishnaganj where there is cow-pox. Fodder and water-supply sufficient.
9	Khulna „ 4, '93 Bagerhat ... Satkhira ...	Nil Nil Nil	Weather—seasonable. Harvesting of *aman* continues. Sowing of *boro* commenced. Prospects of *rabi* good. Outturn of *aman* expected to be good except in Paikgachha. Common rice sells at from 11 to 16 seers per rupee. Fodder and water sufficient.
10	Jessore „ 4, '93 Jhenida ... Magura ... Narail ... Bangaon ...	Nil Nil Nil Nil Nil	Weather—very cold. Harvesting of *aman* in low beels still going on in the Magura and Narail subdivisions. State and prospects of *rabi* crops fair. Supply of fodder and water for cattle plentiful. Prices of rice stationary.
11	Murshidabad „ 4, '93	Nil	Wether—seasonable. *Rabi* crops doing well except wheat. Recent rain will prove beneficial to some species, but is also likely to injure some. Fodder for cattle sufficient. Coarse rice sells at 14 seers per rupee.

	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and State and prospects of the crops.
BENGAL—*concld.*					
CHITTAGONG DIVN.	12	Chittagong	Feb. 4, '93	Nil	Weather—seasonable. Prospects of crops good. Cultivation of winter crops in progress. Prices stationary. Condition of cattle good. Supply of fodder sufficient.
	13	Noakhali	„ 4, '93	Nil	Weather—seasonable. Condition of *rabi* crops good. Cattle-disease reported from Sundip and Companyganj. Price of common rice stationary.
	14	Tippera	„ 4, '93	Nil	Weather—cold; seasonable. Standing crops doing well. *Boro* paddy being transplanted. Prospects good.
	15	Chittagong Hill Tracts.	„ 3, '93	Nil	Weather—cold and foggy in the mornings. Condition of chillies and tobacco tolerable. Sugarcane being pressed. Condition of cattle generally good. Prices of common rice:— Srs. Rangamati ... ... 10 } per rupee. Bandarban ... ... 10 } Manicksury ... ... 20 }
DACCA DIVN.	16	Dacca	„ 4, '93	Nil	Weather—very cold. Slight rain fell in Manickganj and Munshiganj. Prospects of *rabi* crops good. Harvesting of *mug* and *maskalai* continues. Ploughing for *aus* and *aman* paddy going on. Fodder available. No cattle-disease. Common rice selling at from 11 to 14 seers per rupee.
	17	Faridpur	„ 4, '93	Nil	Weather—unusually cold. Standing crops fair. Sugarcane being cut, with a good outturn. Common rice selling at 13 seers per rupee at Sadar, Goalundo, and Madaripur. Cattle in good condition and get fodder.
	18	Backergunge	„ 4, '93	Nil	Weather—cool. *Rabi* crops thriving. Prospects good. Fodder and water sufficient. Common rice selling at from 11 to 15 seers per rupee.
	19	Mymensingh	„ 4, '93	Nil	Weather—continues very cold. Prospects of standing *rabi* crops good. Rice sells at from 11½ to 14 seers per rupee. Supply of water and fodder sufficient.
RAJSHAHI DIVN.	20	Dinajpur Thakurgaon	„ 4, '93 ...	Nil Nil	Weather—very cool. Harvesting of winter rice over. Outturn of mustard expected to be 14 annas. Sugarcane still being pressed. Land being prepared for *bhadoi* and jute. Prices of rice unchanged. Condition of cattle good, except in parts of Thakurgaon, where cattle-disease, which broke out last week, has not yet completely disappeared. Supply of fodder and drinking water continues sufficient.
	21	Rajshahi Nator Naugaon	„ 4, '93	Nil Nil Nil	Weather—very cold and seasonable. *Aman* has given a capital outturn. Cold-weather crops also giving a good outturn. Supply of water and fodder plentiful save in the Barind, where tanks have nearly all run dry. No cattle-disease anywhere. Price of rice varies from 13 to 16½ seers per rupee.
	22	Rangpur Nilphamari Gaibanda Kurigaon Ulipur	„ 4, '93	Nil Nil Nil Nil Nil	Weather—very cold. Mustard being harvested. Lands being prepared for *bhadoi* and jute crops. Tobacco plants thriving well. Price of common rice varies from 11 to 14 seers per rupee.
	23	Bogra	„ 4, '93	Nil	Weather—cold and cloudy at intervals. Lands being ploughed for jute, sugarcane, *kaon*, &c. Prospects of *rabi* crops good. Common rice is selling at 14½ seers per rupee. Fodder and water sufficient.
	24	Pabna	„ 4, '93	Nil	Weather—very cool. Prospects of *rabi* crops continue good. Price of common rice at Pabna 12 seers per rupee and at Sirajganj Rs. 3-6 to Rs. 4 per maund. Condition of cattle good. Water-supply and fodder sufficient.
	25	Darjeeling Siliguri	„ 4, '93 ...	Nil 0·04	Weather—hoarfrost at night; very foggy and chilly by day. *In the hills:*—Wheat, barley and potatoes progressing favourably. *Tori* and *phafur* harvested. *In the terai:*—Harvesting of mustard and potatoes going on. Ploughing for *bhadoi* crop going on. Prices of coarse rice:— Srs. Hills ... ... 11 } per rupee. Terai ... ... 13 }
	26	Jalpaiguri	„ 4, '93	Nil	Weather—very cold. Harvesting of *haimanti* paddy completed. Prospects of standing crops good. Common rice sells at 14 seers per rupee. Supply of fodder and water sufficient. No cattle-disease reported.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.			
Bhagalpur Divn.			
27	Monghyr Feb. 4, '93 Begusarai ... Jamui ...	Nil Nil Nil	Weather—very cold. *Rabi*, indigo and poppy doing well. Condition of cattle good, except in a portion of Jamui subdivision where small-pox has appeared among cattle. Plenty of fodder. Water-supply sufficient. Prices of common rice :— Srs. Sadar ... ... 13 to 16 } per rupee. Begusarai ... ... 16 } Jamui ... ... 15 }
28	Bhagalpur " 4 '93 Banka ... Madhipura ... Supaul ...	Nil Nil Nil Nil	Weather—seasonable. Reaping of paddy completed. Linseed and mustard in good condition. Indigo getting on well. Price of common rice stationary.
29	Purnea " 4, '93 Kishanganj ... Araria ...	Nil Nil Nil	Weather—cold with strong west wind. Harvesting of *aghani* finished. *Rabi* doing well. *Tori* being gathered in. Tobacco doing well and being cut in Araria. Sugarcane being pressed in Kishanganj. Fodder and water plentiful. No cattle-disease. Prices of common rice :— Srs. Sadar ... ... 14 to 18 } per rupee. Kishanganj ... ... 15 } Araria ... . 18 }
30	Malda " 4, '93	Nil	Weather—very cold and dusty with westerly winds. Transplantation of *boro* paddy not yet finished. *Kalai* being threshed. Prospects of wheat and other standing *rabi* crops continue favourable. Price of coarse rice 13 to 17 seers per rupee. No want of fodder or drinking water.
31	Sonthal Parganas " 4, 93 Deoghur ... Godda ... Jamtara ... Pakur ... Rajmahal ...	Nil Nil Nil Nil Nil Nil	Weather—cold and clear. Outturn of rice crop fairly good. *Rabi* prospects fair. Sugarcane being pressed. Prices stationary. Fodder and water-supply sufficient.
Patna Division.			
32	Patna " 4, '93	Nil	Weather—clear and very cool. Prospects of *rabi* and poppy continue fair. Opium extraction has commenced in some places. Prices of common rice :— Srs. Sadar ... . 17 } per rupee. Bihar ... ... 17 } Dinapore ... ... 14 to 15 } Barh .. .. 13 }
33	Gaya " 4, 93 Nawada .. Jahanabad ... Aurangabad ...	Nil Nil Nil Nil	Weather—clear and very cold with high west wind. Prospects of *rabi* crops good. Prospects of poppy reported favourable; lancing commenced on a small scale. Common cleaned rice sells at Gaya from 13 to 14½ seers and coarse and husked rice from 16 to 16½ seers per rupee. Supply of fodder and water for cattle sufficient.
34	Shahabad .. 4, '93 Buxar ... Sasaram ... Bhabhua ..	Nil Nil Nil 0·03	Weather—cold with strong westerly wind. *Rabi* crops and poppy doing well. Sugarcane pressing in progress. Harvesting of pea commenced in parts of Sasaram. Prices stationary. Fodder and water sufficient.
35	Darbhanga " 4, '93	0·02	Weather—very cold with west wind. Prospects of *rabi* and poppy continue very favourable. Mustard almost ripe. Fields being prepared for indigo sowing. Prices almost stationary. Fodder and water for cattle sufficient.
36	Muzaffarpur " 4, '93 Hajipur .. Sitamarhi ..	Nil Nil Nil	Weather—very cool and seasonable. *Rahar* and peas in blossom damaged to some extent by the late rain. Other crops doing well. Fodder and water abundant.
37	Saran " 4, '93 Siwan ..	Nil 0·06	Weather—very cold with strong west winds. *Rabi* and poppy crops doing well. Sugarcane pressing progressing. Paddy fields are being prepared. Fodder and water abundant. Prices of common rice :— Srs. c. Chapra ... ... 14 0 } per rupee. Siwan (old rice) ... ... 10 10 } Gopalganj ... . 14 8 }
38	Champaran " 4, '93	Nil	Weather—cool with high west wind. *Rabi* crops in blossom. Prospects of standing crops continue good except in the tracts where hailstones damaged the crops. Prices steady. Cattle in good condition. Fodder and water sufficient.
ORISSA.			
Orissa Divn.			
39	Cuttack " 4, '93	Nil	Weather—cool; cloudy at times. Harvesting of *rabi* crops going on. *Dalua* paddy being transplanted. Supply of fodder and water sufficient. Prices of common rice :— Srs. c. Srs. c. Sadar ... ... 10 8 to 15 12 } per rupee. Jajpur ... ... 14 0 to 21 0 } Kendrapara ... ... 17 1 to 21 0 } Banki ... ... 17 0 }
40	Puri " 2, '93 Khurda .. Banpur ...	Nil Nil Nil	Weather—seasonable. Harvesting of *sarad* almost over. Land being ploughed in some places for next *sarad* crop. *Dalua* paddy growing well. Miscellaneous crops thriving. Rice sells at from 15 seers 12 chitaks to 18 seers 6 chitaks per rupee.
41	Balasore " 4, '93	Nil	Weather—still very cold. Outturn of winter rice estimated at full 16 annas in Bhadrak and 13 annas in Sadar subdivision; sugarcane 15 annas; *birhi*, *mug* and mustard 14 annas.

	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
CHOTA NAGPUR.					
South-West Frontier Agency.					
CHOTA NAGPUR DIVN.	42	Hazaribagh	Feb. 4, '93	Nil	Weather—clear and cold. *Rabi* crops progressing; some being harvested. Common rice 12 to 16 seers per rupee.
	43	Lohardaga	„ 4, '93	Nil	Weather—seasonable. Prospects of *rabi* crops good. Common rice selling at 14 seers per rupee. Fodder and water sufficient.
	44	Palamau	„ 3, '93	N.	Weather—cold; seasonable. Some rain in some parts. Rice selling as high as 12 pucca seers per rupee at Daltonganj.
	45	Singhbhum	„ 4, '93	Nil	Weather—cold and fine. Condition of crops good. A good outturn expected from mustard, *rahar* and sugarcane. Common rice selling at from 12 to 16 seers per rupee. Cattle-pox in a small scale reported from Ghatsilla and Bahragura.
	46	Manbhum Gobindpur	„ 4, '93 ...	Nil Nil	Weather—cold. Harvesting of *rabi* crops going on. Rice selling at 10 to 14 seers per rupee. Fodder and water sufficient.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 7th February 1893.

C. E. BUCKLAND,
Secy. to the Govt. of Bengal.

***PRICES-CURRENT** (retail) of Food-grains, Firewood, and Salt in the*

QUANTITIES PER RUPEE IN

	Number.	DISTRICTS.	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum (Sorghum Vulgare). Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
BENGAL.			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Burdwan Division.	1	Burdwan .	12 0	12 0	12 0	...	...	...	11 4	11 0	12 0	13 6	12 12	14 1	...	...	...
	2	Bankura .	12 0	12 0	11 8	...	...	16 0	10 0	10 0	12 8	11 4	12 8	16 0	.	...	...
	3	Birbhum ...	10 4	10 4	12 8	9 0	9 0	...	11 0	11 0	13 0	14 4	14 4	15 0	...	...	...
	4	Midnapore ...	10 4	10 4	11 0	...	...	...	10 0	10 0	12 0	12 12	13 2	16 0	...	...	...
	5	Hooghly ...	11 0	11 0	13 0	...	...	...	9 0	9 0	8 0	10 0	10 0	13 0	...	...	...
	6	Howrah ...	...	...	...	...	...	...	9 2	9 6	10 0	11 7	12 4	13 4	...	...	...
Presidency Division.		Calcutta .	10 8	11 0	10 13	16 7	15 0	18 5	7 4	8 0	8 10	10 0	10 0	12 3	18 0	17 0	15 14
	7	24-Parganas ...	11 4	11 0	10 0	16 0	16 0	18 0	8 0	8 0	8 0	12 0	12 0	13 8	18 0	18 0	...
	8	Nadia .	14 14	14 8	12 9	...	...	22 14	10 8	10 0	10 5¼	12 8	12 0	12 9	...	.	...
	9	Khulna ...	...	...	...	...	...	...	11 8	12 0	11 0	13 0	15 0	16 0	...	...	...
	10	Jessore ...	10 0	10 0	10 0	...	...	...	8 8	8 8	13 0	14 0	14 0	15 0	...	...	...
	11	Murshidabad ...	13 0	12 8	10 0	...	...	...	10 0	10 0	10 0	13 0	13 0	13 4	...	...	...
Chittagong Division.	12	Chittagong ...	9 4	9 4	9 12	...	...	...	11 0	10 8	9 0	12 8	12 0	13 0	...	...	...
	13	Noakhali ...	...	...	...	...	...	...	11 8	11 0	13 0	13 0	12 6	14 0	...	...	...
	14	Tippera ...	11 0	11 0	10 0	...	...	...	8 12½	10 0	10 0	13 0	12 6	13 5¼	.	...	...
	15	Chittagong Hill Tracts.	...	...	...	...	...	...	...	...	...	10 0	12 0	10 11½	...	...	...
Dacca Division.	16	Dacca ..	...	...	10 8	...	...	29 0	11 0	8 0	12 0	12 0	12 0	15 0	...	...	...
	17	Faridpur ...	11 0	11 0	12 0	20 0	20 0	16 0	8 0	8 0	10 0	12 0	12 0	14 8	...	...	...
	18	Backergunge ...	...	...	...	...	...	...	Old 7 12, New 11 0	Old 8 0, New 12 0	11 10	13 0	13 0	14 0	...	...	...
	19	Mymensingh ...	9 8	9 8	9 0	...	...	...	10 0	10 0	10 8	11 0	11 0	14 0	...	...	...
Rajshahi Division.	20	Dinajpur ...	13 0	13 0	10 10	15 12	15 12	17 0	8 0	8 0	9 9¼	15 0	14 8	12 0	...	...	...
	21	Rajshahi ...	12 12	12 12	9 12	19 8	19 8	26 4	11 4	11 4	11 4	13 12	12 12	13 12	...	...	...
	22	Rangpur	11 8	11 8	8 0	...	...	...	9 6	9 6	9 0	10 10	10 10	11 8	...	...	-

A In the subdivisional marts the retail prices of salt per rupee are :—Kalna 10 seers, Katwa 10¾ seers, and Raniganj 11 seers.
B At Vishnupur the retail price of salt is 11 seers per rupee.
C In the subdivisional marts the retail prices of salt per rupee are :—Contai 10 seers, Tamluk 11½ seers, and Ghatal 10 seers 11 chitaks.
D In the subdivisional marts the retail prices of salt per rupee are :—Bhaddreswar 10¼ seers and Jahanabad 10 seers 10 chitaks.
E At Uluberia the retail price of salt is 10½ seers per rupee.
F In the mofussil marts the retail prices of salt per rupee are :—Chetla Hát 11 seers 6 chitaks, Baraset 10 seers 10 chitaks, Magrahat 10 seers 10 chitaks, and Baduria 10 seers 11 chitaks.
G In the subdivisional marts the retail prices of salt per rupee are :—Bahadurkhali 10½ seers, Chuadanga 10 seers, Meherpur 10¼ seers, and Ranaghat 10½ seers.
H In the subdivisional marts the retail prices of salt per rupee are :—Bagerhat 8 seers and Satkhira 11 seers.
I In the subdivisional marts the retail prices of salt per rupee are :—Jhenida 9 seers 9 chitaks, Magura 10 seers, Narail 9 seers 10 chitaks, and Bangaon 10 seers 11 chitaks.

Head-quarters Station Bazars of the Districts of Bengal on the 31st January, 1893.

Indian-corn or Maize. (*Zea Mays.*)			Arhar or Thur, Cadjan Pea. (*Cajanus Indicus.*)			Firewood.			Salt.			Wholesale prices per maund of 40 seers. Salt.			Districts.	Number.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.		
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.	BENGAL.	
...	...	...	19 0	19 0	16 0	100 0	100 0	100 0	A 11 12	12 0	11 4	3 6 6	3 5 4	3 6 0	Burdwan	1
...	23 0	20 0	12 0	12 0	17 0	320 0	320 0	210 0	B 11 0	11 0	11 2	3 10 0	3 10 0	3 9 6	Bankura.	2
22 0	22 0	...	11 0	11 0	12 0	200 0	200 0	200 0	10 12	10 12	10 8	3 12 6	3 12 6	3 10 0	Birbhum.	3
...	...	...	18 0	17 8	10 0	280 0	280 0	120 0	C 11 7	11 7	11 8	3 8 0	3 8 0	3 8 0	Midnapore.	4
...	...	...	12 12	12 12	11 0	160 0	160 0	120 0	D 11 0	10 8	10 0	3 6 0	3 8 0	3 12 0	Hooghly.	5
...	...	...	10 10	10 10	11 0	100 0	100 0	100 0	E 10 10⅓	10 10⅓	10 8	3 8 0	3 8 0	3 9 6	Howrah.	6
19 0	19 0	17 8	12 5	12 0	14 12	85 0	85 0	95 0	9 8	9 8	11 6	4 0 0	4 0 0	3 4 2	Calcutta.	
20 0	18 0	...	17 0	17 0	16 0	100 0	100 0	100 0	F 11 0	11 0	11 0	3 4 6	3 4 6	3 4 0	24-Parganas.	7
...	...	...	22 0	20 0	17 12½	128 0	128 0	...	G 10 0	10 0	10 8½	3 8 0	3 8 0	3 9 0	Nadia.	8
...	...	...	10 0	10 0	...	160 0	160 0	160 0	H 9 0	9 0	10 0	3 12 0	3 12 0	3 12 0	Khulna.	9
...	...	...	13 0	13 0	20 0	120 0	120 0	160 0	I 9 14	9 14	9 2	3 10 0	3 10 0	3 10 0	Jessore.	10
...	...	...	17 0	17 0	14 0	200 0	200 0	200 0	J 10 8	10 8	11 12	3 7 0	3 7 0	3 8 0	Murshidabad.	11
...	...	...	...	...	...	100 0	120 0	110 0	K 10 8	10 0	11 0	3 7 0	3 8 0	3 8 0	Chittagong.	12
...	...	...	...	...	...	...	...	...	L 9 0	9 0	10 0	4 0 0	4 0 0	3 12 0	Noakhali.	13
...	...	...	7 8	10 0	7 0	...	...	...	M 10 13½	10 13½	10 0	3 12 0	3 12 0	3 12 0	Tippera.	14
No. in cobs. 300	No. in cobs. 300	...	...	...	...	240 0	240 0	240 0	8 0	8 0	8 0	4 8 0	4 8 0	4 8 0	Chittagong Hill Tracts.	15
...	...	...	12 0	11 4	11 0	120 0	120 0	120 0	N 10 0	10 0	10 8	3 10 0	3 10 0	3 9 0	Dacca.	16
...	...	...	...	...	14 0	...	...	...	O 10 0	10 0	10 0	3 14 0	3 14 0	4 0 0	Faridpur.	17
7 0	Musuri 7 8	...	10 0	Mug. 10 8	...	82 0	80 0	80 0	P 10 8	10 8	10 8	3 10 0	3 10 0	3 10 0	Backergunge.	18
...	...	...	13 0	13 0	9 8	120 0	120 0	...	Q 10 0	10 0	10 8	4 0 0	4 0 0	3 10 0	Mymensingh.	19
...	...	...	13 0	13 8	19 3	160 0	160 0	160 0	10 0	9 8	10 4	3 14 0	3 14 0	3 14 0	Dinajpur.	20
...	...	...	17 10	17 0	20 12	240 0	240 0	240 0	R 9 9	9 9	9 9	3 10 8	3 10 8	3 10 8	Rajshahi.	21
...	...	...	9 8	9 8	8 0	80 0	80 0	100 0	S 9 12	9 12	8 0	4 4 0	4 4 0	5 0 0	Rangpur.	22

Divisions (printed at right margin): Burdwan Division (1–6); Presidency Division (7–11); Chittagong Division (12–15); Dacca Division (16–19); Rajshahi Division (20–22).

J In the subdivisional marts the retail prices of salt per rupee are :—Jangipur 11 seers and Kandi 11 seers.
K At Cox's Bazar the retail price of salt is 8 seers per rupee.
L At Fenny Hát the retail price of salt is 8 seers 5 chitaks per rupee.
M In the subdivisional marts the retail prices of salt per rupee are :—Brahmanbaria 9 seers 14 chitaks and Chandpur 9 seers.
N In the mofussil marts the retail prices of salt per rupee are:—Madanganj 10 seers, Manikganj 9 seers 13 chitaks, Mirkadim 10 seers, and Munshirhat 10 seers.
O At Madaripur and Goalundo the retail price of salt is 10 seers per rupee.
P In the subdivisional marts the retail prices of salt per rupee are :—Patuakhali 9 seers, Pirojpur 10¼ seers, and Bhola 9 seers.
Q In the subdivisional marts of Jamalpur, Kishorganj, Netrakona and Kagmari the retail price of salt is 10 seers per rupee.
R In the subdivisional marts the retail prices of salt per rupee are :—Naugaon 9 seers 9 chitaks and Nator 9 seers.
S At Gaibanda the retail price of salt is 10 seers per rupee.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the Head-quarters

QUANTITIES PER RUPEE IN

Number.	DISTRICTS.	WHEAT. Present return.	WHEAT. Next preceding return.	WHEAT. Corresponding return of last year.	BARLEY. Present return.	BARLEY. Next preceding return.	BARLEY. Corresponding return of last year.	RICE, BEST SORT. Present return.	RICE, BEST SORT. Next preceding return.	RICE, BEST SORT. Corresponding return of last year.	RICE, COMMON. Present return.	RICE, COMMON. Next preceding return.	RICE, COMMON. Corresponding return of last year.	JOWAR OR CHOLUM. (*Sorghum Vulgare.*) Present return.	JOWAR OR CHOLUM. Next preceding return.	JOWAR OR CHOLUM. Corresponding return of last year.
		S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
BENGAL—*continued.*																
RAJSHAHI DIVISION—*concld.* 23	Bogra ...	12 0	10 14	8 10	...	...	...	9 12	10 0	12 0	13 8	15 0	12 12	...	...	...
24	Pabna	14 4	14 4	12 12	...	...	...	6 4	6 4	7 2	14 4	13 8	13 2	...	...	...
25	Darjeeling	8 0	7 0	8 0	10 0	8 0	9 0	5 0	5 0	5 0	11 0	11 8	10 0	...	...	...
26	Jalpaiguri	11 0	11 0	10 0	13 0	13 0	14 0	9 0	7 0	7 0	14 0	13 0	10 0	...	...	...
BIHAR.																
BHAGALPUR DIVISION. 27	Monghyr ...	13 6	12 0 to 13 0	13 10	8 5½	14 0 to 15 0	22 1	10 8	8 0 to 9 0	9 7	13 10¼	Old. 11 0 New 13 0	12 9	19 15	...	17 13
28	Bhágalpur ...	13 14	13 14	12 10	12 10	12 10	22 11	12 10	12 10	Old. 9 7 New. 11 6	15 2	15 2	Old. 10 11 New. 12 10	..	...	...
29	Purnea (Kasba)*	10 0	10 0	11 0	...	...	25 0	13 0	13 0	10 0	15 0	15 0	11 0	...	...	...
30	Malda ...	12 0	12 8	11 0	...	...	...	9 8	10 0	8 0	14 0	14 0	12 0	...	...	...
31	Sonthal Parganas.	10 8	11 0	10 0	...	...	...	11 8	11 8	12 0	14 8	14 8	13 8	...	...	...
PATNA DIVISION. 32	Patna ...	15 0 / 14 0	Red. 15 0 White 14 0	13 8 / 12 0	20 0	20 0	25 0	10 8	10 8	10 8	17 0	17 0	13 8	21 0	29 0	19 0
33	Gaya ...	12 4	12 8	12 8	18 8	18 4	22 8	10 0	9 0	10 8	14 8	14 8	13 0	20 4	19 8	...
34	Shahabad ...	15 0	14 0	12 8	16 0	16 0	22 0	9 0	9 0	8 0	13 0	13 0	13 0	...	...	...
35	Darbhanga ...	13 3	12 2	13 3	11 8	11 8	22 0	11 0	11 0	11 0	15 6	15 6	13 3	...	...	...
36	Muzaffarpur	12 8	12 0	12 0	17 0	18 0	22 0	9 0	8 0	10 0	15 0	16 0	12 0	...	...	...
37	Saran ...	14 0	14 0	12 4	19 0	19 8	24 0	11 8	11 8	8 8	14 8	14 8	13 2	25 0	24 0	...
38	Champaran ...	11 4	11 12	10 12	14 8	20 0	20 0	8 8	8 8	9 0	15 12	15 8	13 4	...	...	...
ORISSA.																
ORISSA DIVISION. 39	Cuttack ...	10 8	10 8	10 2	...	...	...	10 8	10 8	10 8	15 1	15 1	12 8	...	...	...
40	Puri ...	...	...	...	...	...	...	9 3	9 3	9 6	15 12	17 2	13 8	...	...	...
41	Balasore ...	11 0	11 0	11 0	10 0	10 0	10 0	10 0	10 0	13 0	17 0	17 0	15 0	...	...	...
CHOTA NAGPUR.																
CHOTA NAGPUR DIVISION. 42	Hazáribágh ..	11 0	12 0	11 8	11 0	11 0	16 0	8 0	8 0	8 0	13 8	13 8	13 0 to 14 0	...	...	...
43	Lohardaga ...	11 0 / 7 8 to 9 0	Red. 10 8 to 10 12 White. 8 0 to 10 0	12 0 / 7 4 to 11 0	12 0	10 0	13 0	12 0 to 13 0	11 0 to 14 0	11 0 to 12 0	14 8 to 15 8	16 0	13 8 to 15 0	...	...	...
44	Palámau ...	11 4	11 4	12 6	...	...	16 14	11 4	11 1	13 8	15 3	15 12	14 1	...	...	...
45	Singhbhum ...	12 0	12 0	14 0	...	...	10 0	10 0	11 0	12 0	14 0	15 0	16 0	...	...	...
46	Manbhum	11 0	11 8	11 0	...	...	...	9 8	10 8	13 0	12 8 to 14 0	13 0 to 14 0	17 0	...	...	...

T At Sirajganj the retail price of salt is 11¼ seers per rupee.
U At Alipur the retail price of salt is 8 seers per rupee.
V At Begusarai and Jamui the retail price of salt is 10 seers per rupee.
W A Banka, Madhubani, and Supaul the retail price of salt is 10 seers per rupee.
X At Kishanganj and Araria the retail price of salt is 10 seers per rupee.
Y In the subdivisional marts the retail prices of salt per rupee are :—Deoghur 10½ seers, Godda 9½ seers, Jamtara 9 seers, Pakur 10½ seers, and Rajmahal 10 seers.
Z In the subdivisional marts the retail prices of salt per rupee are :—Bihar 8½ seers Barh 11 seers 6 chitaks.
a In the subdivisional marts the retail prices of salt per rupee are :—Nawada 9 seers, Jahanabad 10 seers, and Aurangabad 10 seers.

CALCUTTA,
The 7th February, 1893.

Station Bazars of the Districts of Bengal on the 31st January 1893—(concluded).

Indian-corn or Maize. (*Zea Mays.*) Present return.	Next preceding return.	Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus indicus.*) Present return.	Next preceding return.	Corresponding return of last year.	Firewood. Present return.	Next preceding return.	Corresponding return of last year.	Salt. Present return.	Next preceding return.	Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt. Present return.	Next preceding return.	Corresponding return of last year.	Districts.	Number.	
																	BENGAL—*continued.*
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
...	...	...	...	...	...	90 0	90 0	90 0	10 0	9 12	9 12	3 13 4	3 13 0	3 12 0	Bogra.	23	Rajshahi Division—*concld.*
...	.	...	22 8	22 0	16 8	200 0	200 0	200 0	9 12 [T]	9 12	9 12	3 10 0	3 10 0	3 12 0	Pabna.	24	Rajshahi Division—*concld.*
11 8	14 0	14 0	10 0	8 0	8 0	120 0	120 0	120 0	8 0	8 0	8 0	4 10 0	4 10 0	5 0 0	Darjeeling	25	Rajshahi Division—*concld.*
...	...	...	10 0	10 0	8 0	180 0	180 0	200 0	10 0 [U]	10 0	10 0	3 12 0	3 12 0	4 0 0	Jalpaiguri.	26	Rajshahi Division—*concld.*
																	BIHAR.
23 1½	22 0	20 7	16 13	15 0	15 12	170 0	140 0	168 0	10 8 [V]	10 8	10 8	3 13 0	3 7 0	3 9 3	Monghyr.	27	Bhagalpur Division.
25 4	27 12	18 15	16 6	16 6	15 12	176 0	176 0	176 12	10 11 [W]	10 11	10 11	3 12 0	3 12 0	3 12 0	Bhagalpur.	28	Bhagalpur Division.
25 0	26 0	17 0	16 0	16 0	13 0	320 0	320 0	...	10 0 [X]	10 0	10 0	3 10 2	3 10 2	4 0 0	Purnea.	29	Bhagalpur Division.
...	25 0	...	12 0	12 0	...	160 0	160 0	120 0	10 0	10 0	9 0	4 0 0	3 12 0	3 11 0	Malda	30	Bhagalpur Division.
23 8	24 0	20 0	21 0	20 8	17 0	200 0	200 0	200 0	10 8 [Y]	10 8	9 0	3 10 3	3 10 3	4 0 0	Sonthal Parganas.	31	Bhagalpur Division.
23 12	24 0	21 0	20 0	20 0	18 0	130 0	130 0	120 0	11 8 [Z]	11 8	11 8	3 8 0	3 8 0	3 8 0	Patna.	32	Patna Division.
20 4	21 0	...	19 0	18 0	17 8	200 0	200 0	140 0	10 0 [a]	10 0	10 0	3 13 0	3 13 0	3 14 0	Gaya.	33	Patna Division.
21 0	23 0	20 0	16 0	16 0	14 0	160 0	160 0	160 0	11 0 [b]	11 0	10 0	3 10 0	3 10 0	4 0 0	Shahabad.	34	Patna Division.
25 5	25 5	20 14	17 9	17 9	16 8	176 0	176 0	160 0	10 4 [c]	10 4	11 0	3 14 0	3 14 0	3 6 0	Darbhanga.	35	Patna Division.
24 0	25 0	20 0	17 0	17 0	16 0	160 0	160 0	160 0	11 0 [d]	11 0	11 0	3 11 0	3 10 0	3 10 6	Muzaffarpur.	36	Patna Division.
22 8	22 8	21 0	18 8	18 8	17 4	200 0	200 0	160 0	10 12 [e]	10 8	10 12	3 11 0	3 11 0	3 11 0	Saran.	37	Patna Division.
24 4	24 8	20 4	15 4	16 0	14 0	160 0	160 0	160 0	10 8 [f]	10 12	10 8	3 13 0	3 12 0	3 12 0	Champarun.	38	Patna Division.
																	ORISSA.
...	...	...	17 1	17 1	15 12	80 0	80 0	80 0	10 12	10 12	11 0	3 6 0	3 6 0	3 12 0	Cuttack.	39	Orissa Division.
...	...	...	...	...	...	...	...	...	11 13	12 0	11 13	3 4 0	3 4 0	3 5 0	Puri.	40	Orissa Division.
...	...	...	10 12	10 12	...	160 0	160 0	140 0	11 0 [h]	11 0	10 8	3 10 0	3 10 0	3 14 0	Balasore.	41	Orissa Division.
																	CHOTA NAGPUR.
20 0	20 0	19 0	15 0	15 0	16 0	240 0	240 0	240 0	9 0	9 0	10 0	4 0 0	4 0 0	3 12 0	Hazáribágh.	42	Chota Nagpur Division.
20 0	21 0	20 0	Big. 15 0 Small. 16 0	Big. 14 0 Small. 15 8	Big. 14 0 Small. 19 0	160	160 0	140 0 to 160 0	10 0	9 8	9 12	4 0 0	4 0 0	4 0 0	Lohardaga.	43	Chota Nagpur Division.
27 0	25 5	20 4	19 8	...	...	...	...	..	9 0	8 13½	9 0	...	...	...	Palámau.	44	Chota Nagpur Division.
...	...	20 0	12 0	12 0	18 0	100 0	100 0	160 0	9 0	9 0	9 0	4 6 0	4 6 0	4 4 0	Singhbhum.	45	Chota Nagpur Division.
20 0	21 0	...	18 0	18 0	18 0	...		...	10 10 [j]	10 10	10 10	3 10 0	3 11 0	3 10 0	Manbhum.	46	Chota Nagpur Division.

In the subdivisional marts the retail prices of salt per rupee are :—Buxar 10½ seers, Sasaram 10¾ seers, and Bhabhua 10 seers.
In the subdivisional marts the retail prices of salt per rupee are :—Madhubani 11 seers and Somastipur 10 seers.
In the subdivisional marts the retail prices of salt per rupee are :—Hajipur 10⅓ seers and Sitamarhi 11½ seers.
At Mirganj (in Gopalganj subdivision) the retail price of salt is 12 seers 2 chitaks per rupee.
f At Bettiah the retail price of salt is 10 seers per rupee.
g In the subdivisional marts the retail prices of salt per rupee are :—Kendrapara 9 seers, Banki 12 seers.
h At Bhadrak the retail price of salt is 9 seers per rupee.
i At Giridih the retail price of salt is 11 seers per rupee.
j At Gobindpur the retail price of salt is 10½ seers per rupee.

Published for general information.

C. E. BUCKLAND,
Secretary to the Govt. of Bengal.

PRICES-CURRENT (wholesale) of Food-grains, Firewood, and Salt

Number.	MARTS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE COMMON.		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
1	Calcutta ...	3 8 0	3 6 0	3 6 10	2 5 0	2 8 0	1 15 4	5 9 0	5 9 0	4 5 11	4 0 0	4 2 0	3 0 2
2	Sirajganj ...	3 10 0	3 8 0	3 10 0	...	...	...	5 12 0	5 6 0	5 4 0	3 6 0	3 2 0	3 5 0
3	Dacca ...	...	..	3 12 0	...	...	1 6 0	3 8 0	5 0 0	3 5 0	3 4 0	3 4 0	2 10 0
4	Narayanganj	...	...	...	...	...	...	3 4 0	3 6 0	2 14 0	3 0 0	3 2 0	2 10 0
5	Chittagong	4 2 0	4 2 0	4 0 0	...	...	...	3 8 0	3 12 0	4 8 0	3 1 0	3 2 0	3 0 0
6	Patna ...	2 10 6 2 13 6	Red. 2 10 6 White. 2 13 6	2 15 4 3 5 4	2 0 0	2 0 0	1 9 6	3 13 0	3 13 0	3 12 11	2 5 6	2 5 6	2 15 4
7	Balasore ...	3 8 0	3 8 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 0 0	2 6 0	2 6 0	2 8 0
8	Puri ...	...	...	...	...	...	...	4 5 0	4 5 0	4 9 0	2 8 0	2 5 0	2 15 0
9	Cuttack ...	3 10 0	3 10 0	3 14 0	...	...	...	3 10 0	3 10 0	3 10 0	2 10 0	2 10 0	3 2 0

CALCUTTA,
The 7th February, 1893.

in the undermentioned Marts of Bengal on the 31*st January* 1893.

Gram, Chana, Chhola, Kadalay or Sunaga. (*Cicer Arietinum.*)			Indian-corn or Maize. (*Zea Mays.*)			Arhar or Thur, Cadjan Pea. (*Cajanus indicus.*)			Firewood.			Salt.			Marts.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
2 12 0	2 13 0	2 5 3	1 13 0	1 13 0	2 0 6	3 4 0	3 4 3	2 6 10	0 7 0	0 7 0	0 5 9	4 0 0	4 0 0	3 4 2	Calcutta.
3 0 0	2 14 0	2 14 0	...	...	...	...	...	...	0 6 6	0 6 6	0 6 6	3 8 0	3 8 0	3 5 0	Sirajganj.
...	...	2 12 0	...	...	...	...	...	3 0 0	0 5 0	0 5 0	0 5 6	3 10 0	3 10 0	3 9 0	Dacca.
3 12 0	3 12 0	3 8 0	...	...	...	3 4 0	3 6 0	3 8 0	0 8 0	0 8 0	0 8 0	3 8 0	3 8 0	3 8 0	Narayanganj.
3 8 0	3 10 0	3 8 0		...	...	...	...	...	0 6 0	0 5 0	0 5 0	3 7 0	3 8 0	3 8 0	Chittagong.
2 1 3	2 0 0	1 14 5	1 11 3	1 10 9	1 14 5	2 0 0	2 0 0	2 3 0	0 5 0	0 5 0	0 5 4	3 8 0	3 8 0	3 8 0	Patna.
2 14 0	2 14 0	2 12 0	...	...	...	3 10 0	3 10 0	...	...	...	...	3 10 0	3 12 0	3 14 0	Balasore.
...	...	...	...	...	...	...	...	...	...	...	...	3 4 0	3 4 0	3 5 0	Puri.
2 4 0	(Kalai.) 2 4 0	2 8 0	...	...	...	2 6 0	2 6 0	2 8 0	0 8 0	0 8 0	0 8 0	3 6 0	3 6 0	3 12 0	Cuttack.

Published for general information.

C. E. BUCKLAND,

Secretary to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

STATION OBSERVATIONS.

Meteorological Division.	District.	Representative station.	Air pressure. Mean barometric height, 8 A.M. reduced to 32°.	Air pressure. Mean reduced to sea-level and constant gravity, lat. 45°.	Air pressure. Variation from mean.	Wind. Prevailing direction.	Wind. Mean wind velocity.	Temperature. Highest.	Temperature. Date.	Temperature. Lowest.	Temperature. Date.	Temperature. Mean maximum temperature.	Temperature. Mean minimum temperature.	Temperature. Mean daily temperature.
Orissa.	Puri	Puri ...	30·020	29 968	—	Variable	182	89·7	4th Feb.	57·6	29th Jan.	80·5	62·2	71·4
		Gopalpore ...	30·020	29·981	—·015	NNW	232	82 2	31st Jan.	56·0	29th ,,	79·3	62 4	70·8
		False Point ...	30·026	29·989	—·015	N & NW	189	78·9	31st ,,	51·0	29th ,,	75·6	57·1	66·4
	Cuttack	Cuttack ...	29·964	29 991	—·003	Calm	45	83·6	31st ,,	53 4	29th ,,	80 3	59·6	70·0
	Balasore	Balasore ...	30·001	30·006	+·002	N	88	81 3	31st ,,	49·4	29th ,,	76·7	52 5	64·6
South-West Bengal.	Midnapore	Midnapore ...	29·913	30·017	+·052	N	227	81·3	30th ,,	48·2	29th ,,	78 3	52·5	63·4
	24-Parganas	Calcutta ...	30·036	30 004	—·003	Calm	51	76 7	31st ,,	46·7	2nd Feb.	73·2	51·6	62·4
		Saugor Island	30·027	29·998	0	NEly	226	77 2	31st ,,	51·2	2 & 3 ,,	73·6	56 0	64·8
	Howrah													
	Hooghly													
	Nadia	Krishnagar ...	30·006	30·006	+·017	WNW	82	77·4	31st ,,	41·3	2nd ,,	74·1	46·6	60·4
	Khulna													
	Jessore	Jessore ...	30 017	29 998	0	Calm & Wly.	52	76 7	31st ,,	43·4	3rd ,,	73·7	48·0	60·8
	Burdwan ...	Burdwan ...	29·966	30 021	+·006	Calm	40	77·5	31st ,,	46·1	2 & 3 ,,	74 4	50·7	62·6
		Raniganj ...	29·712	30·030	—·006	Calm & NW.	38	78·5	30th ,,	46·7	2nd ,,	73·8	49 8	61·8
	Bankura	Bankura ...	29·725	29·993	—·007	Calm & Wly.	51	79·3	30th ,,	48 8	29th Jan.	74·7	51·5	63·2
	Birbhum													
	Murshidabad	Berhampore...	29 980	30 000	—·013	Variable	43	75·6	31st ,, & 4th Feb.	43·1	2nd Feb.	73·0	48·2	60·6
North Bengal.	Pabna	Sirajganj ...	29·988	29·987	—·006	Variable	20	75·0	31st Jan.	40·0	2nd ,,	71·4	44·3	5·78
	Bogra	Bogra ...	29·974	29·993	+·017	W	52	76·3	31st ,,	41·2	3rd ,,	72·2	44·4	58·3
	Rajshahi	Rampur Boalia.	29·969	29·993	+·007	SW	74	74·9	31st ,,	40·7	2nd ,,	71·6	45·6	58·6
	Malda	Malda ...	29·968	30·006	—	NW	96	76·6	31st ,,	38·3	2nd ,,	73·4	42 3	57·9
	Dinajpur	Dinajpur ...	29·904	29·984	—·016	W	76	73·6	31st ,,	41·0	2nd ,,	71·0	44·4	57·7
	Rangpur	Rangpur ...	29·896	29 982	—·063	W	49	72·8	31st ,,	40 6	2nd ,,	69·9	43·5	56·7
	Jalpaiguri	Jalpaiguri ..	29·729	29 987	—·004	NE	37	70·4	31st ,,	42·1	2nd ,,	68 8	45·0	56·8
	Kuch Bihar													
	Darjeeling	Darjeeling ...	22·854	—	—·045	SEly	149	40·5	1st Feb.	26·6	3rd ,,	36 6	27·4	32·0
	Sikkim	Gnatong ...	19·012	—	—	WNW	249	34·4	29th Jan.	3·3	4th ,,	26 1	7·8	17·0
East Bengal.	Chittagong	Chittagong ...	29·960	30·000	+·001	Calm	51*	78 7	31st ,,	46·6	3rd ,,	75·5	49·6	62·6
	Chittagong Hill Tracts	Demagiri ...	Observations not received.											
	Backergunge	Barisál ...	30·036	29·995	+·016	Calm	38	77·3	31st Jan.	45·6	29th Jan.	73·5	49·7	61·6
	Noakhali	Noakhali ...	30·011	30·003	+0·12	E	79	77·9	1st Feb.	42 0	2nd Feb.	73·2	46·8	60·1
	Faridpur . ..	Faridpur ...	30 018	30·014	+·012	Variable	44	?	?	43·0	3rd ,,	?	47·6	
	Dacca	Dacca ...	30·019	29·990	—·007	Calm	59	78 1	31st Jan.	46·2	3rd ,,	73 5	49 8	61·7
	Tippera	Comilla ...	30 012	29·997	—·004	Variable	23	78·4	31st ,,	43 1	2nd ,,	74 3	47·0	60·7
	Mymensingh	Mymensingh	29·975	29·994	—·015	Variable	50	73·5	31st ,,	41·7	2nd ,,	70·3	45·3	57·0
North Bihar.	Purnea	Purnea ...	29·889	29·980	—·03)	Calm	58	72 2	30th ,, & 4th Feb.	41·3	29th Jan. & 3rd Feb.	70·2	43·6	56·9
	Bhágalpur	Bhagalpur ...	29·859	29·981	—·018	Calm	44	75·8	30th Jan.	42·5	2nd ,,	71·9	46·5	59·2
	Darbhanga	Darbhanga ...	29·859	29·991	—·029	WSW	124	71·3	30th ,, & 4th Feb.	44 4	2, 3 & 4 ,,	68·4	46·7	57·6
	Muzaffarpur	Muzaffarpur...	29·849	29·996	—	WSW	135	70·7	30th Jan.	41·3	31st Jan.	67·9	45·0	56·5
	Champaran	Motihari ...	29·775	29·974	—·027	WSW	192	72·2	30th ,, & 4th Feb.	39·0	31st ,, 1, & 2 Feb.	69·2	41·5	55·4
	Saran	Chapra ..	29·849	29·998	+·006	WSW	137	74·5	4th ,,	42·9	31st Jan. 1st Feb.	70·1	45·5	57·8
South Bihar.	Shahabad	Dehri ...	29·691	30·020	—·0?2	Variable	90	77·9	30th Jan.	45·0	2nd ,,	72·2	50·3	61·3
		Buxar* ..	29·811	30·022	—·003	Variable	124	?	?	42·4	2nd ,,	?	47·5	?
		Arrah ..	29 843	30·000	+·005	WSW	100	77 2	29th ,,	42·0	31st Jan. 2nd Feb.	72·5	44·8	58·7
	Gaya	Gaya ...	29·660	30·014	—·013	Variable	116	77·7	30th ,,	43·8	2nd ,,	71·7	48·5	60·1
	Patna	Bankipore ...	29·870	30·018	—·008	WSW	131	73·6	4th Feb.	40·7	1 & 2 ,,	69 4	45·2	57·3
	Monghyr													
Chota Nagpur.	Sonthal Parganas ...	Naya Dumka	29·530	30·014	—·004	WNW	53	75·5	4th ,,	44·0	2nd ,,	72·2	47·7	60·0
	Hazaribagh	Hazaribagh ...	27·961	30·015	—·023	Variable	244	76·0	30th Jan.	41·6	1st ,,	69·1	45·3	57·3
	Lohardaga	Ranchi ..	27·830	30 009	—·021	W	191	75 2	30th ,,	42·5	1st ,,	69·0	47·2	58·1
	Palamau													
	Singhbhum	Chaibassa ...	29·257	30·007	—·009	Variable	26	82·7	30th ,,	47·2	2nd ,,	79·1	51·3	65·2
	Manbhum													

* Mean of 6 days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period

The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01

rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station

district, i.e. from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one on

for the week ending Saturday, the 4th of February 1893.

Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	DISTRICT OBSERVATIONS. Of week. Mean for district.	Of week. Normal mean.	Of week. Average number of rainy days.	Of week. Normal number of rainy days.	Rainfall. Since 1st of month. Mean for district.	Since 1st of month. Normal mean.	Since 1st of month. Variation.	Since 16th October 1892. Mean for district.	Since 16th October 1892. Normal mean.	Since 16th October 1892. Variation.	DISTRICT.
—	66·5	70	1·4	Nil	Nil	0·17	0·00	0·23	Nil	0·08	—0·08	9·28	6·63	+2·65	Puri.
—0·7	66·0	87	0·3	Nil											
—3·2	64·7	80	1·0	Nil											
—3 7	63·3	69	2·6	Nil	Nil	0·17	0·00	0·32	Nil	0·08	—0·08	7·86	4·47	+3·39	Cuttack.
—3·7	59·0	75	0	Nil	Nil	0·32	0·00	0·47	Nil	0·19	—0·19	7·51	3·51	+4·00	Balasore.
—1·2	59·7	55	0·7	Nil	Nil	0·52	0·00	0·56	Nil	0·25	—0·25	8·36	3·59	+4·77	Midnapore.
—4·6	57·4	71	2·6	Nil	Nil	0·53	0·00	0·62	Nil	0·25	—0·25	7·87	3·50	+4·37	24-Parganas.
—4·6	60·0	80	0·4	Nil											
					Nil	0·45	0·00	0·54	Nil	0·28	—0·28	3·83	2·71	+1·12	Howrah.
					Nil	0·60	0·00	0·58	Nil	0·18	—0·18	7·76	2·67	+5·09	Hooghly.
—2·2	55·5	71	0·5	Nil	Nil	0·36	0·00	0·55	Nil	0·16	—0·16	4·60	2·32	+2·28	Nadia.
					Nil	0·28	0·00	0·39	Nil	0·17	—0·17	7·07	3·25	+3·82	Khulna.
—5·9	54·7	81	1·1	Nil	Nil	0·34	0 00	0·48	Nil	0·16	—0·16	9·52	2·77	+6·75	Jessore.
—4·6	56·6	59	1·1	Nil	Nil	0·35	0·00	0·51	Nil	0·16	—0·16	5·02	2·25	+2·77	Burdwan.
—4·0	55·7	65	0	Nil											
—0·6	56·5	71	0·3	Nil	Nil	0·18	0·00	0·41	Nil	0·11	—0·11	5·34	2·15	+3·19	Bankura.
					Nil	0·34	0·00	0·57	Nil	0·18	—0·18	4 01	1·80	+2·21	Birbhum.
—5·1	52·0	84	0·4	Nil	Nil	0·28	0·00	0·48	Nil	0·08	—0·08	2·50	1·61	+0·89	Murshidabad.
—4·4	52·0	80	0	Nil	Nil	0·30	0·00	0·57	Nil	0·12	—0·12	1·72	2·20	—0·48	Pabna.
—4·2	51·5	75	0	Nil	Nil	0·15	0 00	0·37	Nil	0·06	—0·06	1·25	1·63	—0·38	Bogra.
—3·0	54·7	72	0·4	Nil	Nil	0·22	0·00	0·40	Nil	0·08	—0·08	0·99	1·87	—0·88	Rajshahi.
—	53·3	70	0	Nil	Nil	0·10	0·00	0·43	Nil	0·04	—0·04	1·05	1·85	—0·80	Malda.
—3·3	51·0	75	0·4	Nil	Nil	0·08	0·00	0·25	Nil	0·05	—0·05	0·91	1·37	—0·46	Dinajpur.
—3·5	49·5	85	0·4	Nil	Nil	0·06	0·00	0·25	Nil	0·05	—0·05	1·69	1·71	—0·02	Rangpur.
—3·3	49·9	91	2·3	Nil	Nil	0·05	0·00	0·16	Nil	0·01	—0·01	1·68	2·94	—1·26	Jalpaiguri.
—5·2	31·3	96	6·1	Nil	Nil	0·03	0·00	0·13	Nil	0·02	—0·02	1·56	1·57	—0·01	Kuch Bihar.
—	19·2	51	0	Nil	Nil	0·15	0·00	0·41	Nil	0 12	—0·12	5·36	3·34	+2·02	Darjeeling.
															Sikkim.
—4·7	56·6	85	0·3	Nil	Nil	0·22	0·00	0·44	Nil	0·15	—0·15	12·86	5·82	+7·04	Chittagong.
					Nil	0·29	0·00	0·50	Nil	0·21	—0·21	8·61	5·18	+3·43	Chittagong Hill Tracts.
—1·9	56 9	82	2·7	Nil	Nil	0·28	0·00	0·44	Nil	0·16	—0·16	8·20	4·46	+3·74	Backergunge.
—4·3	57·9	76	0·3	Nil	Nil	0·22	0·00	0·29	Nil	0·06	—0·06	15·66	5·62	+10·04	Noakhali.
?	55·5	80	0·3	Nil	Nil	0·26	0·00	0·44	Nil	0·13	—0·13	7·43	2·35	+5·08	Faridpur.
—5·5	54·7	76	0·6	Nil	Nil	0·28	0·00	0·43	Nil	0·12	—0·12	9·14	3·03	+6·11	Dacca.
—3·8	56·1	79	0·6	Nil	Nil	0·24	0·00	0·41	Nil	0·15	—0·15	8·90	3·19	+5·71	Tippera.
—4·9	50·8	87	0·3	Nil	Nil	0·21	0·00	0·40	Nil	0·07	—0·07	3·41	2·45	+0·96	Mymensingh.
—4·3	46·4	88	0	Nil	Nil	0·07	0·00	0·29	Nil	0·05	—0·05	0·81	1·90	—1·09	Purnea.
—2·6	54·4	57	0·1	Nil	Nil	0·13	0·00	0·33	Nil	0·08	—0·08	1·35	1·68	—0·33	Bhagalpur.
—4·6	51·2	82	0·3	0·02	Nil	0·21	0·00	0·25	Nil	0·11	—0·11	1·50	1·69	—0·19	Darbhanga.
—	48·9	91	0	0·06	Nil	0·16	0·00	0·34	Nil	0·15	—0·15	1·21	1·81	—0·60	Muzaffarpur.
—3·6	47·9	86	0	Nil	Nil	0·11	0·00	0·32	Nil	0·09	—0·09	0·75	1·35	—0·60	Champaran.
—3·4	49·3	77	0·1	Nil	0·02	0·11	0·00	0·28	Nil	0·08	—0·08	1·20	1·77	—0·57	Saran.
—0·3	55·9	74	1·1	Nil											
?	54·1	75	1·5	Nil	Nil	0·18	0·00	0·36	Nil	0·13	—0·13	1·13	2·26	—1·13	Shahabad.
—1·9	50·3	73	0	Nil											
—4·8	54·5	60	0·6	Nil	Nil	0·20	0·00	0·41	Nil	0·10	—0·10	1·08	1·94	—0·86	Gaya.
—4·5	53·7	65	0*	Nil	Nil	0·17	0·00	0·43	Nil	0·13	—0·13	0·82	1·99	—1·17	Patna.
					Nil	0·17	0·00	0·40	Nil	0·07	—0·07	1·75	2·04	—0·29	Monghyr.
—3·3	53·9	66	0	Nil	Nil	0·19	0·00	0 35	Nil	0·05	—0·05	2·21	1·74	+0·47	Sonthal Parganas.
—5·0	53·6	55	1·4	Nil	Nil	0·21	0·00	0·39	Nil	0·15	—0·15	4·91	2·01	+2·90	Hazaribagh.
—3·0	53·0	68	1·3	Nil	Nil	0·34	0·00	0·48	Nil	0·18	—0·18	7·15	2·75	+4·40	Lohardaga.
—1·2	56·9	69	0·9	Nil	Nil	0·34	0·00	0·53	Nil	0·15	—0·15	1·64	2·50	—0·86	Palamau.
					Nil	0·46	0·00	0·45	Nil	0·25	—0·25	6·53	3·04	+3·49	Singhbhum.
					Nil	0·42	0·00	0·64	Nil	0·18	—0·18	4·34	2·23	+2·11	Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 4th of February 1893.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 29th Jan.	Monday, 30th Jan.	Tuesday, 31st Jan.	Wednesday, 1st.	Thursday, 2nd.	Friday, 3rd.	Saturday, 4th.	Total number of rainy days.	Rainfal of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th October 1892.	Average rainfall from 16th October to date.
ORISSA	Puri	Puri	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·05	12·23	7·35
		Khurda	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·07	5·72	5·04
		Banpur	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·09	7·36	6·08
		False Point	...	...	...	...	...	...	...	Nil	Nil	0·29	Nil	0·11	11·80	8·02
		Gop	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·79	?
		Satpara	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·54	?
		Pipli	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	6·61	?
	Cuttack	Jagatsingpore	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·03	11·00	4·17
		Banki	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·06	5·15	4·45
		Cuttack	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·07	10·25	4·63
		Kendrapara	...	...	...	...	...	...	...	Nil	Nil	0·21	Nil	0·07	7·94	4·72
		Jajpur	...	...	...	...	...	...	...	Nil	Nil	0·27	Nil	0·16	4·84	4·26
		Dharmsala	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·18	?
		Salipore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	6·14	?
		Pal Lahara	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·55	?
	Balasore	*Akhyapada*	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·42	?
		Chandbali	...	...	...	...	...	...	...	Nil	Nil	0·30	Nil	0·21	5·75	4·76
		Bhadrak	...	...	...	...	...	...	...	Nil	Nil	0·44	Nil	0·24	7·48	3·93
		Soro	...	...	...	...	...	...	...	Nil	Nil	0·19	Nil	0·13	7·78	3·27
		Balasore	...	...	...	...	...	...	...	Nil	Nil	0·34	Nil	0·18	10·84	4·37
		Jellasore	...	...	...	...	...	...	...	Nil	Nil	0·42	Nil	0·18		2·44
		Baripodah	...	...	...	...	...	...	...	Nil	Nil	0·24	Nil	0·21	8·17	2·30
SOUTH-WEST BENGAL.	Midnapore	Contai	...	...	...	...	...	...	...	Nil	Nil	0·62	Nil	0·21	10·68	5·76
		Tamluk	...	...	...	...	...	...	...	Nil	Nil	0·63	Nil	0·30	5·80	3·61
		Midnapore	...	...	...	...	...	...	...	Nil	Nil	0·41	Nil	0·24	8·18	3·21
		Ghatal	...	...	...	...	...	...	...	Nil	Nil	0·40	Nil	0·26	8·77	1·68
		Kukrahaty	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·91	?
		Garhbeta	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·01	?
	24-Parganas	Saugor Island	...	...	...	...	...	...	...	Nil	Nil	0·55	Nil	0·21	15·54	5·90
		Diamond Harbour	...	...	...	...	...	...	...	Nil	Nil	0·57	Nil	0·31	7·30	3·82
		Canning Town	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	9·92	?
		Alipore Observatory	...	...	...	...	...	...	...	Nil	Nil	0·51	Nil	0·25	5·55	3·40
		Barrackpore	...	...	...	...	...	...	...	Nil	Nil	0·64	Nil	0·23	8·50	2·80
		Dum-Dum	...	...	...	...	...	...	...	Nil	Nil	0·50	Nil	0·25	4·61	2·88
		Barasat	...	...	...	...	...	...	...	Nil	Nil	0·64	Nil	0·32	6·80	3·14
		Basirhat	...	...	...	...	...	...	...	Nil	Nil	0·32	Nil	0·17	6·67	2·02
	Howrah	Howrah	...	...	...	...	...	...	...	Nil	Nil	0·43	Nil	0·21	3·38	3·04
		Mohesreka	...	...	...	...	...	...	...	Nil	Nil	0·46	Nil	0·36	4·26	2·36
		Uluberia	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·16	?
	Hooghly	Serampore	...	...	...	...	...	...	...	Nil	Nil	0·62	Nil	0·18	9·46	2·73
		Hooghly	...	...	...	...	...	...	...	Nil	Nil	0·63	Nil	0·07	8·37	2·74
		Jahanabad	...	...	...	...	...	...	...	Nil	Nil	0·57	Nil	0·29	5·42	2·57
	Nadia	Ranaghat	...	...	...	...	...	...	...	Nil	Nil	0·37	Nil	0·20	6·25	2·39
		Krishnagar	...	...	...	...	...	...	...	Nil	Nil	0·40	Nil	0·19	6·28	1·93
		Chuadanga	...	...	...	...	...	...	...	Nil	Nil	0·35	Nil	0·15	?	2·54
		Meherpore	...	...	...	...	...	...	...	Nil	Nil	0·30	Nil	0·09	2·39	2·06
		Kushtia	...	...	...	...	...	...	...	Nil	Nil	0·36	Nil	0·17	3·47	2·44
	Khulna	Satkhira	...	...	...	...	...	...	...	Nil	Nil	0·29	Nil	0·15	5·24	2·96
		Bagerhat	...	...	...	...	...	...	...	Nil	Nil	0·29	Nil	0·26	8·65	3·37
		Khulna	...	...	...	...	...	...	...	Nil	Nil	0·25	Nil	0·09	7·34	3·47
		Nakipur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·52	?
		Rampal	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	6·75	?
	Jessore	Narail	...	...	...	...	...	...	...	Nil	Nil	0·26	Nil	0·17	9·48	3·32
		Jessore	...	...	...	...	...	...	...	Nil	Nil	0·35	Nil	0·16	14·24	3·14
		Jhenidah	...	...	...	...	...	...	...	Nil	Nil	0·43	Nil	0·22	8·81	2·59
		Magura	...	...	...	...	...	...	...	Nil	Nil	0·29	Nil	0·10	7·30	2·17
		Bangaon	...	...	...	...	...	...	...	Nil	Nil	0·36	Nil	0·20	7·77	2·77
	Burdwan	Kalna	...	...	...	...	...	...	...	Nil	Nil	0·35	Nil	0·14	7·77	2·40
		Burdwan	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	0·13	5·87	2·29
		Katwa	...	...	...	...	...	...	...	Nil	Nil	0·39	Nil	0·20	4·27	2·44
		Raniganj	...	...	...	...	...	...	...	Nil	Nil	0·34	Nil	0·17	2·14	1·87
		Mankur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·12	?
	Bankura	Bankura	...	...	...	...	...	...	...	Nil	Nil	0·33	Nil	0·12	5·67	2·35
		Vishnupur	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·11	6·51	1·96
		Mahara	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·08	1·82	1·68
		Khatra	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·11	7·35	2·59
		Indas	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·91	?
		Kotalpur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·12	?
		Onda	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·33	?
		Gangajalghati	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·37	?
		Raipur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·84	?
		Sonamukhi	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?		?
	Birbhum	Suri	...	...	...	...	...	...	...	Nil	Nil	0·35	Nil	0·17	2·5[illegible]	2·22
		Hetampore	...	...	...	...	...	...	...	Nil	Nil	0·37	Nil	0·22	5·38	1·42
		Rampur Hat	...	...	...	...	...	...	...	Nil	Nil	0·27	Nil	0·14	4·18	1·77
		Bolpur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·66	?
		Murari	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·64	?
	Murshidabad	Kandi	...	...	...	...	...	...	...	Nil	Nil	0·22	Nil	0·10	3·40	1·71
		Berhampore	...	...	...	...	...	...	...	Nil	Nil	0·36	Nil	0·11	2·31	1·86
		Lalbagh	...	...	...	...	...	...	...	Nil	Nil	0·22	Nil	0·05	3·72	1·23
		Azimganj	...	...	...	...	...	...	...	Nil	Nil	0·29	Nil	0·07	1·89	1·80
		Jangipur	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	0·07	1·97	1·50
		Lalgola	...	...	...	...	...	...	...	Nil	Nil	0·24	Nil	0·05	1·70	1·54
		Akhriganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·34	?
		Patkabari	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·80	?
NORTH BENGAL.	Pabna	Pabna	...	...	...	...	...	...	...	Nil	Nil	0·25	Nil	0·11	2·71	1·98
		Sirajganj	...	...	...	...	...	...	...	Nil	Nil	0·36	Nil	0·13	0·72	2·39
	Bogra	Sherepore	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·11	1·36	1·81
		Nowkhilla	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·04	1·45	1·59
		Bogra	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·05	1·16	2·09
		Panchbibi	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·03	1·02	0·98
	Rajshahi	Boalia	...	...	...	...	...	...	...	Nil	Nil	0·27	Nil	0·06	1·53	1·83
		Nator	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	0·11	1·01	2·25
		Naugaon	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·07	0·48	1·51
		Lalpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·98	?
		Manda	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·44	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 4th of February 1893—contd.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 29th Jan.	Monday, 30th Jan.	Tuesday, 31st Jan.	Wednesday, 1st.	Thursday, 2nd.	Friday, 3rd.	Saturday, 4th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BENGAL—concld.	Malda	Malda	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·04	1·47	2·10
		Chanchal	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·03	0·62	1·55
		Gajol	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·38	?
		Sibganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·36	?
	Dinajpur	Mohadebpore	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·02	0·61	1·04
		Churaman	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·03	0·69	1·06
		Raiganj	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	1·56	0·99
		Dinajpur	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·09	0·88	2·56
		Balurghat	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·05	0·62	1·24
		Thakurgaon	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·58	?
	Rangpur	Bhawanigunge (*Gyabanda*)										0·10	Nil	0·07		1·77
		Rangpur	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·02	4·03	2·26
		Kurigaon	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·04	0·66	1·52
		Bagdogra (*Nilphamari*)	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·05	1·39	1·39
		Ulipore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·40	?
	Jalpaiguri	Jalpaiguri	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·01	1·68	2·94
		Alipore Dooar	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·20	?
		Fallacotta	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·65	?
		Debiganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·25	?
		Bhagatpore (Nagrakatta)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·20	?
	Kuch Bihar	Dinhatta	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·03	1·28	1·62
		Kuch Bihar	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·02	1·73	1·70
		Mickliganj	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·02	1·60	1·57
		Mathabhanga	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·02	1·57	1·28
	Darjeeling	Buxa	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·10	14·63	4·78
		Siliguri	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·03	2·91	1·63
		Darjeeling	...	...	...	...	...	...	...	Nil	Nil	0·26	Nil	0·21	1·56	4·66
		Kalimpong	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·13	2·43	2·27
		Kurseong	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·18	?
EAST BENGAL	Chittagong	Cox's Bazar	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·14	13·15	6·90
		Chittagong	...	...	...	...	...	...	...	Nil	Nil	0·27	Nil	0·16	12·55	4·07
		Kutubdia	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	19·17	?
		Satkanya	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·80	?
		Kodala	...	0·10	...	...	...	...	...	1	0·10	?	Nil	?	?	?
		Fenoa	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	?	?
		Mirsarai	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	?	?
	Chittagong Hill Tracts.	Rangamati	...	...	...	...	...	...	...	Nil	Nil	0·29	Nil	0·21	8·61	5·18
		Bundarban	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·70	?
	Backergunge	Patuakhali	...	...	...	...	...	...	...	Nil	Nil	0·43	Nil	0·22	8·98	5·04
		Pirojpur	...	...	...	...	...	...	...	Nil	Nil	0·27	Nil	0·15	8·05	4·21
		Barisal	...	...	...	...	...	...	...	Nil	Nil	0·23	Nil	0·15	7·39	4·44
		Gournaddi	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·83	?
		Bhola	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·11	8·33	4·08
		Daulatkhan	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	11·60	?
		Bauphal	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·91	?
	Noakhali	Noakhali	...	...	...	...	...	...	...	Nil	Nil	0·25	Nil	0·10	16·34	4·91
		Fenny	...	...	...	...	...	...	...	Nil	Nil	0·19	Nil	0·02	14·98	6·29
		Harishpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	19·67	?
		Ramganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	10·73	?
	Faridpur	Madaripur	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·13	6·11	2·45
		Faridpur	...	...	...	...	...	...	...	Nil	Nil	0·24	Nil	0·11	10·89	3·25
		Goalundo	...	...	...	...	...	...	...	Nil	Nil	0·35	Nil	0·14	5·32	2·34
	Dacca	Munshiganj	...	...	...	...	...	...	...	Nil	Nil	0·37	Nil	0·19	7·26	3·43
		Dacca	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	0·18	12·05	2·34
		Narayanganj	...	...	...	...	...	...	...	Nil	Nil	0·22	Nil	0·06	10·13	4·13
		Manikganj	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·06	6·93	2·11
		Joydebpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·14	?
	Hill Tippera	Agartola	...	...	...	...	...	...	...	Nil	Nil	0·30	Nil	0·20	7·41	3·63
	Tippera	Comilla	...	...	...	...	...	...	...	Nil	Nil	0·26	Nil	0·15	9·22	3·36
		Chandpore	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·06	8·01	2·57
		Brahmanbaria	...	...	...	...	...	...	...	Nil	Nil	0·29	Nil	0·17	10·94	3·19
		Ramchandrapore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·73	?
		Nasirnagar	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	11·06	?
		Daudkandi	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·70	?
		Kasba	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	12·69	?
		Laksham	...	...	...	...	...	...	...			?	Nil	?	9·17	?
	Mymensingh	Kishorganj	...	...	...	...	...	...	...	Nil	Nil	0·23	Nil	0·09	6·55	2·49
		Atia (*Tangail*)	...	...	...	...	...	...	...	Nil	Nil	0·25	Nil	0·06	3·24	2·10
		Mymensingh	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·04	1·18	2·52
		Jamalpur	...	...	...	...	...	...	...	Nil	Nil	0·27	Nil	0·12	2·03	2·36
		Netrakona	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·04	4·08	2·72
		Subornakhally	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·69	?
		Durgapore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·47	?
		Sherepore Town	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·51	?
		Dewanganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·78	?
NORTH BIHAR	Purnea	Kishanganj	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·05	0·76	1·89
		Araria	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·08	0·61	1·59
		Purnea	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·05	1·09	2·17
		Gondwara (Korah)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·46	?
		Barsoe	...	...								?		?	Nil	?
		Forbesganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·38	?
		Kasbaganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·35	?
	Bhagalpur	Madhipura	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·09	0·93	1·56
		Bongaon (Sufabad)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·10	?
		Supaul	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·10	1·47	1·49
		Protabganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·73	?
		Bhagalpur	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·07	0·78	1·75
		Banka	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·06	2·17	1·80
		Colgong	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·19	?
	Darbhanga	Tajpur	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·17	0·84	1·65
		Darbhanga	0·02	...	...	...	...	...	...	Nil	0·02	0·22	0·02	0·10	2·00	1·71
		Madhubani	...	...	...	...	...	...	...	Nil	Nil	0·23	Nil	0·06	1·67	1·79
		Bahera	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·77	?
		Roshera	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·64	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 4th of February 1893—concld.

Meteorological Division.	District	Station.	Rainfall. Sunday, 29th Jan.	Monday, 30th Jan.	Tuesday, 31st Jan.	Wednesday, 1st.	Thursday, 2nd.	Friday, 3rd.	Saturday, 4th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BIHAR—concluded.	Muzaffarpur...	Sitamarhi ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·07	1·45	1·29
		Muzaffarpur	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·15	1·33	2·37
		Hajipur ...	...	...	...	...	...	...	...	Nil	Nil	0·24	Nil	0·22	0·86	1·72
		Paru ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·67	?
		Mahua ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·85	?
		Siuhar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·14	?
		Pupri ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·42	?
	Champaran ...	Motihari ...	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·09	0·88	1·32
		Bettiah ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·08	0·80	1·35
		Bagaha ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·41	?
		Burhurwa ...	0·03	...	...	...	...	...	...	Nil	0·03	?	0 03	?	0·49	?
	Saran ...	Gopalganj ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	0·84	1·29
		Siwan ...	0·06	...	...	...	...	...	...	Nil	0·06	0·12	0·06	0·10	1·36	2·10
		Chapra ...	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·10	1·37	1·95
SOUTH BIHAR	Shahabad ...	Buxar ...	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·08	1·34	2·18
		Dehri ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	Nil	1·34	2·14
		Bhabhua ...	...	...	...	...	...	...	...	Nil	Nil	0·33	Nil	0·28	0·91	2·60
		Sasaram ...	...	...	...	...	...	...	...	Nil	Nil	0·26	Nil	0·11	0·96	2·33
		Arrah ...	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·12	0·88	1·94
		Mohanea ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·09	?
		Khiri ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·50	?
		Ageaon ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·34	?
		Ramagar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·50	?
		Koath ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·34	?
		Sikroul ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·60	?
		Bassowan ...	0·01	...	...	...	...	...	...	Nil	0 01	?	0·01	?	1·44	?
		Monaharpur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·45	?
	Gaya ...	Aurangabad ...	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·05	1·74	1·64
		Gaya ...	...	...	...	...	...	...	...	Nil	Nil	0·25	Nil	0·09	0·87	2·08
		Nawadah ...	...	...	...	...	...	...	...	Nil	Nil	0·21	Nil	0·10	1 21	2·05
		Jahanabad ...	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·16	0·43	1·92
		Arwal ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·43	?
		Daudnagar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·35	?
		Sherghati ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·03	?
		Rajauli ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·44	?
		Pakri Barawan	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0 62	?
	Patna ...	Patna ...	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·12	0·97	1·97
		Dinapore ...	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·14	0·82	1·85
		Bihar ...	...	...	...	...	...	...	...	Nil	Nil	0·19	Nil	0·12	0·55	2·18
		Barh ...	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·12	0·80	1·95
		Biokram ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·76	?
		Hilsa ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·74	?
	Monghyr ...	Begusarai ...	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·08	2·75	2·32
		Monghyr ...	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·09	1·23	2 01
		Jamui ...	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·03	1·28	1·80
		Gogri ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·89	?
		Shaikpura ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·65	?
		Chahai Bamda	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·00	?
	Sonthal Parganas.	Rajmahal ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·03	0·86	1·32
		Godda ...	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·06	1·14	1·41
		Pakour ...	...	...	...	...	...	...	...	Nil	Nil	0·26	Nil	0·02	4·49	1·29
		Naya Dumka	...	...	...	...	...	...	...	Nil	Nil	0·30	Nil	0·09	2·25	2·15
		Deoghur ...	...	...	...	...	...	...	...	Nil	Nil	0·25	Nil	0·05	1·17	2·33
		Jamtara ...	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·07	3·31	1·87
		Belbodda ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·14	?
		Nanihat ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·62	?
CHOTA NAGPUR.	Hazaribagh ...	Pachamba (*Giridih*).	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	0·17	3·65	1·99
		Hazaribagh ...	...	...	...	...	...	...	...	Nil	Nil	0·39	Nil	0·24	4·05	2·32
		Semtaguran ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·04	4·82	1·52
		Mahudi Hills	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·14	5·85	1·93
		Jhumra Hill	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·14	6·20	2·17
		Barhi ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·83	?
		Chatra ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·31	?
		Karagdeha ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·77	?
		Ramgar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·05	?
	Lohardaga ...	Lohardaga ...	...	...	...	...	...	...	...	Nil	Nil	0·19	Nil	0·18	7·11	2·78
		Ranchi ...	...	...	...	...	...	...	...	Nil	Nil	0 49	Nil	0·20	7·16	2·71
		Silli ...	...	...	...	...	...	...	...	...	...	?	Nil	?		?
	Palamau ...	Palamau (Daltonganj).	...	...	...	...	...	...	...	Nil	Nil	0·34	Nil	0·15	1·64	2·50
		Balumath ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·62	?
		Husainabad	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·01	?
		Garhwa ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·19	?
	Singhbhum ...	Chaibassa ...	...	...	...	...	...	...	...	Nil	Nil	0·46	Nil	0·25	6·53	3 04
		Chakardharpur.	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	6·34	?
		Ghatsila ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·00	?
		Baharagura	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·35	?
	Manbhum ...	Purulia ...	...	...	...	...	...	...	...	Nil	Nil	0·41	Nil	0·26	5·70	2·20
		Gobindpur ...	...	...	...	...	...	...	...	Nil	Nil	0·43	Nil	0·11	2·98	2·23
		Baghunathpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·64	?
		Barahabhum	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·71	?
		Jhalda ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·48	?
		Chas ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·52	?
		Pandra ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·12	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the 7th February* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 4TH OF FEBRUARY 1893.

DURING second half of the previous week a low pressure area had passed over the province and had given moderate general rain on the 25th or 26th, and on the 28th of January, or the last day of that week, a rapid increase of pressure, in some cases amounting to 0·18″, had occurred, the rise being largest in the north of the province, and hence the effects of the low pressure area had to a great extent passed away. Indeed on the 28th, pressure had become in excess of the normal by small amounts over a large part of the province. The cold wave of air following in the rear of the depression had also flowed over the province, and on the 28th temperature at many stations was 10° below the normal. Two depressions, however, still existed in North-Western India on the 28th, and one of them had apparently travelled rapidly in an eastward direction, and on the 29th a feeble low pressure area existed over Chota Nagpur and the neighbouring parts of West Bengal. The appearance of this low pressure area was marked by a rapid fall of pressure, the fall exceeding a tenth of an inch at the western stations, and in front of this depression also the usual rapid increase of temperature had taken place, and temperature had risen at many stations by from 3° to 5°, though the day and night temperatures were still largely in defect of the normal, the defects in the maximum or day temperature still ranging up to more than 10° at such stations as Jessore, Cuttack, Burdwan, and Berhampore. The sky on the 29th clouded over slightly, but practically no rain fell. Winds were partly influenced by the depression and were rather irregular in direction. On the 30th the feeble depression had passed away, pressure was rising slowly, and temperature also increased rather rapidly. Winds remained a little irregular, and sky was moderately clouded, but except for one or two very light showers, there was no rain. On the 31st pressure again rose moderately to rapidly, and a cold wave of air following the previous shallow depression commenced to flow over the west of the province, and there was a fall of about 5° in Chota Nagpur and at some of the Bihar stations, while over the remainder of the province temperature was still rising. Winds also became more steady on this day, and they were westerly and north-westerly at the majority of stations. On February 1st weather in Bengal was again fine and settled, and the wave of low temperature had spread over the greater part of the province. There had also been an extremely rapid fall of humidity, equalling about 20 per cent., at some stations, and the air became particularly dry. On the 2nd temperature had again fallen rather rapidly, while humidity had somewhat increased, and on both the 1st and 2nd pressure had risen fairly steadily over the greater part of the province, though the changes were very small, and on the 2nd pressure was in excess of the normal by about 0·03″. A rather rapid fall of pressure again commenced on the 3rd, which continued more slowly on the 4th, and at the end of the week pressure was about 0·03″ to 0·05″ below the normal. On the last two days of the week, on the other hand, temperature was rising slowly, but nevertheless on the 4th, the mean temperature was still in defect of the normal by from 2° to 5°. Winds, however, remained very steady and were westerly and north-westerly at almost all stations.

Pressure.—The pressure changes for the week have been particularly large, but have been of opposite character at different parts of the week. Hence the mean pressure for the week has been very nearly normal, and except in the west of the province, where defects of about 0·01″ to 0·02″ are registered in some cases, the variations as a rule only amount to a few thousandths of an inch. Indeed about two-thirds of the stations register slight defects and one-third slight excess pressure.

Temperature.—Has been unusually low almost throughout the week, and the mean temperature for the province has been 3·3° below the normal. The distribution of temperature for the week and its variation from the normal value are best seen in the table below, where the average maximum, minimum and mean temperatures for the week at nine typical stations in different districts of the province are compared with the normal values for the same period. It will be seen that both day and night temperatures have been largely in defect of the normal :—

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 4th February 1893.

	Normal mean maximum temperature for the week ending 4th February.	Actual mean maximum temperature for the week ending 4th February 1893.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 4th February.	Actual mean minimum temperature for the week ending 4th February 1893.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 4th February.	Actual mean daily temperature for the week ending 4th February 1893.	Variation of actual mean from the normal.
Cuttack	86·5	80·3	—6·2	60·9	59·6	—1·4	73·7	70·0	—3·7
Calcutta	77·9	73·2	—4·7	56·0	51·6	—4·4	67·0	62·4	—4·6
Dacca	79·2	73·5	—5·7	54·7	49·8	—4·9	67·0	61·7	—5·3
Burdwan	79·5	74·4	—5·1	54·8	50·7	—4·1	67·2	62·6	—4·6
Patna	73·9	69·4	—4·5	49·5	45·2	—4·3	61·7	57·3	—4·4
Gaya	76·9	71·7	—5·2	52·9	48·5	—4·4	64·9	60·1	—4·8
Purnea	75·3	70·2	—5·1	47·0	43·6	—3·4	61·2	56·9	—4·3
Hazaribagh	73·7	69·1	—4·6	50·7	45·3	—5·4	62·2	57·3	—4·9
Darjeeling	42·4	36·6	—5·8	32·0	27·4	—4·6	37·2	32·0	—5·2

Rainfall.—Has been practically entirely absent from the province throughout the week.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 4th of February 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th Oct. 1892.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	89·7	49·4	78·5	58·8	68·6	−2·8	Nil	·23	−0·23	0·00	0·35	−0·35	Nil	0·12	·12	4·67
South-West Bengal ...	81·3	41·3	74·3	50·5	62·4	−3·6	Nil	0·38	−0·38	0·00	0·52	−0·52	Nil	0·18	6·10	2·61
North Bengal	76·6	38·3	71·2	44·2	57·7	−3·6	Nil	0·11	−0·11	0·00	0·30	−0·30	Nil	0·05	1·32	1·73
East Bengal	78·7	41·7	73·4	48·0	60·8	−4·2	Nil	0·25	−0·25	0·00	0·41	−0·41	Nil	0·12	8·41	3·57
North Bihar	75·8	39·0	69·6	44·8	57·2	−3·7	Nil	0·13	−0·13	0·00	0·30	−0·30	Nil	0·09	1·19	1·69
South Bihar	77·9	40·7	71·6	47·3	59·5	−3·0	Nil	0·18	−0·18	0·00	0·38	−0·38	Nil	0·09	1·42	1·94
Chota Nagpur	82·7	41·6	72·4	47·9	60·2	−3·1	Nil	0·30	−0·30	0·00	0·47	−0·47	Nil	0·18	5·01	2·29

Meteorological Office, Bengal,
The 7th February 1893.

A. Pedler,
Meteorological Reporter to the Govt. of Bengal.

Abstract of the results of Meteorological Observations taken at the Alipore Observatory in the month of January 1893.

	Inches.	Date.	Hour.
The mean pressure of the month	29·978		
The average pressure of January from 24 years' registers	30·014		
The highest pressure in the month	30·166	4th	10
The lowest pressure in the month	29·822	26th	6
The range of pressure	0·344		
	Hours.		
The total number of hours of bright sunshine during the month	242 8		
The maximum possible number of hours of sunshine ...	337·3		
	⊖		
The mean temperature of the month	63·9		
The average temperature of January from 24 years' registers...	67·7		
The highest temperature in the month	79·9	16th, 17th & 18th.	
The lowest temperature in the month	45·9	28th.	
The range of temperature during the month	34·0		
The mean daily range of temperature	20·6		
The greatest range of temperature in one day	27·2	29th.	
	Per cent.		
The mean humidity of the month	72		
The average humidity of January from 24 years' registers ...	71		
	Inches.		
The mean vapour tension of the month	0·419		
The average vapour tension of January from 9 years' registers	0·467		
The mean cloud proportion of the month	1·75		
The average cloud proportion of January from 16 years' registers	1·37		
The total rainfall of the month	0·70		
The total rainfall indicated by a Beckley's self-registering rain-gauge (mouth of the gauge about 52 feet above the ground)	0·67		
The average fall of January from 48 years' registers ...	0·43		
The greatest fall in 24 hours	0·50	26th.	
	Days.		
The number of rainy days in the month	3		
The average number of rainy days in January from 24 years' registers	2		
	⊖		
The mean maximum equilibrium temperature of solar radiation during the month	127·4		
The mean difference of sun and air temperatures	52·8		
The greatest sun temperature	133·6	21st.	
The greatest excess of sun over air temperature	58·4	21st.	
The mean temperature of the nocturnal radiation thermometer on woollen cloth	46·8		
The mean depression of the nocturnal radiation thermometer below the minimum air temperature at 4 feet above the ground	7·8		
The greatest depression of the nocturnal radiation thermometer below the minimum air temperature	11·3	11th.	
	Miles.		
The mean movement of the wind per day	50·7		
The greatest movement of the wind in one day	120·0	17th.	
The greatest movement of the wind in one hour	16·0	18th, 10 to 11 A.M.	

The number of hours with winds from each of the 8 points—

N. 198, N.E. 74, E. 35, S.E. 18, S. 27, S.W. 40, W. 58, N.W. 106, Calm 188.

The results of observations at the Alipore Observatory are not rigorously comparable with the registers of past years (at the Park Street Observatory). The barometer is about 3 feet higher at Alipore, and, other things being equal, reads therefore ·003 lower. The diurnal range of temperature is also greater at Alipore, and the mean temperature apparently about 2·5° lower; and, finally, the thermometer which furnished the record of temperature at the Surveyor-General's Office during 20 years and upwards is found to read 0·6 higher than the Kew standard thermometer, which is the standard of reference at the present Observatory.

C. LITTLE,

For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA;
Calcutta, the 6th February 1893.

Abstract of the Results of the Barometric and Thermometric Observations taken at 10 a.m. at the Meteorological Office, Chowringhee, in the month of January 1893.

		Inches.	Date.
The mean pressure at 10 A.M. during the month	... ...	30·049	
The mean temperature at 10 A.M. during the month	... ...	68·9 °	
The highest temperature during the month	... ...	81·9	16th & 18th.
The lowest temperature during the month	... ...	47·0	28th.
The absolute range of temperature during the month	... ...	34·9	
The mean daily range of temperature during the month	...	21·5	
The greatest range of temperature in one day during the month	...	29·0	29th.
		°/ₒ	
The mean 10 A.M. humidity during the month	... ...	65	
		Inches.	
The mean 10 A.M. vapour tension during the month	... ...	·466	
The total rainfall of the month	... ...	0·54	
The greatest fall in 24 hours	... ...	0·34	26th.
The number of rainy days in the month	... ...	2 days.	

C. LITTLE,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 6th February 1893.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 29th January to 4th February 1893.

MONTH.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	TEMPERATURE. Daily mean.	Maximum.	Range.	Minimum.	HYGROMETRY. Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	Rainfall at 10 A.M. for past 24 hours.
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
January ...	29th ...	30·029	62·9	77·4	29·0	48·4	67·1	57·6	·350	49·1	53	Nil
" ...	30th ...	·039	67·2	77·9	21·5	56 4	69·6	64·6	·544	61·3	75	"
" ...	31st ..	·071	65·2	75·9	21·5	54 4	67·6	57·7	·347	48 9	51	"
February ...	1st ...	·094	64·9	73·9	18·0	55·9	65·6	54·7	·285	43 8	45	"
" ...	2nd ...	·096	60·2	72·9	25·4	47·5	66·6	53·7	·244	39 6	37	"
" ...	3rd ...	·044	62·4	71·9	25·0	49 9	68·6	55·7	·274	42 6	39	"
" ...	4th ...	·040	64·8	78·7	27·8	50·9	69·6	59·7	·386	51·8	53	"

		Inches.
The mean 10 A.M. pressure of the seven days	... ...	30·059
		°
The mean temperature of the seven days	... ...	63 9
The extreme variation of temperature	... . ..	31·2
The maximum temperature	... ...	78·7
		°/ₒ
The mean 10 A.M. relative humidity of the seven days	...	50
The total fall of rain from 29th January to 4th February 1893	...	Nil.

The daily mean temperatures are the crude means of maximum and minimum temperatures.

C. LITTLE,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 6th February 1893.

Results of the Meteorological Observations taken at the Alipore Observatory from 29th January to 4th February 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fahrt.	Temperature.				Hygrometry.				Wind.		Rain.	Weather.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
Jan.	29th	129 2	9·6	29·969	60·9	74·7	27·2	47·5	54·9	0 361	50·0	69	SW by W, calm and variable.	48	Nil	Clear, ⌓.
,,	30th	130·6	8·4	·973	65·1	76·9	20·7	56·2	59·7	·442	55·5	73	NNW; calm and variable.	58	,,	Partially cloudy, o, ⌓.
,,	31st	126·4	8·9	30 015	61·4	74·5	20·3	54·2	57·0	·370	50·6	62	NNE and NNW	62	,,	Chiefly clear.
Feb.	1st	129·1	8·5	·033	62·5	72·3	15·1	57·2	53·8	·301	45·1	55	NNW and N by W	74	,,	Partially cloudy.
,,	2nd	128·3	9·5	·025	59·0	71·5	24 6	46·9	52·0	·300	45·0	65	NNW and calm...	41	,,	Clear, ⌓.
,,	3rd	129·5	9·2	29 974	60·9	71·2	24 8	49·4	52·9	·295	44·6	59	WNW, NW and calm.	46	,,	Claar. ⌓.
,,	4th	130 7	9·7	·984	63·1	76 7	27·2	49·5	51·6	·314	46·2	55	WNW and calm	35	,,	Clear, ⌓.

	Inches.
The mean pressure of the seven days	29·996
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	29·983
	Hours.
The total number of hours of bright sunshine	63·8
The maximum possible number of hours of sunshine	77·7
	°
The mean temperature of the seven days	62·3
The average temperature of the corresponding period for 24 years, S.-G.'s Office	69·5
The extreme variation of temperature	30·0
The maximum temperature	76·9
	Miles.
The highest velocity of the wind in one hour	10
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	63
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	71
	Inches.
The total fall of rain from 29th January to 4th February 1893 ...	Nil.
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·19
The total fall from 1st January to 4th February 1893	0·70
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·47

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; ⌓, dew.

C. Little,
For Meteorological Reporter to the Govt. of India.

Meteorological Office, Govt. of India;
Calcutta, the 6th February 1893.

IRRIGATION DEPARTMENT, BENGAL.

IRRIGATION OPERATIONS FOR THE OFFICIAL YEAR 1892-93.

Areas leased for irrigation up to end of November 1892.

Circle.	District.	Canal.	Estimated full discharge.	Average discharge in month.	Discharge utilised.	Approximate area of land irrigated during the year up to the end of the month.	Approximate area of land under irrigation up to the same date last year.	Details of areas leased. Five years, all crops.	Five years, kharif.	Annual leases. Kharif.	Rabi.	Sugarcane.	Bhadoi.	Hot-weather.	Total.	GRAND TOTAL.	Rainfall, 1892-93. During month.	Up to end of month.	Rainfall, 1891-92. During month.	Up to end of month.	REMARKS.
			C. ft.	C. ft.	C. ft.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Inches.	Inches.	Inches.	Inches.	
ORISSA ...	Cuttack ...	Taldanda, 1st reach ...	1,342	23	}	8,732	10,537	......	8,308	351	139	29	......	......	519	8,827	0·80	49·65	16·95	76·60	
		Ditto, 2nd " ...	566	9													{ 0·60	49·01	9·30	62·19	
		Machgong	706	14	1	27,430	33,404	......	25,343	2,601	125	23	......	......	2,749	28,091	{ 0·60	42·52	4·60	51·98	
		Kendrapara	1,067	352	136	48,903	46,767	......	51,147	......	1,746	38	......	......	1,784	52,931	0·75	38·45	......	48·93	
		Gobri	372·82	45·26	20·05	2,610	3,063	......	3,287	......	50	......	......	......	50	3,337	0·93	46·41	16·12	73·33	
		Do. Extension	648	56·26	14·00	3,574	3,633	......	3,216	......	13	......	......	......	13	3,229	No rain gauge.				
		Pattamoondi	885	118	62·30	12,627	13,541	......	11,802	......	199	......	......	......	199	12,001	0·50	10·82	......	......	
		High Level, Range I ...	608	157·8	......	21,739	21,173	......	21,750	106	276	......	......	......	382	22,132	1·15	51·97	1·95	42·84	
		Ditto, ditto II ...	727·10	......	......	2,374	2,732	......	2,329	104	45	......	......	......	149	2,478	No rain gauge.				
		Jaipur Canal	700	......	......	791	1,366	......	449	......	......	......	......	......	.. ...	449	.. ...	......	......	......	
	Balasore ...	High Level, Range III ...	727·16	......	......	31,141	37,209	......	32,725	......	1	168	......	......	169	32,894	1·21	52·37	4·74	62·00	
		Total ...	......	......	......	159,930	173,425	......	160,355	3,162	2,594	258	......	. ....	6,014	166,369	......	......	... ..	... ..	
		Total of the corresponding period of last year ...	......	......	......	......	......	......	178,827	5	3,861	260	......	......	4,126	182,953	......	......	......	......	
SOUTH-WESTERN.	Midnapore ...	Midnapore	1,141	157	......	81,501	76,673	......	80,297	13	......	......	......	......	13	80,310	4·90	37·76	0·18	54·92	20 days discharging.
		Panchkoora	522	3	......	7,266	5,258	......	7,056	......	......	......	......	......	......	7,056	0·65	33·65	0·55	41·60	2 days discharging.
	Howrah ...	Tidal Reaches, Ranges III.	......	......	......	835	375	......	642	......	......	......	......	......	......	642	......	......	......	......	
		Total ...	......	......	......	89,602	82,306	......	87,995	13	......	......	... ..	......	13	88,008	......	......	......	......	
		Total of the corresponding period of last year ...	......	......	......	......	......	......	82,198	......	......	......	......	......	......	82,198	......	......	......	......	
SONE ...	Shahabad ...	Western Main	4,342	2,515	111	28,688	27,993	12,704	......	7,596	7,346	.. ...	......	768	15,710	28,414	} 0·60	40·20	......	18·92	
		Buxar	1,226	781	568	92,859	77,044	52,548	......	14,132	21,706	......	54	4,047	39,939	92,487					
		Arrah	2,000	1,418	793	1,34,579	138,002	104,450	......	13,724	13,698	......	103	4,076	31,601	136,051	......	34·37	......	23·99	
	Patna and Gaya.	Eastern Main	} 1,466	574	238	{ 2,777	2,203	1,833	......	659	255	......	......	.. ...	914	2,747	} 0·38	47·77	......	34·01	
		Patna				{ 66,316	77,351	54,549	......	11,768	2,735	......	30	......	14,533	69,082					
		Total ...	......	......	......	325,219	322,593	226,084	......	47,879	45,740	......	187	8,891	102,697	328,781	. ....	......	......	......	
		Total of the corresponding period of last year ...	......	......	......	......	......	217,751	......	51,191	81,259	1,098	520	9,973	144,041	361,792	......	......	......	......	
		Grand Total ...	......	......	......	574,751	578,324	226,084	248,350	51,054	48,334	258	187	8,891	108,724	583,158	......	.. ...	......	......	
		Grand Total of the corresponding period of last year ...	......	......	......	......	......	217,751	261,025	51,196	85,120	1,358	520	9,973	148,167	626,943	......	......	......	......	

CALCUTTA,
The 7th February 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 4th February 1893, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 4th February 1893.			Week ending Saturday, the 6th February 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	1 873	3.91,420	6,562	1,669	5,33,225	8,928
Jute	174	1,14,625	1,781	37	27,250	483
Firewood	119	78,150	1,160	142	97,175	1,449
Other articles	1,047	2,12,490	3,242	942	1,94,840	3,056
Total ...	3,213	7,96,685	12,745	2,790	8,52,490	13,916

BENGAL CENTRAL RAILWAY.

Abstract of principal commodities carried over the Bengal Central Railway during the month of November 1892, as compared with the same month of the previous year.

Staples.	1892.		1891.		Total.		Increase.	Decrease.
	Up.	Down.	Up.	Down.	1892.	1891.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal	1,459	......	1,213	......	2,136*	1,522*	614	......
Cotton, raw	......	3	......	......	3	......	3	......
Cotton twist and yarn—								
1.—European								
2.—Indian								
Cotton piece-goods—								
1.—European—								
a.—In bales and bundles	611	......	378	......	611	378	233	......
b.—In boxes								
2.—Indian—								
a.—In bales and bundles								
b.—In boxes								
Grains—								
2.—Rice	28	267	22	134	295	156	139	......
5.—Others	178	42	53	56	220	109	111	......
Hides and skins—								
1.—Hides of cattle—								
a.—Dressed								
b.—Undressed								
2.—Skins of sheep, &c.—	......	31	......	26	31	26	5	......
a.—Dressed								
b.—Undressed								
Jute—								
1.—Raw—								
b.—Unscrewed	......	3,779	......	1,557	3,779	1,557	2,222	......
2.—Gunny-bags and cloth	43	1	5	......	44	5	39	......
Metals—								
1.—Copper, unwrought								
2.—Brass, unwrought								
3.—Brass and copper, wrought	59	13	97	2	72	99	......	27
4.—Iron								
5.—Tin								
6.—Others								
Oils—								
2.—Kerosine	192	......	73	......	192	73	119	......
3.—Others	115	......	104	......	115	104	11	......
Oil-seeds—								
1.—Linseed								
2.—Rape and mustard								
3.—Til or gingelly								
4.—Niger	165	16	37	142	181	179	2	......
5.—Castor								
6.—Poppy								
7.—Others								
Provisions—								
2.—Betel-nuts	......	1,280	......	1,137	1,280	1,137	1,430	......
3.—Others	33	37	12	13	70	25	45	......
Railway plant and rolling-stock	......	......	......	......	98†	494†	......	396
Salt	338	......	236	73	338	309	29	......
Sugar—								
1.—Drained	21	353	22	159	374	181	193	......
2.—Undrained								
Tobacco	77	45	36	18	122	54	68	......
All other articles of merchandise—								
1.—Unmanufactured	533	347	323	415	880	738	142	......
2.—Manufactured								
Total ...	3,852	6,214	2,611	3,732	10,841	7,146	4,118	423

* Includes 677 tons and 309 tons of coal during 1892 and 1891 respectively carried for Revenue, for which no "Up" and "Down" register maintained.

† Railway plant and rolling-stock 98 tons and 494 tons for the years 1892 and 1891, respectively, for which no "Up" and "Down" register maintained.

Statement of principal commodities carried on the Bengal Central Railway during the month of November 1892.

INCREASES.

	Tons.
Coal	614
For Railway and Flotilla consumption.	
Cotton twist and yarn and cotton piece-goods	233
Ordinary fluctuation.	
Jute, unscrewed	2,222
Jhikergachee, Nawapara, and Khulna show the principal increases. The crop is a far larger one than in 1891.	
Sugar	193
Of this increase Jhikergachee contributed about one-half.	

CALCUTTA, *the 24th January 1893.*

JAMES SHAW,
Joint Auditor and Examiner of Accounts.

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 28th January 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	287,827	3,46,907 10 0	27,59,504 10	6,18,650 6 0	17,594 6 0	9,83,152 6 0	75,215½	110,926¼	186,141¾
Or per mile of railway ...	.....	215 6 5	......	384 2 2	10 14 10	610 7 5	......	......	.....
For previous 3 weeks of half-year ...	843,070	9,63,153 10 0	81,32,552 30	17,79,192 1 0	54,972 13 0	27,97,318 8 0	227,173¾	330,373¾	557,547½
Total for 4 weeks ...	1,130,897	13,10,061 4 0	1,08,92,057 0	23,97,842 7 0	72,567 3 0	37,80,470 14 0	302,389¼	441,300	743,689¼
Comparison.									
Total for corresponding week of previous year ...	297,258½	3,32,629 12 0	28,09,314 30	6,23,246 12 7	20,400 8 9	9,76,277 1 4	78,158	96,480	174,638
Per mile of railway corresponding week of previous year ...	......	210 2 5	......	393 12 2	12 14 3	616 12 10	......	......	......
Total for corresponding 4⅞ weeks of previous year ...	1,132,808	12,66,290 13 11	1,11,72,934 20	25,88,688 8 10	67,602 11 0	39,22,582 1 9	326,516	413,689	740,205

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 28th January 1893, on 22¼ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	19,812	4,950 13 0	9,696 30	327 3 0	9 0 0	5,287 0 0	859	109	968
Or per mile of railway ...	.....	222 8 2	.....	14 11 3	0 6 6	237 9 11	......	......	.....
For previous 3 weeks of half-year ...	56,978	13,924 15 0	28,690 10	1,057 10 0	41 0 0	15,023 9 0	2,602	374	2,976
Total for 4 weeks ...	76,790	18,875 12 0	38,387 0	1,384 13 0	50 0 0	20,310 9 0	3,461	483	3,944
Comparison.									
Total for corresponding week of previous year ...	18,915	4,707 12 1	19,486 30	628 13 0	12 10 9	5,349 3 10	852	116	968
Per mile of railway corresponding week of previous year ...	......	211 9 4	......	28 4 2	0 9 2	240 6 8	......	......	.....
Total for corresponding 4⅞ weeks of previous year ...	81,762	19,980 9 3	58,394 20	2,062 11 9	55 0 9	22,098 5 0	3,745	413	4,158

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 28th January 1893, on 161¾ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*20,102	*12,741 15 0	49,373 20	7,292 9 0	39 0 0	20,073 8 0	5,130½	3,178	8,308½
Or per mile of railway ...	.....	78 15 2	......	45 2 11	0 3 10	124 5 11	......	......	......
For previous 3 weeks of half-year ...	47,206	31,660 12 0	1,53,714 20	25,516 1 0	156 0 0	57,332 13 0	15,679½	9,819	25,498½
Total for 4 weeks ...	67,308	44,402 11 0	2,03,088 0	32,808 10 0	195 0 0	77,406 5 0	20,810	12,997	33,807
Comparison.									
Total for corresponding week of previous year ...	14,052	10,138 4 2	43,464 0	7,691 4 0	65 4 9	17,894 12 11	5,572	2,313	7,885
Per mile of railway corresponding week of previous year ...	.....	62 13 0	......	47 10 6	0 6 6	110 14 0	......	......	......
Total for corresponding 4⅞ weeks of previous year ...	57,096	41,00[illegible] 15 10	1,93,721 30	33,260 4 0	259 15 9	74,572 3 7	25,[illegible]94	9,337	34,431

* The increase occurred principally at Delhi, Sonepat and Panipat, and partly on account of running of a special train for His Excellency the Commander-in-Chie from Umballa to Howrah.

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for the week ended 28th January 1893, *on* 777 *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	107,481	89,430 0 0	7,69,573 0	1,01,610 0 0	22,260 0 0	2,13,300 0 0	27,346	29,464	56,810
Or per mile of railway	216	115 0 0	990 0	131 0 0	*14 0 0	260 0 0	......	......	......
For previous 3 weeks of half-year	544,704	2,45,960 0 0	19,40,753 0	3,62,810 0 0	45,160 0 0	6,53,930 0 0	83,200	99,232	182,432
Total for 4 weeks ...	712,185	3,35,390 0 0	27,10,326 0	4,64,420 0 0	67,420 0 0	8,67,230 0 0	110,546	128,696	239,242
Comparison.									
Total for corresponding week of previous year	156,319	92,190 0 0	7,90,305 0	1,05,196 0 0	24,525 0 0	2,21,911 0 0	27,760	29,653	57,413
Per mile of railway corresponding period of previous year ...	201	119 0 0	1,017 0	135 0 0	*17 0 0	271 0 0	......	......	......
Total to corresponding date of previous year	697,595	3,45,863 0 0	24,87,983 0	3,85,944 0 0	61,480 0 0	7,93,287 0 0	116,626	124,604	241,230

* Excluding steamer earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 28th January 1893, *on* 125 *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	27,981	11,420 0 0	60,292 0	3,110 0 0	40 0 0	14,570 0 0	3,668	2,004	5,672
Or per mile of railway	224	93 0 0	482 0	25 0 0	... .	117 0 0	......	... .	......
For previous 3 weeks of half-year	88,640	33,030 0 0	1,57,892 0	9,840 0 0	760 0 0	43,630 0 0	11,421	5,595	17,016
Total for 4 weeks ...	116,621	44,450 0 0	2,18,184 0	12,950 0 0	800 0 0	58,200 0 0	15,089	7,599	22,688
Comparison.									
Total for corresponding week of previous year	26,146	10,304 0 0	66,472 0	3,667 0 0	145 0 0	14,116 0 0	3,668	2,004	5,672
Per mile of railway corresponding week of previous year ...	209	82 0 0	532 0	29 0 0	1 0 0	112 0 0	.....	.....	......
Total to corresponding date of previous year	116,732	43,918 0 0	2,61,565 0	15,203 0 0	457 0 0	59,578 0 0	15,774	8,569	24,343

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 28th January 1893, *on* 86 *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ..	18,018	6,080 0 0	22,370 0	2,030 0 0	160 0 0	8,270 0 0	2,418	806	3,224
Or per mile of railway	209	71 0 0	260 0	23 0 0	2 0 0	96 0 0	......	......	......
For previous 3 weeks of half-year	54,053	17,680 0 0	58,534 0	5,360 0 0	500 0 0	23,540 0 0	7,478	2,194	9,672
Total for 4 weeks ...	72,071	23,760 0 0	80,904 0	7,390 0 0	660 0 0	31,810 0 0	9,896	3,000	12,896
Comparison.									
Total for corresponding week of previous year	17,543	6,847 0 0	13,317 0	1,002 0 0	367 0 0	8,216 0 0	2,504	720	3,224
Per mile of railway corresponding week of previous year ...	204	80 0 0	155 0	12 0 0	4 0 0	96 0 0	......	......	... .
Total to corresponding date of previous year	73,806	24,760 0 0	39,664 0	3,026 0 0	614 0 0	29,300 0 0	10,701	3,089	13,790

BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

Approximate return of traffic for the week ending 21st January 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	84,270	35,560	4,25,880	68,490	11,700	1,15,750	9,284	14,950	24,234
Or per mile of railway	111·47	47·04	563·33	90·59	15·48	153·11	......	......	......
For previous 2 weeks of half-year	162,520	64,920	7,95,780	1,11,610	24,010	2,00,540	22,840	34,548	57,388
Total for 3 weeks ...	246,790	1,00,480	12,21,660	1,80,100	35,710	3,16,290	32,124	49,498	81,622
COMPARISON.									
Total for corresponding period of previous year on 737 miles open	74,231	31,283	2,92,162	44,637	9,640	85,610	11,638	15,397	27,035
Per mile of corresponding week of previous year	100·72	42·45	396·42	60·63	13·08	116·16	......	......	......
Total to corresponding date of previous year	236,553	98,988	9,27,001	1,26,565	28,108	2,53,661	40,108	48,547	88,655

BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

Approximate Return of Traffic for the week ending 28th January 1893 on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	85,130	36,380	4,53,190	57,260	11,210	1,04,850	9,613	13,554	23,167
Or per mile of railway	112·61	48·12	599·46	75·74	14·83	138·69	......	......	......
For previous 3 weeks of half-year	246,790	1,00,480	12,21,660	1,80,100	35,710	3,16,290	32,124	49,498	81,622
Total for 4 weeks ...	331,920	1,36,860	16,74,850	2,37,360	46,920	4,21,140	41,737	63,052	104,789
COMPARISON.									
Total for corresponding week of previous year on 737 miles open	77,576	32,599	3,68,308	53,658	12,841	99,098	11,128	17,649	28,777
Per mile of corresponding week of previous year	105·26	44·23	499·74	72·81	17·42	134·46	......	......	......
Total to corresponding date of previous year	314,129	1,31,587	12,95,309	1,80,223	40,949	3,52,759	51,236	66,196	117,432

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 21st January 1893	9,758	0	0
Corresponding period of 1892	9,204	0	0
Increase	554	0	0
Receipts per mile for the week ending 21st January 1893	191	5	4
Corresponding period of 1892	180	7	5
Increase	10	13	11
Receipts from 1st to 21st January 1893	25,419	0	0
Corresponding period of 1892	23,472	0	0
Increase	1,947	0	0

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[REGISTERED No. 29.]

No. 7 of 1893.



SUPPLEMENT TO
The Calcutta Gazette.

WEDNESDAY, FEBRUARY 15, 1893.

OFFICIAL PAPERS.

Non-Subscribers to the GAZETTE *may receive the* SUPPLEMENT *separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

CONTENTS.

CONDUCT OF MAULVI KABIRUDDIN AHMED AT THE EXTRAORDINARY MEETING OF THE CALCUTTA MADRASA DEBATING CLUB HELD ON THE 16TH OCTOBER 1892.

No. 621, dated Calcutta, the 11th February 1893.

From—C. E. BUCKLAND, Esq., Secy. to the Govt. of Bengal, Genl. & Rev. Depts.,
To—The Officiating Director of Public Instruction.

IN continuation of this office endorsement No. 3620, dated the 14th December 1892, I am directed to forward for your information a copy of a memorandum, No. 5072, dated the 10th February 1893, received from the Principal of the Calcutta Madrasa, submitting for favourable consideration a memorial addressed to His Honour the Lieutenant-Governor by Maulvi Kabiruddin Ahmed, late additional teacher in the Anglo-Persian School Department of the Madrasa, in which the latter expresses his most unqualified regret for his conduct on the occasion of the extraordinary meeting of the Madrasa Debating Club held on the 16th October 1892, and asks for pardon.

2. The Lieutenant-Governor observes that the memorialist fully admits the justice of the punishment dealt out to him and all others concerned in this case, and that he solemnly promises in future to be more careful not to offend against the duties of his position. His Honour is glad to see that Maulvi Kabiruddin

Ahmed has recognized the impropriety of his conduct, and he is willing to accept the explanation that the memorialist was led away by excitement on the occasion in question, though this cannot be regarded as a sufficient excuse. It has been ascertained that, apart from this incident, the Maulvi bore a good character, and that he appears to be really penitent for his behaviour. In consideration of these circumstances, and the recommendation of the Principal of the Madrasa, Sir Charles Elliott is pleased to reduce the period of suspension imposed upon Maulvi Kabiruddin Ahmed by the Resolution of this Government, No. 3619, dated the 14th December 1892, from one year to six months.

3. At the same time the Lieutenant-Governor desires it to be known that he will not tolerate any breach of discipline or good conduct on the part of the officers of the Education Department, or the pupils, and he is anxious that the warning conveyed by the action of Government in this case may be borne in mind, and prevent any similar occurrences. The papers will therefore be published *in extenso* in the *Calcutta Gazette.*

No. 5072, dated Calcutta Madrasa, the 10th February 1893.

Memo. by—Dr. A. F. R. Hœrnle, Principal, Calcutta Madrassa.

The enclosed petition of Maulvi Kabiruddin Ahmed is submitted to the Secretary to the Government of Bengal, in the General Department (in the absence of the Director of Public Instruction, on tour), for favourable consideration, with reference to the orders of the Government of Bengal, in the General Department, Education, No. 3619, dated the 14th December 1892.

To—His Honour the Lieutenant-Governor of Bengal, Calcutta.

May it please your Honour—

Your Honour's most obedient and humble servant begs most respectfully to submit that he has deeply felt the sentence of punishment passed upon him and has already undergone suspension for nearly two months.

That the excitement of the occasion had led your Honour's most humble servant to a course of conduct which he now on more mature consideration feels bound to admit was detrimental to good discipline and unjustified in him as a teacher of the Madrasa, and for which he now begs to submit his most unqualified regret.

That your Honour's most obedient servant fully admits the justice of the punishment dealt out to him and all others concerned, including the members of the Madrasa Debating Club, and that it will undoubtedly serve to provide for them a sound lesson for their future conduct and behaviour, and that your Honour's most obedient servant now faithfully and solemnly promises in future to be more careful not to offend against the duties of his position.

That mercy and forgiveness are the two divine attributes of the rulers of a country, and that, as your Honour's most obedient servant's conduct has been justly found blameable, he therefore most humbly hopes that the noble maxim, "To err is human, to forgive divine," be his only source of comfort and consolation.

Your Honour's most obedient servant now begs to tender this most humble apology in the hope that he will be pardoned by the most just and merciful ruler, and as he is in duty bound shall ever fervently pray.

Your Honour's most obedient and humble servant,

Kabiruddin Ahmed,
Teacher, Madrasa.

Calcutta, *8th February* 1893.

No. 3010, dated Calcutta, the 31st October 1892.

From—C. E. Buckland, Esq., Secy. to the Govt. of Bengal, General Dept.,
To—The Offg. Director of Public Instruction.

I am desired by the Lieutenant-Governor to invite your attention to the correspondence printed in column 4 of page 5 of the *Hindu Patriot* of Thursday, the 27th October, which purports to give an account of an extraordinary meeting of the Madrasa Debating Club, said to have been held on Sunday, the 23rd idem, at No. 7, Waliullah's Lane. If the report of the proceedings as published is correct, it would appear (1) that the use of the Madrasa Debating Club was improperly diverted into a religious and proselytising channel, and (2) that certain members of the Educational Service—viz., a teacher of the Calcutta Madrasa and an Assistant Inspector of Schools—behaved in an improper manner by being concerned with the proceedings reported. I am to request that you will institute an enquiry into the occurrence, and, after obtaining such explanations as you may deem necessary, submit a full report for the information and orders of Government.

No. 8746, dated Calcutta, the 18th November 1892.

From—C. H. TAWNEY, Esq., Offg. Director of Public Instruction, Bengal,
To—The Secretary to the Government of Bengal, General Department.

IN reply to your No. 3010, dated the 31st October 1892, I have the honour to submit copy of a letter No. 4954, dated the 12th November 1892, from Mr. F. Rowe, Officiating Principal of the Calcutta Madrasa, which gives a full report of what took place at the extraordinary meeting of the Madrasa Debating Club held on the 23rd October, so far as the facts can be ascertained. It appears to me that Mr. Rowe's conclusions are so entirely just as to need no comment from me. I myself questioned the Assistant Inspector of Muhammadan Education, Maulvi Abdul Karim, and he gave me substantially the same answer as he appears to have given to Mr. Rowe. If this account is correct, his conduct does not seem deserving of blame. But Maulvi Kabiruddin Ahmed appears to have been guilty of grave indiscretion.

2. The enclosure of your letter under reply is herewith returned.

No. 4954, dated Calcutta Madrasa, the 12th November 1892.

From—F. J. ROWE, Esq., M.A., Offg. Principal, Calcutta Madrasa,
To—The Offg. Director of Public Instruction, Bengal.

IN reply to your No. 8497, dated the 8th November 1892, and received on the 11th idem, asking me for a report on the proceedings of an extraordinary meeting of the Madrasa Debating Society held on the 23rd October, and the conduct of certain members of the Educational Department at that meeting, I have the honour to state as follows.

2. So far as I have been able to ascertain from careful inquiry among several of those who were present at the meeting, the account of the meeting given in the *Hindu Patriot* of October 27th, upon the strength of which this report is called for, is in some important particulars over-coloured and untrustworthy. The signature of the correspondent is, I believe, a false one. There is but one member of the club called "Abdullah," and he is a boy in the second-year class of the college, and could not, I believe, have composed the letter.

3. The facts regarding the preliminaries of the meeting seem to be briefly the following—

Mr. Lorimer, head-master of the school department, who during the holidays of the College Department was in temporary charge of the office of Principal, was on the 15th October asked by Maulvi Kabiruddin Ahmed, President of the Madrasa Debating Society, and Wahiduddin Ahmed, both teachers of the Anglo-Persian School Department of the Madrasa, if he would grant the use of the Madrasa hall for an extraordinary meeting of the Society, to be convened to meet a Mr. Webb, a recent convert to Muhammadanism. Mr. Lorimer wrote on the application: "*Very well; but please ask the head maulvi if there is any objection.*" The two applicants then referred to the head maulvi, who answered them: "*I have no authority; therefore I cannot say anything regarding any objection,*" thus declining all responsibility in the matter. Maulvis Kabiruddin Ahmed and Wahiduddin Ahmed appear to have considered this colourless reply of the head maulvi's as sufficient sanction for the use of the hall, and accordingly notices were issued that the meeting would be held there.

4. Mr. Lorimer subsequently learnt that a large number of Muhammadans, not members of the Debating Society, had been asked to attend the meeting, that Mr. Webb was going to give a lecture on the "Principles of Islam," and that several of the leading Muhammadans had refused to preside at the meeting. Mr. Lorimer then very properly, as it seems to me, told Maulvi Kabiruddin that he could not grant the use of the hall, giving as his grounds for refusal—

(1) that the meeting was not strictly one of the Debating Society;
(2) that the reference to the head maulvi had not been properly made;
(3) that the object of the meeting was more or less of a religious character, while questions of a religious or political complexion are expressly excluded from the subjects which the Society may constitutionally discuss.

Mr. Lorimer further expressed his willingness to grant the use of the hall for the meeting if the promoters could procure the written assurance of four or five of the leading members of the Muhammadan community that neither religion nor politics would form a part of the business of the meeting.

5. This assurance was not procured, but a notice was posted on the Madrasa notice board to the effect that as the Madrasa hall could not be conveniently had for the meeting, it would be held at a house in Waliullah's Lane.

6. The meeting was held at that place, and was attended by a large number of students and teachers of the Madrasa, and by others unconnected with the College. Mr. Webb, the convert, gave an address, taking as his subject "Why I became a Mussulman." As might have been expected, there was a good deal in his speech of a polemic character, quite justifying Mr. Lorimer's belief that the subject was not one suited to a meeting of a school debating club, and his consequent refusal of the hall as a meeting place.

7. On the conclusion of the address, Maulvi Kabiruddin Ahmed, as President of the Debating Society, proposed a vote of thanks to the speaker, and then proceeded to apologise to the audience for the inconvenience they had been put to owing to the change of place of the meeting. The accounts of what he actually said are conflicting. His own report to me states: "The exact wordings of my expression were: *I believe the head-master is mistaken in supposing that Mr. Webb being an American would very likely speak something against the Government, and for this and other reasons he withdrew his permission at the eleventh hour to use the*

Madrasa hall." Other accounts state that he further said that he understood that Mr. Lorimer acted under the instructions of some of the leaders of the Muhammadan community, and that these so-called leaders were doing nothing for the community, but only hankering after titles, medals, &c., and their conduct was shameful. Cries of "Shame! Shame!!" were raised during some parts of his speech, but it is difficult to decide whether these cries were meant to apply to Mr. Lorimer's refusal of the hall, or to the apathy attributed to the "so-called leaders," probably to both.

The vote of thanks to Mr. Webb was seconded by Maulvi Abdul Karim, Assistant Inspector of Muhammadan Education, who according to his own account, when he "*heard Kabiruddin speaking so harshly of the head-master and some of the leaders of the Muhammadan community,*" thought it his duty to contradict him, and did so, attributing Kabiruddin's "*severe remarks*" to the confusion of his mind under the difficulty in which he had been placed.

8. The above is, I believe, a fairly accurate account of what took place. I may be allowed to add my own impression of the conduct of those principally concerned. I think—

(1) that Mr. Lorimer was quite right in refusing the use of the hall for a meeting of the kind; and that he acted with commendable prudence in the whole affair;

(2) that Maulví Kabiruddin was wrong, as President of the Debating Society, to have got up or sanctioned a meeting of the Society in which such a subject as conversion from Christianity to Muhammadanism was to be the subject of the main discourse;

(3) that Maulvi Kabiruddin was wrong in taking the head maulvi's refusal to commit himself to an objection as equivalent to a sanction of the use of the hall;

(4) that Maulvi Kabiruddin was wrong in holding a meeting of the Madrasa Debating Society at all outside the college, especially after Mr. Lorimer had pointed out the objectionable character of the subject for a meeting of the Society;

(5) that Maulvi Kabiruddin was wrong in bringing in the name of Mr. Lorimer, his immediate superior, at all in a connexion which could hardly avoid the imputation of blame, before an audience largely composed of Mr. Lorimer's pupils;

(6) that Maulvi Kabiruddin was wrong in using at a meeting of the Debating Society expressions regarding the leaders of the Muhammadan community which, to say the least of them, were certain to give just offence.

9. At the same time I believe that the maulvi, who is of a rather excitable temperament, was temporarily carried away by his feelings, and said more than in cooler moments he would approve. There is no want of subordination shown in his general behaviour as a teacher, and Mr. Lorimer has no fault to find with him in his work or demeanour.

10. The newspaper enclosed with your letter is herewith returned.

No. 3619, dated Calcutta, the 14th December 1892.

RESOLUTION—By the Government of Bengal, General Department.

READ—

The letters published in the *Hindu Patriot*, dated the 27th October and 7th November 1892, purporting to give accounts of the meeting of the Calcutta Madrasa Debating Club, held on Sunday, the 16th October 1892.

Read also—

A letter from the Offg. Director of Public Instruction, No. 8746, dated the 18th November 1892, and its enclosure, from the Officiating Principal of the Madrasa, giving a full report of what occurred at the meeting.

IT appears from the information available to Government that Mr. Lorimer, head-master of the School Department, who, during the holidays of the College Department, was in temporary charge of the office of Principal of the Calcutta Madrasa, was on the 15th October asked by Maulvi Kabiruddin Ahmed, President of the Madrasa Debating Club, and Wahiduddin Ahmed, both teachers of the Anglo-Persian School Department of the Madrasa, whether he would grant the use of the Madrasa hall for an extraordinary meeting of the Club to be convened to meet a Mr. Webb, a recent convert to Muhammadanism. Mr. Lorimer agreed to the application, provided the Head Maulvi had no objection; but the Head Maulvi said he had no authority, and therefore could not say anything regarding any objection Maulvis Kabiruddin Ahmed and Wahiduddin Ahmed considered the Head Maulvi's reply as sufficient sanction for the use of the hall, and issued notices that the meeting would be held there. Subsequently, Mr. Lorimer received information that Mr. Webb was going to give a lecture on the Principles of Islam, and therefore declined, for reasons assigned, to grant the use of the hall, but expressed his willingness to do so, provided the promoters of the meeting could procure the written assurance of four or five of the leading members of the Muhammadan community that neither religion nor politics would form a part of the business of the meeting. As this assurance was not given, a notice was posted on the Madrasa notice board to the effect that the Madrasa hall could not conveniently be had for the meeting, so that it would be held at a house in Waliullah's Lane.

2. This meeting was attended by a large number of students and teachers of the Madrasa and by others unconnected with the College. Mr. Webb, the convert, gave an address, taking as his subject "Why I became a Mussalman."

3. On the conclusion of the address, Maulvi Kabiruddin Ahmed, as President of the Debating Club, proposed a vote of thanks to the speaker, and then proceeded to apologise to the audience for the inconvenience they had been put to owing to the change of place of the meeting. The accounts furnished to Government of what took place at the meeting show that the Maulvi made a somewhat inflammatory speech containing reflections both on Mr. Lorimer and the leading Muhammadans. These reflections incited the boys present at the meeting to cries of fie, fie, shame, shame, &c., against both Mr. Lorimer and the leading Muhammadans.

The vote of thanks to Mr. Webb was seconded by Maulvi Abdul Karim, Assistant Inspector of Muhammadan Education, who, when he heard Kabiruddin speaking so harshly of the head-master and some of the leaders of the Muhammadan community, thought it his duty to contradict him, and did so, attributing Kabiruddin's severe remarks to the confusion of his mind under the difficulty in which he had been placed.

4. Mr. Rowe, Officiating Principal of the Calcutta Madrasa, observes—

(1) that Maulvi Kabiruddin was wrong, as President of the Debating Club, in having got up or sanctioned a meeting of the Club in which such a subject as conversion from Christianity to Muhammadanism was to be the subject of the main discourse;

(2) that Maulvi Kabiruddin was wrong in taking the Head Maulvi's refusal to commit himself to an objection as equivalent to a sanction of the use of the hall;

(3) that Maulvi Kabiruddin was wrong in holding a meeting of the Madrasa Debating Club at all outside the College, especially after Mr. Lorimer had pointed out the objectionable character of the subject for a meeting of the Club;

(4) that Maulvi Kabiruddin was wrong in bringing in the name of Mr. Lorimer, his immediate superior, at all in a connexion which could hardly avoid the imputation of blame, before an audience largely composed of Mr. Lorimer's pupils;

(5) that Maulvi Kabiruddin was wrong in using, at a meeting of the Debating Club, expressions regarding the leaders of the Muhammadan community which, to say the least of them, were certain to give just offence.

5. Taking all the circumstances into consideration, the Lieutenant-Governor agrees with Mr. Rowe that Maulvi Kabiruddin is highly to blame in the affair, and directs that he shall be suspended for one year from his temporary appointment as additional master of the Anglo-Persian Department of the Madrasa and from the service of Government in any capacity during that time. His Honour also directs that the censure of Government shall be conveyed to Maulvi Abdul Karim, Assistant Inspector of Muhammadan Education, for assisting at the meeting and countenancing the proceedings by his presence. He should have interfered as soon as the subject of the lecture was known to him, and should have stopped, and not merely contradicted, Maulvi Kabiruddin's improper speech.

The conduct of the members of the Madrasa Debating Club is shown also to have been reprehensible, and the Lieutenant-Governor has had serious doubts whether it should be allowed to continue. He has assured himself by enquiry that the rules of the Club were disregarded when a subject of a religious character was allowed to be introduced, and for this disregard of the rules all the members are to blame. His Honour is therefore pleased to direct that the Madrasa Debating Club be closed during the year 1893, and that, before it is re-opened, its rules are to be submitted to the Director of Public Instruction for approval.

6. Sir Charles Elliott also considers that Mr. Lorimer was greatly to blame for his weakness in agreeing at first to the application for the use of the hall, if the Head Maulvi saw no objection. Mr. Lorimer should have seen at once the impropriety of the whole of the proposal made to him, and should have stopped the delivery of the lecture in any place in connection with the Madrasa Debating Club, and not contented himself with subsequently refusing the use of the hall. An expression of the Lieutenant-Governor's displeasure will be conveyed to Mr. Lorimer for his neglect to take proper responsibility on himself on the occasion under consideration.

ORDER.—Ordered that a copy of the Resolution be forwarded to the Officiating Director of Public Instruction for information and guidance.

By order of the Lieutenant-Governor of Bengal,

C. E. BUCKLAND,

Secretary to the Government of Bengal.

No. 3620.

COPY forwarded to the Director of Public Instruction, with reference to his letter No. 8746, dated the 18th November 1892, for information and guidance.

By order of the Lieutenant-Governor of Bengal,

T. W RICHARDSON,

Under-Secretary to the Govt. of Bengal.

CALCUTTA,

The 14th December 1892.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 11th February, 1893.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.			
BURDWAN DIVN.			
1	Burdwan Feb. 11, '93 Kalna ... Katwa ... Raniganj ...	0·14 0·30 Nil 0·23	Weather—fair and very cold. Prospects of *rabi* crops and sugarcane fair except in parts of Sadar subdivision. Condition of cattle good. Prices of common rice :— Srs. Burdwan ... ... 11 to 13 Kalna ... ... 10 to 13 Katwa ... ... 13¾ Raniganj ... ... 13 per rupee.
2	Bankura „ 11, '93 Vishnupur ...	0·08 0·21	Weather—some days cloudy, others fine. Prospects of *rabi* continue fair. Pressing of sugarcane commenced in places. Fodder and water sufficient. Prices of common rice :— Srs. Sadar ... ... 11¾ Vishnupur ... ... 12 per rupee.
3	Birbhum „ 11, '93 Rampur Hât ...	1·75 0·48	The rain has done some good to the *rabi* crops. Cattle-pox reported from some villages. Price of rice 13 to 15 seers per rupee.
4	Midnapore „ 11, '93	0·22	Weather—cold with occasional showers. *Rabi* doing well. Sugarcane and *rabi* being cut in places. Prices of common rice :— Srs. Sadar ... ... 12 Contai ... ... 13 to 16 Tamluk ... ... 12 to 14 Garhbeta ... ... 11 to 13 per rupee.
5	Hooghly „ 11, '93 Serampore ... Jahanabad ...	1·05 0·86 0·32	Weather—exceptionally cold since the rain. The rain has done some injury to such of the *rabi* as was already ripe and to such of the mango blossom as was out. The Subdivisional Officer, Serampore, reports that but for it there would have been a 16-anna *rabi* crop. In the Sadar subdivision it is less good. Ploughing has been much facilitated and is now general. Cattle-pox has fallen off though still general in Sadar. Want of water very badly felt in Dwarbasini in Pandua, the rain having hardly affected the tanks. Prices of common rice :— Srs. Sadar ... ... 10 to 11½ Serampore ... ... 10 to 11½ Jahanabad ... ... 11 to 12 per rupee.
6	Howrah „ 11, '93 Ulubaria ...	0·48 0·28	Weather—cloudy for some time, but now clear and cool. Harvesting of winter rice is finished. Pressing of sugarcane and gathering of *kalai* going on. Condition of cattle good. Fodder and water-supply ample. Common rice 11 to 11½ seers per rupee.
PRESIDENCY DIVN.			
7	24-Parganas „ 11, '93	0·47	Weather—cold and seasonable. Sugarcane being pressed. Prospect of *rabi* crop good. Ploughing for *aus* and jute going on. Fodder and water sufficient. Prices of common rice :— Srs. Srs. c. Sadar ... ... 10 to 14 0 Barasat ... ... 11 14 Basirhat ... ... 12 5 Diamond Harbour ... 13 0 Barrackpore ... ... 12 0 Dum-Dum ... ... 12 0 per rupee.
8	Nadia „ 11, '93 Kushtia ... Meherpur ... Chuadanga ... Ranaghat ...	0·80 1·45 2·75 Nil 0·82	Weather—very cool. Prospects of *rabi* crops good. Harvesting of some of them going on. Price of rice almost stationary. Health of cattle good. Fodder and water-supply sufficient.
9	Khulna „ 11, '93 Bagerhat ... Satkhira ...	0·73 0·69 0·44	Weather—cold with rain on one day. Harvesting of *aman* completed; outturn good except in Assasuni and Paickgacha. The recent rain has done much good to *boro* paddy and *rabi* crops on the ground. Common rice selling at 11 to 14 seers per rupee. Supply of fodder and water sufficient.
10	Jessore „ 11, '93 Jhenida ... Magura ... Narail ... Bangaon ...	0·72 1·02 1·26 0·61 1·40	Weather—very cold and occasionally cloudy with light showers on the 7th. The recent rain has been beneficial to the standing crops as well as to ploughing. Harvesting of *aman* in Narail is now over. Supply of fodder and water for cattle sufficient.
11	Murshidabad „ 11, '93	0·66	Weather—cool; cloudy at times. Prospects of *rabi* crops favourable. Common rice selling at 14 seers per rupee. Fodder and water sufficient.

	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and State and prospects of the crops.
BENGAL—*concld.*				
CHITTAGONG DIVN.	12	Chittagong Feb. 11, '93	Nil	Weather—seasonable. Prospects of crops good. Prices stationary. Condition of cattle generally good. Supply of fodder sufficient.
	13	Noakhali „ 11, '93	Nil	Weather—seasonable. Prospects of *rabi* crops good. Fodder and water sufficient. No cattle-disease except in Sundip and Companiganj. Price of rice stationary.
	14	Tippera „ 11, '93	0·10	Weather—cool. Winter crops are now being harvested; outturn generally reported to be good. Prices of rice and other articles of food are stationary.
	15	Chittagong Hill Tracts. „ 10, '93	Nil	Weather—cloudy in the latter part of the week. Chillies and tobacco doing well. Sugarcane being pressed. No cattle-disease reported. Common rice selling at 10 seers per rupee.
DACCA DIVN.	16	Dacca „ 11, '93	Not reported.	Weather—very cold. Heavy rain in the Manikganj subdivision. *Boro* paddy being sown. Recent rain has done much good to the *rabi* crops. Harvesting of mustard and *maskalai* continues. Cultivation and sowing of *aus* going on. Fodder available. No cattle-disease. Common rice selling at from 11 to 14 seers per rupee.
	17	Faridpur „ 11, '93	1·40	Weather—still very cold. Standing crops doing well. Oil-seeds being gathered; outturn fair. *Boro* paddy is being sown. Common rice selling at 13 seers per rupee at Faridpur, Goalundo, and Madaripur. Condition of cattle good and fodder available.
	18	Backergunge „ 11, '93	Nil	Weather—seasonable. Prospect of crops good. Fodder and water sufficient. Common rice selling at from 10 to 15 seers per rupee.
	19	Mymensingh „ 11, '93	Nil	Weather—seasonably cold. Prospects of standing crops good. Transplantation of *boro* completed. Rice sells at from 11 to 14 seers per rupee. Fodder and water available.
RAJSHAHI DIVN.	20	Dinajpur „ 11, '93 Thakurgaon ...	Nil Nil	Weather—cool and cloudy at times. Cultivation of lands for *bhadoi* and jute in progress. Sugarcane still being pressed. Prices of rice:— Srs. Sadar ... ... 15 } per rupee. Thakurgaon ... ... 15 to 16 } per rupee. Condition of cattle good. Cattle disease, which broke out in Thakurgaon subdivision, is reported to be disappearing. Supply of fodder and drinking water sufficient.
	21	Rajshahi „ 11, '93 Nator ... Naugaon ...	0·38 0·55 0·10	Weather—cold and seasonable. Condition of standing crops good. A few cases of small-pox among cattle reported from the Manda thana. Supply of fodder and water sufficient everywhere except in the Barind, where some difficulty has been felt from the want of good drinking water. Price of rice stationary.
	22	Rangpur „ 11, '93 Gaibanda ... Kurigaon ... Nilphamari ... Ulipur ...	Nil Nil Nil Nil Nil	Weather—cold. Ploughing of land for *aus* and jute going on. Mustard is being gathered. Tobacco doing well. Price of common rice varying from 12 to 14 seers per rupee.
	23	Bogra „ 11, '93 Sherpur ... Naukhila ...	0·07 0·21 0·09	Weather—cold and cloudy at intervals. Lands are being ploughed for jute, sugarcane, *kaon*, &c. Prospects of *rabi* crops good. Common rice selling at 14½ seers per rupee. Fodder and water sufficient.
	24	Pabna „ 11, '93	1·98	Weather—7th and 8th cloudy; remaining days fine and cool. The recent rainfall will do good to the standing *rabi* crops and facilitate cultivation of land. Sugarcane is being reaped and yielding an outturn of 12 annas. Rice selling at 13 seers per rupee at Pabna. Condition of cattle good. Fodder and water-supply sufficient.
	25	Darjeeling „ 11, '93 Siligori ...	0·08 Nil	Weather—very cloudy and cold for the first half, and clear and fine during the latter half of the week. *In the hills:*—Wheat and barley progressing favourably. *Tori* and potatoes being harvested. *In the terai:*—State and prospects of crops good. Ploughing for *bhadoi* crops continues. Potatoes and mustard being harvested. Prices of coarse rice:— Srs. Hills ... ... 11 } per rupee. Terai ... ... 13 } per rupee.
	26	Jalpaiguri „ 11, '93	Nil	Weather—cold and cloudy at times. *Rabi* crops, tobacco and potato doing well. Harvesting of potato has commenced in places. Common rice sells at 13 seers 5 chitaks per rupee. Condition of cattle good. Fodder and water-supply sufficient.

	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
BHAGALPUR DIVN.	27	Monghyr Feb. 11, '93 Begusarai ... Jamui ...	0·20 0·23 0·06	Weather—very cold and occasionally cloudy. Crops doing well. Some of the earlier *rabi* being harvested. Indigo land being prepared and a little irrigation going on where the moisture is bad. Prices of common rice :— Srs. Sadar ... ... 13 to 15½ } Begusarai ... ... 16 } per rupee. Jamui ... ... 15 }
	28	Bhagalpur „ 11, '93 Banka ... Madhipura ... Supaul ...	0·25 0·07 Nil 0·18	Weather—cloudy and cold. Prospects of crops good. Linseed and mustard in good condition. Price of rice stationary.
	29	Purnea „ 11, '93 Kishanganj ... Araria ...	0·02 0·15 Nil	Weather—cold with west wind. Standing *rabi* crops doing well. *Tori* being gathered. Land being prepared for *bhadoi*. Fodder and water plentiful. No cattle-disease. Prices of common rice :— Srs. Sadar ... ... 13 to 16 } Kishanganj ... ... 15 } per rupee. Araria ... ... 18 }
	30	Malda „ 11, '93 Chanchal ... Shibganj .. Gajole ...	0·17 0·09 0·20 0·04	Weather—cold and clear but occasionally cloudy. *Boro* rice still being transplanted. *Rabi* crops coming into maturity and their prospects favourable. Common rice sells at from 13 to 17 seers per rupee. Fodder and drinking water enough.
	31	Sonthal Parganas „ 11, 93 Deoghur ... Godda ... Jamtara ... Pakur ... Rajmahal ...	0·36 0·49 0·14 0·57 0·06 0 30	Weather—cold and occasionally cloudy. Standing *rabi* crops much benefited by the recent rain. Fodder and water-supply sufficient.
PATNA DIVISION.	32	Patna „ 11, '93 Barh ... Bihar ... Dinapore ...	0·17 0·36 0·36 0·16	Weather—cold and occasionally cloudy. Prospects of *rabi* continue fair. The weather during the week was not favourable to poppy. Mustard being harvested. Extraction of opium going on. Prices of common rice :— Srs. Sadar ... ... 17 } Barh ... ... 13 } Bihar ... ... 17 } per rupee. Dinapore ... ... 14 to 15 }
	33	Gaya „ 11, '93 Nawada ... Aurangabad ... Jahanabad ...	0·02 0 14 Nil 0·24	Weather—cloudy and very cold. Prospects of *rabi* good. Harvesting of *masur*, *kerao*, and linseed commenced on a small scale in the Aurangabad subdivision. The little rainfall has become favourable to the late *rabi* crops. Prospects of poppy reported favourable. Common rice sells from 13 to 14½ and coarse husked rice from 16 to 16½ seers per rupee at Gaya. Supply of fodder and water for cattle sufficient.
	34	Shahabad „ 11, '93 Buxar ... Sasaram ... Bhabhua ...	Drizzling 0·12 Nil Nil	Weather—cold; cloudy with west wind prevailing. Prospects of *rabi* crops favourable. Sugarcane being pressed in some places and sown in other places. Peas being reaped. Prices stationary.
	35	Darbhanga „ 11, '93 Madhubani ...	0·03 0·81	Weather—cloudy with west winds. Prospects of *rabi* continue favourable. Mustard is about to be reaped. Fields being prepared for indigo and *mung* sowings. Common rice selling at 15 to 16 seers per rupee. Supply of fodder for cattle sufficient.
	36	Muzaffarpur „ 11, '93 Hajipur ... Sitamarhi ...	Nil 0·54 0·32	Weather—seasonable, but cloudy occasionally. *Rabi* crops doing well. Prospects of wheat good. Fodder and water-supply ample.
	37	Saran „ 11, '93 Siwan ... Gopalganj ...	0·36 0·09 0·14	Weather—yet very cold for the season. The rain has done some good to *rabi* and slight harm to poppy. Fodder and water abundant. Prices of common rice are :— Srs. C. Chapra ... ... 14 0 } Siwan ... ... 14 5 } per rupee. Gopalganj ... ... 14 3 }
	38	Champaran „ 11, '93	0·12	Weather—very cold and cloudy at times. Standing crops in full flower. The rain of the week has damaged to some extent some of the *rabi* crops, but benefited the poppy crop. Prospects generally continue favourable. Cattle in good condition with sufficient fodder and water.
ORISSA.				
ORISSA DIVN.	39	Cuttack „ 11, '93	0·41	Weather—cold. Outturn of *mung* estimated at 12 to 13 annas. Recent rain has been of benefit. Supply of fodder and water sufficient. Average prices of common rice :— Srs. C. Srs. C. Sadar .. ... 10 8 to 15 1 } Jajpur ... ... 17 4 to 21 0 } Kendrapara ... ... 15 0 to 20 0 } per rupee. Banki ... ... 17 0 }
	40	Puri „ 9, '93 Khurda ...	0·29 1·0	Weather—cloudy. Harvesting of *sarad* almost over. Land being ploughed in places for next *sarad* crop. *Dalua* paddy thriving. *Rabi* crops doing well. Rice sells at from 15 to 17 seers per rupee.
	41	Balasore „ 11, '93	1·45	Weather—very cold. No change in the prospect of winter crops. Common rice sells at 16 seers per rupee at Sadar and 18 seers in Bhadrak subdivision.

	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
CHOTA NAGPUR.					
South-West Frontier Agency.					
Chota Nagpur Divn.	42	Hazaribagh Giridi	Feb. 11, '93 ...	1·01 0·35	Weather—cold and windy. Prospects favourable. Ploughing going on. Common rice 11 to 14 seers per rupee.
	43	Lohardaga	„ 11, '93	0·28	Weather—seasonable. Prospects of *rabi* continue favourable. The rainfall has done much good to this crop. Common rice selling at 14 seers per rupee. Fodder and water sufficient.
	44	Palamau	„ 10, '93	Nil	Weather—cold and cloudy. A little rain in some parts. Prospects of *rabi* crops favourable. Cattle-disease reported from two or three stations. Prices stationary.
	45	Singhbhum	„ 11, '93	0·38	Weather—cold and fine. Rain on the 6th and 7th instant. Condition of crops good. Cotton, sugarcane, *rahar* and other crops being harvested with good outturn. Price of rice stationary between 12 and 16 seers per rupee.
	46	Manbhum Gobindpur	„ 11, '93 ...	0·33 0·62	Weather—cloudy on 6th and 7th with rain on night of 7th. Now cold. Harvesting of *rabi* crops nearly complete. Rice selling at 10 to 14 seers per rupee. Fodder and water-supply sufficient.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 14*th February*, 1893.

C. E. BUCKLAND,
Secy. to the Govt. of Bengal.

The following Statement shows the Quantities of the Principal Staples of Traffic imported into Calcutta from the Interior during the month of September, 1892.

IMPORTS INTO CALCUTTA.

Whence imported.	Food-Grains.							Fibrous Products.		Oilseeds.		Tea, Indian.	Cotton, raw.	Silk, raw.	Sugar.		Tobacco.	
	Rice and Paddy.			Wheat.	Gram and pulses.	Other food-grains.	Total.	Jute, raw.	Gunny-bags.†	Linseed.	Mustard seed.				Refined.	Unrefined.	Unmanufactured.	Manufactured.
	Rice.	Paddy.*	Total (in rice).															
	Mds.	Mds.	Mds.	Mds.	Mds	Mds.	Mds.	Mds.	No.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
BENGAL.																		
Burdwan	50,851	44,424	78,616	5	685	20	79,326	1,872	23,100	7	......	... ..	... ..	45	13	150	10	15
Birbhum	1,02,293	12,852	1,10,236	... .	...	......	1,10,236	13	8,260	334	......	......	......	165	......	......	1	......
Midnapore	55,210	2,632	56,855	.. ..	50	8	56,913	1,179	3,920	1,672	......	... ..	97	398	..... .	1,005	23	......
Hooghly	24,534	7,324	29,111	2,800	3,664	6	35,581	42,027	156,665	5,171	2,162	......	52	......	398	14,829	11,469	298
24-Parganas ...	54,725	2,711	56,419	...	...	......	56,419	73,006	211,155	... ..	... ..	......	164	... .	4,409	11,004	1,553	108
Nadia	10,172	4,617	13,058	2,502	43,506	1,076	60,142	1,86,089	4,795	10,891	112	......	60	180	294	2,136	2,299	......
Khulna	4,459	925	5,028	..	.	. . . .	5,028	97,660	490	. . .	......	......	... .	......	150	2,900	...	......
Jessore ...	30,737	2,100	32,050		2,089	......	34,139	50,892	3,815	32	...	......	29	.. ...	4,074	15,729	1,139	......
Murshidabad ...	14,652	......	14,652	3,722	10,352	266	28,992	2,493	. ..	3,697	463	......	1	1,077	......	30	55	......
Dinajpur	11,652	......	11,652	......	200	......	11,852	24,659	196,665	.... .	......	......	6	......	......	......	...	......
Rajshahi	7,081	... ..	7,081	484	9,709	......	17,265	1,81,340	280	4,120	......	... ..	18	634	......	......	...	......
Rangpur	......	. ...	... ..	...	... ..	......	... .	1,45,068	25,550	......	264	258	......	......	......	......	48,103	......
Bogra	1,860	......	1,860	......	..	......	1,860	28,516	455	......	.....	......	......	......	......	......	..	......
Pabna	.... .	. . ..	.....	......	1,587	......	1,587	6,53,085	760,670	2,028	8,959	......	......	......	......	......	2,306	......
Darjeeling	... ..	.. .	.....	......	... ..	......	......	873	108,290	......	......	31,035	......	......	......	......	292	......
Jalpaiguri	... ..	.. .	.	......	......	......	.. ...	17,622	156,693	... ..	......	28,418	......	......	......	......	851	......
Dacca	2,310	300	2,499	... ..	..	.. ..	2,499	8,08,994	1,340	......	... ..	551	2,348	......	... ..	......	...	......
Faridpur	9,643	300	9,830	... .	1,928	......	11,758	7,82,354	1,960	1,312	4,678	52	297	......	......	......	381	......
Backergunge ...	1,44,914	150	1,45,008	......	1,786	......	1,16,794	13,046	280	......	400	......	......	......	......	......	...	......
Mymensingh ...	4,920	......	4,920	... .	848	......	5,768	59,100	140	......	2,057	......	......	......	......	......	...	......
Tippera	11,425	......	11,425	......	......	......	11,425	28,539	......	......	......	......	... .	......	......	185	...	......
Chittagong ..	1,115	.. .	1,115	......	......	......	1,115	......	......	.. ...	......	1,590	3,754	......	......	......	...	......
Noakhali	26,025	.. ..	26,025	......	......	......	26,025	2,550	... ..	......	......	......	650	......	... ..	......	...	... ..
Total of Bengal ...	5,68,481	78,335	6,17,440	9,513	76,395	1,376	7,04,724	31,81,637	1,667,525	29,264	19,095	61,904	7,466	2,499	9,338	47,968	68,482	421
BIHAR.																		
Patna	4	......	4	47,800	28,538	10,471	86,822	47	1,960	62,378	13,388	1	104	30	977	2,107	1,159	853
Gaya	24	......	24	337	. ..	. . .	361	......	849	4,110	......	......	4	......	......	11	...	542
Shahabad	......	......	... ..	31,956	12,699	1,705	46,360	......	1,680	8,030	1,436	......	......	... ..	.. ...	420	13	15
Muzaffarpur ...	......	......	......	550	531	1,256	2,337	590	......	11,480	1,827	......	......	......	......	... .	132	......
Darbhanga ...	855	......	855	1,640	426	369	3,290	......	140	37,108	9,827	......	......	......	... ..	635	472	32
Saran	300	......	300	9,925	10,622	535	15,882	166	......	11,183	4,544	......	......	......	......	......	37	6
Champaran ...	......	......	......	... .	... .	659	659	......	175	5,506	1,015	......	......	......	......	39	...	......
Monghyr	675	... .	675	8,293	20,326	1	29,295	......	1,500	9,886	2,849	......	......	......	......	......	13	8
Bhagalpur ...	1,005	990	1,624	15,757	2,675	9,715	29,801	......	105	6,118	3,295	......	16	......	......	......	...	......
Purnea	1,498	......	1,498	1,119	3,664	.. ..	6,610	5,268	......	2,702	8,285	......	......	......	......	......	376	......
Malda	567	......	567	3,500	2,488	1,214	7,769	12,375	... ..	1,063	......	......	......	......	......	......	...	......
Sonthal Parganas	6,256	......	6,256	6,031	2,839	3,586	18,703	2,249	1,365	1,831	3,015	......	......	146	......	26	...	......
Total of Bihar ...	11,184	990	11,803	1,21,247	84,798	29,541	2,47,389	20,655	7,765	1,61,395	49,521	1	124	176	977	3,238	2,204	1,456
ORISSA.																		
Cuttack	334	......	334	......	1,124	......	1,458	......	300	......	......	......	......	......	......	......	...	......
Balasore	10,810	6,782	15,049	......	3,704	......	18,753	......	400	446	.. ...	... .	.. ...	......	......	......	79	......
Total of Orissa ...	11,144	6,782	15,383	......	4,828	......	20,211	... ..	700	446	......	......	......	. . ..	.....	......	70	.. ...
CHOTA NAGPUR.																		
Hazaribagh ...	......	......	... ..	......	... ..	......	......	......	1,155	8	......	17	......	......	......	......	...	......
Singhbhum ...	......	......	... ..	... ..	2	......	2	......	35	85	... .	......	.. ...	1	......	......	...	......
Manbhum ...	598	... ..	598	......	43	......	644	......	945	143	......	806	. . ..	......	......	......	...	......
Total of Chota Nagpur.	598	... ..	598	... ..	48	......	646	... ..	2,135	236	......	823	.	1	... .	......	...	......
Grand Total of supplies from the Provinces under the Lieutenant-Governor of Bengal.	5,91,407	86,107	6,45,224	1,30,760	1,66,069	30,917	9,72,970	32,02,292	1,678,125	1,91,341	68,616	62,728	7,590	2,676	10,315	51,206	70,763	1,877
OTHER PROVINCES.																		
Assam ...	700	......	700	...	.	......	700	8,369	245	......	40,386	1,20,231	956	160	......	......	...	......
North-Western Provinces and Oudh.	413	.. . .	413	1,81,147	1,83,162	4,072	3,68,794	......	1,470	72,673	31,570	504	15,506	... ..	1,707	723	476	2
Punjab . .	35	......	35	12,861	26,757	11,401	51,054	.. .	140	551	......	2 0	...	......	......	......	3	1
Central Provinces	10,586	.....	10,586	304	1,979	..	12,869	... ..	.. ...	603	.. ...	.... .	598	. . ..	.. ...	......	...	......
Rajputana and Central India.	... ..	......	... ..	999	4,462	253	5,714	.. ..	70	9,072	85	.....	.. ..	......	......	... ..	...	......
Berar	......	......	...	......	. . .	... .	......	.....	......	......	......	......	217	... ..	......	......	...	......
Bombay	......	......	......	. . .	.....	......	.. ..	......	......	......	......	... ..	18,604	.. ...	. .	.. ...	15	3
Madras	. . . .	... ..	.. .	...	... ..	... ..	... .	......	......	......	... ..	... .	1,161	......	3,062	......	190	94
Burma . ..	. ...	......	..	.	.. ..	......	..	.. .	......	......	... ..	......	159	......	.....	. . .	491	285
Other places ..	1,031	......	1,031	. ..	. .	16	1,047	..	......	......	......	......	....	......	617	76,025	59	409
Grand Total of Imports in Sept. 1892	6,04,172	86,107	6,57,989	3,26,071	3,82,129	46,659	14,13,148	32,10,661	1,680,050	2,74,240	1,40,657	1,83,696	43,091	2,836	15,701	1,27,964	71,977	2,671
Grand Total of Imports in Sept. 1891	14,77,298	1,26,665	15,56,464	5,68,483	4,69,429	57,893	25,92,339	25,07,737	1,904,380	8,62,113	1,83,065	2,25,490	42,438	3,314	40,273	1,16,618	64,339	97,392

* One maund of paddy is equivalent to 25 seers of rice. | † Exclusive of bags obtained by local manufacture.

The Sea-borne Trade of Calcutta in these Staples during the month of September, 1892 was as follows :—

Exported from Calcutta—	Rice.	Paddy.	Total (in rice).	Wheat.	Gram and pulses.	Other food-grains.	Total.	Jute, raw.	Gunny-bags.	Linseed.	Mustard seed.	Tea, Indian.	Cotton, raw.	Silk, raw.	Sugar, Refined.	Sugar, Unrefined.	Tobacco, Unmanufactured.	Tobacco, Manufactured.
To Indian ports, viz.—																		
Bombay ..	4,332	60	4,369	... ..	79	499	4,947	......	1,874,700	......	......	864	......	......	6,703	......	...	20
Madras ...	...	......	......	1,499	76,496	29	78,024	......	102,700	......	......	215	......	328	120	......	...	21
Other ports in Madras ..	18,876	......	18,876	1,245	6,614	......	26,735	......	96,000	......	......	1	.... .	12	61	1,365	...	51
Burma	8,134	......	8,131	505	17,029	78	25,746	467	365,050	14	......	68	323	28	2,557	479	32,540	265
Other Indian ports	514	......	514	1,977	2,440	.....	4,931	......	65,900	......	......	2	......	5	2,210	132	1,893	149
Pondicherry ..	......	......	......	60	69	......	120	......	2,500	......	......	......	.. ...	......	......	......	...	......
Sind	......	......	......	......	......	......	......	......	99,530	......	......	......	.. ..	.. ...	......	......	...	......
Total of Inter-portal trade ..	31,856	60	31,853	5,286	1,02,727	606	1,40,512	467	2,604,380	14	......	1,170	323	373	11,951	1,976	34,433	506
To Foreign ports—																		
United Kingdom	10,506	......	10,506	1,11,012	37,202	......	1,58,720	8,00,778	2,142,200	2,62,580	42,203	1,78,466	1,395	143	200	......	...	9
Other Foreign ports	6,13,199	6,302	6,16,513	14,384	45,731	22,477	6,99,105	7,05,531	12,269,950	1,32,168	......	5,137	8,153	1,646	280	4,100	2,795	190
Total of Foreign trade	6,23,705	6,302	6,27,019	1,25,396	82,933	22,477	8,57,825	15,06,309	14,412,150	3,94,748	42,203	1,83,603	9,548	1,789	480	4,100	2,795	199
Grand Total of Exports in Sept. 1892	6,55,561	6,362	6,58,912	1,30,682	1,85,660	23,083	9,98,337	15,06,776	17,016,530	3,94,762	42,203	1,84,773	9,871	2,162	12,431	6,076	37,228	705
Grand Total of Exports in Sept. 1891	11,73,722	6,453	11,77,755	6,00,489	2,19,169	28,105	20,25,758	10,22,128	16,673,802	9,64,213	90,916	2,22,590	4,732	1,989	3,128	863	36,207	607

The following Statement shows the several Routes followed by the Trade in the Principal Staples of Traffic imported into Calcutta during the month of September, 1892.

IMPORTS INTO CALCUTTA.

Specification of Routes.	Food-grains.					Fibrous Products.		Oilseeds.		Tea, Indian.	Cotton, raw.	Silk, raw.	Sugar.		Tobacco.	
	Rice.	Paddy.	Wheat.	Gram and pulses.	Other food-grains.	Jute, raw.	Gunny bags.	Linseed.	Mustard seed.				Refined.	Unrefined.	Unmanufactured.	Manufactured.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	No.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds	Mds.
By country boats ...	3,60,449	29.630	41,602	91,017	5,7?9	5,50,212	345,000	53,010	56,694	......	1,354	391	5,195	34,099	15,135	868
,, river steamers ...	23,368	1,123	39,995	3,628	186	6,83,348	... .	38,068	23,985	75,279	8?7	1,145	29	1,784	432	...
,, rail { E. I. Railway	1,55,019	46,690	2,53,244	2,67,108	40,658	18,021	130,760	1,73,357	54,285	1,558	14,729	518	1,234	4,012	759	672
,, rail { E. B. S. Railway.	25,609	675	39	17,370	......	10,12,953	1,174,600	7,361	5,633	1,05,260	2,454	842	3,968	9,999	51,702	......
,, road	29,558	1,207	......	......	....	46,127	29,610	......	......	... ..	39	...	1,596	2,045	3,170	345
,, sea	10,178	6,782	......	3,306	16	......	......	446	... ..	1,590	23,678	...	3,679	76,025	790	786
Grand Total of Imports in September ... 1892 ...	6,04,172	86,107	3,26,071	3,82,429	46,659	32,10,661	1,680,050	2,74,240	1,40,657	1,83,693	43,091	2,836	15,701	1,?7,964	71,977	2,671
Grand Total of Imports in September ... 1891 ...	4,77,298	1,26,665	5,68.483	4,09,493	57,893	25,07,737	1,904,380	8,62,113	1,83,065	2,25,490	42,458	3,314	40,273	1,16,618	64,359	97,394

The following Statement shows the Values and Quantities of the Principal Staples of Traffic exported Inland from Calcutta during the month of September, 1892.

EXPORTS FROM CALCUTTA.

Whither exported.	Cotton piece-goods.		Cotton twist.		Salt.	Gunny bags.
	European.	Indian.	European.	Indian.		
	Rs.	Rs.	Mds.	Mds.	Mds.	No.
BENGAL.						
Burdwan ...	4,90,080	520	535	730	17,525	54,275
Birbhum ...	4,28,410	756	224	1,019	18.227	90,955
Midnapore ...	2.27,500	1.400	2,156	......	21 875	72,654
Hooghly ...	1,42,539	4.310	310	153	673	51,628
24-Parganas ...	1,12,193	1,855	79	......	12,451	14,389
Nadia ...	6,47,588	......	1,752	6	55,476	21,8,3
Khulna ...	1,94,352	......	125	......	3,573	385
Jessore ...	2.94,094	... ..	......	......	25,069	7,065
Murshidabad ...	3,34,004	1,459	1,459	4	14,785	8,315
Dinajpur ...	2,30,044	......	470	......	13,668	420
Rajshahi ...	8,76,044	......	127	......	31,706	8,625
Rangpur ...	5 64,672	......	743	......	17,851	910
Bogra ...	3,62,789	......	255	......	9,185	4,480
Pabna ...	5,76,980	......	678	......	33,691	9,285
Darjeeling ...	1,79,860	......	414	......	5,262	280
Jalpaiguri ...	3,52,172	......	180	......	10,335	......
Dacca ...	14,29,904	......	2,723	......	40,294	6,430
Faridpur ...	2,91,?40	......	1,130	......	41,732	16,205
Backergunge ...	5,09,728	......	1,941	......	33,215	7,910
Mymensingh ...	2,02,776	......	......	......	12,903	......
Tippera ...	10,812	......	61	63	9,150	... ..
Chittagong ...	69,840	......	53	... .	2,097	11,330
Noakhali ...	......	......	......	......	13,475	... ..
Total of Bengal ...	85,27,412	10,300	15,445	1,975	4,52,915	386,734
BIHAR.						
Patna ...	2,00,606	3,302	292	666	25,288	145,355
Gaya ...	1,34,072	..	4	1.273	14,654	28 770
Shahabad ...	1,60,014	2,830	......	1,206	19,425	26,005
Muzaffarpur ...	78 010	1,176	.. .	47	14,585	13,790
Darbhanga ...	1,29.378	...	7	910	28,764	28,550
Saran ...	1,31,216	42	5	550	17,043	13 160
Champaran ...	4,39.584	... .	......	112	17,038	6,440
Monghyr ...	87,810	252	...	691	19,330	26.395
Bhagalpur ...	2,64,262	2,452	192	483	21,212	2,29,220
Purnea ...	2,02,448	.....	304	780	27,449	30,435
Malda ...	... ..	......	28	......	6,105	100
Sonthal Parganas ...	3,43,796	700	122	756	18,714	24,255
Total of Bihar ...	21,71,226	10,754	954	7,474	2,29,598	572,365
ORISSA.						
Cuttack ...	1,300	......	......	......	... ..	6,500
Balasore ...	42,600	......	1,054	3,677	21,669	48,300
Total of Orissa ...	43,900	... ..	1,054	3,677	21,669	54,800

Whither exported.	Cotton piece-goods.		Cotton twist.		Salt.	Gunny-bags.
	European.	Indian.	European.	Indian.		
CHOTA NAGPUR.	Rs.	Rs.	Mds.	Mds.	Mds.	No
Hazaribagh	73,530	510	1	145	7.464	1,995
Singhbhum	8,900	......	20	432	2,043	1,995
Manbhum	1,86,920	......	89	1,607	17,026	2,730
Total of Chota Nagpur ...	2,69,350	510	110	2,184	26,533	6,720
Grand total of supplies into the Provinces under the Lieutenant-Governor of Bengal ...	1,10,11,888	21,564	17,563	15,310	7,30,715	1,020,639
OTHER PROVINCES.						
Assam	9,78,300	2,130	3,360	40	42,556	18,255
North-Western Provinces and Oudh	20,57,840	9,156	2,898	921	27,604	578,340
Punjab	7,53,288	65,486	552	.... .	1	91,805
Central Provinces	65,066	......	316	255	341	62.440
Rajputana and Central India	53,614	42	94	24	......	12,390
Berar	1,254	126	......	......	......	1,995
Mysore	......	......	......	......	......	35
Bombay	1,268	210	......	258	......	1,874,700
Madras	87,280	......	68	2,372	......	198,700
Pondicherry	......	... .	....	... ..	... ..	2.500
Burma	2,94,818	1,597	707	1,709	.. ...	363,050
Sind	500	1,596	......	......	......	90,530
Other places	16,131	13,458	5	20,560	... ..	14,412,159
Grand Total of Exports in Sept. 1892 ..	1,53,21,537	1,15 365	25,573	41,444	8,01,217	18,736,529
Grand Total of Exports in Sept. ... 1891 ...	1,74,05,306	68,174	27,154	34,559	8,41,641	18,669,665

The Sea-borne Trade of Calcutta in these Staples during the month of September, 1892 was as follows:—

Imported into Calcutta—	Rs.*	Rs.	Mds.	Mds.	Mds.	No.
From Foreign Ports—						
United Kingdom	93,76,787	......	6,628	... ..	3,50,394	... ..
Other Foreign ports ...	56,892	......	... ..	......	3,21,25?	. ..
Total of Foreign Trade ...	94,33,679	......	6,628	......	6,71,644	. ...
From Indian Ports—						
Bombay	6,506	2,92,565	......	7,593	42,73?	......
Madras	400	8,937	......	.....	...	... ..
Other ports in Madras ...	... ..	......	......	33	4,910	.. .
Burma	17,650	......	......	35	... ..	. ....
Other Indian ports ...	......	... ..	......	7	.....	......
Total of Interportal Trade ...	24,556	3,01,502	......	7,668	47,670	... ..
Grand Total of Imports in September 1892 ..	94,58,235	3,01,502	6,628	7,668	7,19,314	.. ...
Grand Total of Imports in September 1891 ...	1,18,37,714	3,50,560	11,183	11,757	9,71,26?	1,325

* As per tariff declaration value.

The following Statement shows the several Routes followed by the Trade in the Principal Staples of Traffic exported from Calcutta during the month of September, 1892.

Specification of Routes.	Cotton piece-goods.		Cotton twist.		Salt.	Gunny-bags.
	European.	Indian.	European.	Indian.		
	Rs.	Rs.	Mds.	Mds.	Mds.	No.
By country boats	1,17,185	4,850	1,511	......	3,16,978	108,042
,, river steamers	10,84,668	3,347	4,810	116	65,072	293 3?7
,, rail { East Indian Railway ...	62,07,258	89,408	5,5?4	12,641	2,81,441	1,235,189
,, rail { Eastern Bengal State Railway ...	72,42,136	......	11.672	......	1,12,367	80,990
,, road	1,57,161	2,715	170	116	4,103	550
,, sea	5,13,129	15,055	1,677	28,571	21,016	17,016,530
Grand Total of Exports in September ... 1892 ...	1,53,21,537	1,15,365	25,573	41,444	8, 1,217	18,736,529
Grand Total of Exports in September ... 1891 ...	1,74,05,306	68,174	27,154	34,559	8,41,641	18,669,665

STATISTICAL DEPARTMENT,
The 30th January 1893.

C. E. BUCKLAND,
Secy. to the Govt. of Bengal.

The following Statement shows the Quantities of the Principal Staples of Traffic imported into Calcutta from the Interior during the month of October, 1892.

IMPORTS INTO CALCUTTA.

Whence imported.	FOOD-GRAINS. Rice and Paddy. Rice.	* Paddy.	Total (in rice).	Wheat.	Gram and pulses.	Other food-grains.	Total.	FIBROUS PRODUCTS. Jute, raw.	† Gunny-bags.	OIL-SEEDS. Linseed.	Mustard seed.	Tea, Indian.	Cotton, raw.	Silk, raw.	SUGAR. Refined	Un-refined.	TOBACCO. Un-manufactured.	Manu-factured.
BENGAL.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	No.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Burdwan	27,364	36,541	48,202	411	6,496	......	55,112	288	28,785	4,637	......	......	1	54	55	8	...	9
Birbhum	44,069	7,610	48,825	......	... ..	......	48,825	......	6,020	......	......	......	74	187	......	......	...	......
Midnapore	72,154	1,625	73,170	......	747	......	73,917	145	1,550	1,669	... ..	......	96	451	... ..	372	78	... ..
Hooghly	36,259	14,326	45,257	2,622	2,255	......	50,134	1,10,551	123,662	4,237	5,338	......	207	... ..	398	6,746	5,954	......
24-Parganas ...	47,682	2,728	49,387	......	40,224	......	89,611	1,81,245	121,435	... ..	251	......	334	......	4,501	9,069	1,041	5,037
Nadia ...	14,371	1,092	15,033	4,727	107	1,081	20,968	1,91,645	16,939	8,785	564	......	415	69	2,615	60	1,907	147
Khulna	2,063	1,475	2,985	... ..	1,023	... ..	4,008	44,135	280	......	......	......	48	......	......	3,500	...	......
Jessore	16,559	1,130	17,278	... .	12,306	......	29,674	84,081	2,661	39	......	......	35	... ..	1,230	11,199	1,654	......
Murshidabad ...	31,138	87	31,192	7,300	544	285	39,321	20,884	412	8,936	709	......	11	836	122	......	11	......
Dinajpur	683	......	683	... ..	7,081	... ..	7,764	33,487	305,235	... ..	......	......	......	......	......	......	1	......
Rajshahi	971	......	971	... ..	......	......	971	1,14,592	16,695	1,612	318	......	......	175	......	......	109	......
Rangpur	......	......	...	. ...	......	......	......	2,12,961	151,620	......	270	358	23	......	......	... ..	24,576	......
Bogra	996	... .	996	......	609	......	1,605	32,117	420	... ..	......	......	......	......	......	......	..	......
Pabna	......	......	......	107	......	... ..	107	4,83,064	418,770	488	10,488	......	......	......	......	......	1,809	......
Darjeeling	..... .	..... .	.... .	......	......	......	......	2,407	151,185	......	......	20,991	......	......	......	......	...	......
Jalpaiguri	... . .	......	....	25	......	... ..	25	48,239	308,805	......	33	27,524	......	......	......	......	915	......
Dacca	13	.. .	13	......	... ..	......	13	10,01,567	2,485	......	806	......	3,832	......	......	......	...	.. ...
Faridpur	5,072	......	5,072	......	620	... ..	5,692	4,93,405	6,825	1,049	541	2	197	24	......	......	242	......
Backergunge ...	1,78,150	......	1,78,150	......	970	......	1,79,120	7,176	... ..	1,365	... ..	......	......	......	......	100	...	... ...
Mymensingh ...	...	......	......	......	......	... .	... ..	1,14,651	1,015	325	2,350	......	......	......	......	......	...	......
Tippera	6,900	... .	6,900	......	......	... ..	6,900	23,170	......	......	......	......	......	......	......	......	...	......
Chittagong	....	......	... ..	. ....	......	... ..	......	... ..	......	......	......	2,454	5,189	......	......	......	...	......
Noakhali	10,458	. ....	10,458	......	.. ..	......	10,458	2,160	......	600	......	... ..	......	......	... ..	......	...	......
Total of Bengal .	4,92,902	66,704	5,34,592	15,195	73,072	1,366	6,24,225	32,12,330	1,693,798	33,742	21,670	51,329	10,462	1,796	8,921	31,054	33,297	5,193
BIHAR																		
Patna	493	......	493	5,379	24,716	......	30,588	......	2,935	46,217	19,667	......	31	6	549	1,193	251	445
Gaya	......	......	......	.. .	......	... .	... ..	......	1,610	844	60	......	......	......	......	15	...	441
Shahabad	... ..	......	.. ...	22,159	12,697	409	35,265	... ..	1,340	19,284	762	......	......	9	......	2,814	5	19
Muzaffarpur ...	5,260	......	5,260	478	......	3,671	9,409	......	105	11,932	2,677	......	......	......	......	......	139	......
Darbhanga	33,851	1,012	34,483	1,322	272	891	36,968	......	105	25,811	10,442	......	... ..	......	......	341	314	113
Saran	158	......	158	4,864	2,241	161	7,427	... ..	210	4,484	2,652	......	... ..	......	......	214	5	......
Champaran ...	......	......	......	.. . .	. ...	364	364	... ..	700	5,559	1,069	......	......	... ..	......	41	...	......
Monghyr	1,037	. ...	1,037	5,187	16,955	424	23,693	......	1,015	6,518	3,912	......	......	......	......	......	24	8
Bhagalpur	5,759	14,566	14,863	14,373	2,225	28,945	60,406	24	525	10,375	11,763	......	......	......	......	......	...	10
Purnea	5,042	......	5,042	1,239	1,160	......	7,441	22,911	7,770	4,911	9,900	......	......	......	......	......	1,406	......
Malda	143	......	143	3,058	3,211	1,931	8,343	15,777	......	1,902	125	......	......	......	......	......	...	......
Sonthal Parganas	8,168	640	8,508	4,953	4,616	13,599	31,730	4,063	350	2,245	3,698	......	......	100	......	......	...	......
Total of Bihar ...	59,911	16,218	70,047	63,012	63,093	59,398	2,51,550	45,775	16,655	1,40,081	66,727	......	31	115	549	4,621	2,174	1,036
ORISSA.																		
Cuttack	1,331	... ..	1,331	......	1,105	......	2,436	......	......	......	......	......	......	......	......	......	120	......
Balasore	24,563	22,664	38,728	......	6,661	......	45,389	169	525	370	38	......	20	......	......	......	393	... ..
Total of Orissa ...	25,894	22,664	40,059	... ..	7,766	......	47,825	169	525	370	38	......	20	......	......	......	513	... ..
CHOTA NAGPUR.																		
Hazaribagh ...	......	......	......	......	670	......	670	......	1,575	......	......	353	......	......	......	......	...	......
Singhbhum ...	3,568	......	3,568	......	......	......	3,568	......	245	......	......	.. ...	......	......	......	......	...	... ..
Manbhum ...	993	......	993	......	......	......	993	......	525	......	......	546	......	......	......	12	427	......
Total of Chota Nagpur.	4,561	......	4,561	......	670	......	5,231	......	2,345	......	......	899	......	......	......	12	427	......
Grand Total of supplies from the Provinces under the Lieutenant-Governor of Bengal.	5,83,268	1,05,586	6,49,259	73,207	1,49,601	51,764	9,28,831	32,58,304	1,713,323	1,74,193	83,435	52,228	10,513	1,911	9,470	35,687	41,411	6,229
OTHER PROVINCES.																		
Assam	453	......	453	......	......	......	453	18,972	455	1,280	54,033	1,70,594	567	126	......	......	...	......
North-Western Provinces and Oudh.	2,804	......	2,804	1,46,285	2,29,567	1,848	3,80,504	......	2,905	42,846	27,311	1,287	15,521	......	527	2,264	304	[illegible]
Punjab	31	... ..	31	7,903	34,924	5,486	47,344	... ..	1,015	......	7	930	......	......	......	......	...	
Central Provinces	42,068	......	42,068	538	6,120	263	49,689	......	......	689	......	......	......	......	......	......	...	2
Rajputana and Central India ...	......	......	......	1,280	5,453	300	7,033	......	70	673	......	......	......	......	......	......	...	......
Bombay	......	......	......	......	......	......	......	......	......	......	......	......	15,338	......	......	......	...	7
Madras	......	......	......	......	......	......	......	......	......	......	......	......	1,545	1	1,426	......	556	230
Burma	......	. ....	.... .	... ..	......	......	......	......	......	......	......	......	350	1	......	......	510	18
Other places ...	......	... ..	......	... ..	......	......	......	... .	......	......	......	......	......	......	55,196	2,443	...	302
Grand Total of Imports in October 1892	6,29,224	1,05,586	6,95,215	2,34,213	4,24,655	50,661	14,13,754	32,77,276	1,717,768	2,19,681	1,69,786	2,31,039	43,834	2,039	66,619	40,394	42,781	6,832
Grand Total of Imports in October 1891	12,82,652	1,28,973	13,63,260	4,26,261	3,67,394	45,249	22,02,164	32,21,715	2,662,019	6,68,769	1,99,932	2,16,111	60,105	2,449	61,461	66,462	48,183	4,825

* One maund of paddy is equivalent to 25 seers of rice. | † Exclusive of bags obtained by local manufacture.

The Sea-borne Trade of Calcutta in these Staples during the month of October, 1892 *was as follows:—*

EXPORTED FROM CALCUTTA—	Rice.	Paddy.	Total (in rice).	Wheat.	Gram and pulses.	Other food-grains.	Total.	Jute, raw.	Gunny-bags.	Linseed.	Mustard seed.	Tea, Indian.	Cotton, raw.	Silk, raw.	Sugar Refined	Un-refined.	Tobacco Un-manufactured.	Manu-factured.
To Indian ports, viz.—																		
Bombay ...	11,217	......	11,217	......	......	......	11,217	......	2,009,300	......	2,266	407	......	......	3,580	......	...	12
Madras	......	......	......	3,216	84,232	293	87,747	106	165,100	......	......	2	......	240	109	......	...	15
Other ports in Madras ..	14,014	293	14,197	1,888	6,479	......	22,564	......	88,850	......	193	......	......	9	135	......	...	......
Burma ...	5,361	......	5,361	1,255	17,927	2,027	20,570	98	234,000	......	......	169	181	12	1,139	633	23,009	769
Other Indian ports	131	......	131	325	2,612	......	3,098	......	177,000	......	......	1	6	6	2,541	308	1,518	28
Pondicherry ...	......	......	.....	442	131	.. ...	573	... ..	8,100	......	......	......	......	......	......	......	...	[illegible]
Sind	......	......	......	......	... ..	......	......	......	54,250	......	......	......	......	......	......	......	...	[illegible]
Total of Inter-portal trade ...	30,723	293	30,906	7,126	1,11,411	2,320	1,51,769	204	2,756,600	......	2,459	579	187	267	7,504	946	24,527	[illegible]
To Foreign ports— United Kingdom	23,067	......	23,067	72,128	33,319	10,051	1,39,465	11,71,455	3,063,530	1,99,630	22,159	2,16,817	495	39	......	......	...	10
Other Foreign ports ...	5,38,389	3,117	5,40,337	13,676	38,556	11,990	6,04,559	5,42,540	7,930,365	15,881	10	2,737	3,143	1,660	644	3,224	288	190
Total of Foreign trade ...	5,61,456	3,117	5,63,404	85,804	71,875	22,041	7,44,024	17,13,995	10,993,895	2,15,511	22,169	2,19,554	3,638	1,699	644	3,224	288	200
Grand Total of Exports in October 1892	5,92,179	3,410	5,94,310	93,930	1,83,286	25,267	8,95,793	17,14,199	13,750,495	2,15,511	24,628	2,20,133	3,825	1,966	8,148	4,170	24,815	1,024
Grand Total of Exports in October 1891	11,03,082	14,733	11,12,290	4,10,101	1,02,284	8,479	16,33,154	19,27,446	12,293,771	7,99,567	63,889	2,21,414	6,177	1,710	3,386	418	20,714	358

The following Statement shows the several Routes followed by the Trade in the Principal Staples of Traffic imported into Calcutta during the month of October, 1892.

IMPORTS INTO CALCUTTA.

Specification of Routes.	Food-grains.					Fibrous Products.		Oilseeds.		Tea, Indian.	Cotton, raw.	Silk, raw.	Sugar.		Tobacco.	
	Rice.	Paddy.	Wheat.	Gram and pulses.	Other food-grains.	Jute, raw.	Gunny-bags.	Linseed.	Mustard seed.				Refined.	Unrefined.	Unmanufactured.	Manufactured.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	No.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
By country boats ...	3,86,945	26,194	31,130	74,925	4,752	7,43,111	245,193	42,587	65,322	......	3,257	451	5,395	25,420	7,300	5,187
„ river steamers ...	14,214	1,383	2,948	4,977	......	8,98,046	......	6,525	33,061	1,43,551	596	878	1,917	5	1,265	...
„ rail { East Indian Railway.	1,62,501	73,728	2,00,101	3,23,821	54,909	54,996	40,635	1,65,810	69,969	3,116	15,626	383	628	6,900	1,576	749
„ rail { Eastern Bengal State Railway.	13,442	377	25	14,281	......	14,73,423	1,410,990	4,339	1,396	81,918	1,640	325	1,231	4,576	27,639	...
„ road	27,681	1,240	......	......	......	1,05,818	20,800	......	......	......	273	......	797	1,050	3,522	347
„ sea	24,441	22,664	......	6,661	......	......	150	370	38	2,454	22,442	2	56,622	2,443	1,459	549
Grand Total of Imports in October ... { 1892...	6,29,224	1,05,586	2,34,213	4,24,665	59,661	32,75,394	1,717,768	2,19,631	1,69,786	2,31,039	43,834	2,039	66,619	40,394	42,781	6,832
Grand Total of Imports in October ... { 1891...	12,82,652	1,28,973	4,26,261	3,67,394	45,249	32,21,715	2,662,019	6,68,769	1,09,932	2,16,111	60,105	2,449	61,461	66,462	48,183	4,825

The following Statement shows the Values and Quantities of the Principal Staples of Traffic exported Inland from Calcutta during the month of October, 1892.

EXPORTS FROM CALCUTTA.

Whither exported.	Cotton piece-goods.		Cotton twist.		Salt.	Gunny-bags.
	European.	Indian.	European.	Indian.		
Bengal.	Rs.	Rs.	Mds.	Mds.	Mds.	No.
Bardwan ...	86,210	......	355	786	37,815	43,440
Birbhum ...	40,480	......	78	934	13,631	41,580
Midnapore ...	1,83,232	......	3,262	......	14,035	10,497
Hooghly ...	70,047	710	567	73	2,360	156,009
24-Parganas ...	1,14,192	3,850	238	......	12,634	6,641
Nadia ...	3,05,540	......	1,771	......	42,874	34,520
Khulna ...	40,332	......	84	......	4,295	70
Jessore ...	1,13,408	......	1,025	......	18,710	5,389
Murshidabad ..	48,276	5,538	153	54	22,956	12,255
Dinajpur ...	1,99,580	......	112	......	3,303	140
Rajshahi ...	3,48,740	......	120	......	26,531	5,985
Rangpur ...	6,09,484	......	527	......	6,237	770
Bogra ...	2,11,548	......	33	......	891	......
Pabna ...	3,57,676	......	245	......	37,344	3,420
Darjeeling ...	1,54,428	......	199	......	5,792	350
Jalpaiguri ...	1,79,792	......	227	......	4,703	......
Dacca ...	6,50,812	......	1,608	......	35,608	6,510
Faridpur ...	1,28,840	......	624	......	24,073	7,770
Backergunge ...	2,61,052	......	1,521	......	33,300	9,870
Mymensingh ...	1,61,976	......	89	......	8,425	673
Tippera ...	44,744	......	190	275	9,625	......
Chittagong ...	1,27,42.	......	3.8	10	800	86,400
Noakhali ...	......	......	......	......	6,025	......
Total of Bengal	44,60,111	10,098	13,156	2,132	3,71,968	432,273
Bihar.						
Patna ...	4,64,302	1,974	387	581	28,292	100,175
Gaya ...	1,81,834	...	95	1,545	13,642	14,980
Shahabad ...	3,53,860	10,028	11	1,176	17,724	25,480
Muzaffarpur ...	3,88,160	......	......	36	15,604	20,053
Darbhanga ...	5,38,316	......	2	936	45,632	79,135
Saran ...	3,44,728	......	27	101	22,551	14,910
Champaran ...	4,22,870	......	24	264	15,001	11,900
Monghyr ...	2,15,610	1,218	8	637	25,116	39,480
Bhagalpur ...	2,79,516	3,444	52	795	22,107	81,950
Purnea ...	94,024	168	......	......	25,067	9,168
Malda ...	......	......	16	......	7,775	455
Sonthal Parganas ...	1,62,866	......	207	1,055	20,408	37,065
Total of Bihar ...	33,83,116	16,832	829	7,126	2,58,919	434,773
Orissa.						
Cuttack ...	13,800	......	112	569	599	8,000
Balasore ...	73,800	......	982	4,987	15,614	83,425
Total of Orissa ...	87,600	......	1,094	5,556	16,213	91,425
Chota Nagpur.						
Hazaribagh	52,932	420	28	246	340	1,610
Singhbhum	27,829	......	12	696	2,724	5,805
Manbhum	1,21,412	252	33	1,118	24,631	5,845
Total of Chota Nagpur	2,02,163	672	73	2,060	27,695	12,956
Grand Total of supplies into the provinces under the Lieutenant-Governor of Bengal.	81,44,993	27,602	15,152	16,874	6,74,795	971,421
Other Provinces.						
Assam	7,67,108	......	1,486	168	40,395	13,040
North-Western Provinces and Oudh	41,03,874	24,604	2,581	1,370	33,984	520,205
Punjab	11,95,806	3,654	1,428	......	......	312,629
Central Provinces	1,45,262	2,478	342	567	341	120,015
Rajputana and Central India	1,42,148	3,996	24	6	......	33,425
Berar	702	......	6	......	......	4,270
Nizam's Territory	602	......	......	......	......	......
Bombay	6,518	3,738	......	42	......	2,011,855
Madras	71,265	......	53	2,039	......	273,950
Pondicherry	......	......	......	......	......	8,105
Burma	2,24,362	19	815	3,308	......	234,000
Sind	......	......	......	......	......	54,250
Other places	35,920	2,877	39	18,715	......	10,993,895
Grand Total of Exports in October { 1892 ..	1,48,38,760	68,878	21,924	43,089	7,49,515	15,551,046
Grand Total of Exports in October { 1891 ..	2,04,74,351	86,649	26,964	30,031	8,09,750	14,451,261

The Sea-borne Trade of Calcutta in these Staples during the month of October, 1892 was as follows :—

IMPORTED INTO CALCUTTA—	Rs.*	Rs.	Mds.	Mds.	Mds.	No.
From Foreign Ports—						
United Kingdom ...	1,06,09,051	......	10,362	......	3,45,181	......
Other Foreign ports ...	1,01,424	......	1,220	......	3,87,721	......
Total of Foreign Trade ...	1,07,10,475	......	11,582	......	7,32,902	......
From Indian Ports—						
Bombay	23,298	1,74,609	......	6,736	2,213	......
Madras	......	14,518	......	......	......	......
Other Ports in Madras ...	......	380	......	......	4,420	......
Burma	11,950	1,450	91	19	......	......
Other Indian Ports ...	......	......	......	......	......	150
Total of Interportal Trade ..	35,248	1,90,957	91	6,755	6,633	150
Grand Total of Imports in October { 1892 ...	1,07,45,723	1,90,957	11,673	6,755	7,39,535	150
Grand Total of Imports in October { 1891 ...	1,07,24,225	3,18,738	9,343	15,931	8,24,400	7,750

* As per tariff declaration value.

The following Statement shows the several Routes followed by the Trade in the Principal Staples of Traffic exported from Calcutta during the month of October, 1892.

Specification of Routes.	Cotton piece-goods.		Cotton twist.		Salt.	Gunny-bags.
	European.	Indian.	European.	Indian.		
	Rs.	Rs.	Mds.	Mds.	Mds.	No.
By country boats ...	1,17,910	710	2,073	......	3,08,640	198,489
„ river steamers ...	6,25,736	5,538	3,656	486	60,089	39,317
„ rail { East Indian Railway ...	93,11,080	55,884	5,711	12,578	3,08,628	1,190,840
„ rail { Eastern Bengal State Railway ...	41,40,944	......	7,856	......	52,203	71,015
„ road ...	1,30,983	3,850	290	63	5,093	870
„ sea ...	5,52,107	2,896	2,329	29,662	14,863	13,750,495
Grand Total of Exports in October ... { 1892 ...	1,48,38,760	68,878	21,924	43,089	7,49,515	15,551,046
Grand Total of Exports in October ... { 1891 ...	2,04,74,351	86,649	26,964	30,031	8,09,750	14,451,261

STATISTICAL DEPARTMENT,
The 25th January 1893.

C. E. BUCKLAND,
Secy. to the Govt. of Bengal.

STATEMENT SHOWING THE STOCKS OF RICE IN AND AROUND CALCUTTA.

Names of Marts.	Stock in hand as compiled on—												
	1st week of Feb. 1892.	1st week of March 1892.	1st week of April 1892.	1st week of May 1892.	1st week of June 1892.	1st week of July 1892.	1st week of August 1892.	1st week of Sept. 1892	1st week of Oct. 1892.	1st week of Nov. 1892	1st week of Dec. 1892	1st week of Jan. 1893.	1st week of Feb. 1893.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Baliaghata	7,99,000	11,29,000	12,67,000	10,25,000	12,28,000	9,62,000	8,39,000	6,74,000	4,96,500	4,39,000	3,16,000	3,34,000	4,05,000
Ultadanga	68,500	75,500	69,000	85,900	73,900	65,800	65,900	70,900	65,100	57,300	57,800	65,200	78,700
Chitpur, Golabaree, Kumartooly, Hatkhola, and Cuipi Ghat.	6,17,700	8,41,400	8,78,400	7,83,000	7,61,300	7,20,400	6,56,300	6,41,400	5,63,300	5,64,800	5,40,700	5,64,700	7,01,900
Pathuriaghatta, Posta, and Jorabagan.	2,000	3,000	4,000	5,000	4,000	3,000	4,000	3,700	3,000	2,500	2,000	3,000	8,000
Tollygunge, Chetla, Kidderpore, and Munshigunj.	1,04,500	1,55,900	1,44,500	1,41,500	1,37,200	1,12,100	1,43,400	96,500	93,600	51,100	40,600	87,900	1,14,200
21 Minor bazars (estimated) ...	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000
Other retail shops, 3,189 in number (estimated).	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000
Baidyabati, Nowabgunj, Bhadreshwar, and Chandernagore.	18,938	31,250	59,450	42,000	32,325	26,062	61,125	51,250	33,908	31,125	40,037	63,961	69,800
Total ...	21,00,638	27,26,050	29,12,350	25,77,400	27,26,725	23,79,362	22,59,725	20,27,750	17,45,408	16,35,825	14,87,137	16,08,761	18,67,600
On Railway premises on both sides of the river.	44,775 (on 3rd Feb. 1892.)	41,862 (on 3rd March 1892.)	38,171 (on 3rd April 1892.)	17,133 (on 3rd May 1892.)	12,011 (on 3rd June 1892.)	5,239 (on 3rd July 1892.)	1,322 (on 3rd August 1892.)	11,336 (on 3rd Sept. 1892.)	17,216 (on 8th Oct. 1892.)	9,774 (on 3rd Nov. 1892.)	24,557 (on 3rd Dec. 1892.)	35,589 (on 3rd Jan. 1893.)	32,791 (on 3rd Feb. 1893.)
On boats unloaded ... By Port Commissioners' returns.	63,215 (1st to 3rd Feb. 1892.)	53,460 (1st to 3rd March 1892.)	29,556 (1st to 3rd April 1892.)	28,662 (2nd to 4th May 1892.)	25,598 (1st to 3rd June 1892.)	27,288 (1st to 3rd July 1892.)	25,889 (1st to 3rd August 1892.)	18,308 (1st to 3rd Sept. 1892.)	27,678 (6th to 8th Oct. 1892.)	13,606 (1st to 3rd Nov. 1892.)	38,882 (1st to 3rd Dec. 1892.)	47,638 (3rd to 5th Jan. 1893.)	40,930 (1st to 3rd Feb. 1893.)
On boats unloaded ... By Canal returns	1,90,718 (1st to 3rd Feb. 1892.)	96,456 (1st to 3rd March 1892.)	38,474 (1st to 3rd April 1892.)	17,050 (2nd to 4th May 1892.)	37,916 (1st to 3rd June 1892.)	21,650 (1st to 3rd July 1892.)	17,415 (1st to 3rd August 1892.)	27,069 (1st to 3rd Sept. 1892.)	24,097 (6th to 8th Oct. 1892.)	15,777 (1st to 3rd Nov. 1892.)	16,296 (1st to 3rd Dec. 1892.)	1,30,459 (3rd to 5th Jan. 1893.)	1,20,600 (1st to 3rd Feb. 1893.)
Grand total of Stocks ...	23,99,346	29,17,828	30,18,551	26,40,245	28,02,250	24,33,539	23,04,331	20,84,463	18,14,399	16,74,982	15,66,872	18,22,447	20,61,921
Probable stock available for exportation by sea.	13¾ lakhs	18¼ lakhs	19½ lakhs	15¾ lakhs	17½ lakhs	13½ lakhs	12½ lakhs	10½ lakhs	7¼ lakhs	6¼ lakhs	5 lakhs	7½ lakhs	10 lakhs

STATISTICAL DEPARTMENT,
The 6th February, 1893.

C. E. BUCKLAND,
Secy. to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 5th to 11th February 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Temperature. Maximum.	Temperature. Range.	Temperature. Minimum.	Hygrometry. Mean wet bulb.	Hygrometry. Vapour tension.	Hygrometry. Dew point.	Hygrometry. Humidity.	Wind. Prevailing direction.	Wind. Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
Feb.	5th	130 6	9·5	29·986	63·1	76·7	26·3	50·4	55·9	0·358	49·7	65	WNW and calm	33	Nil	Clear, ⌓.
„	6th	133·3	8·5	·954	66·3	79·0	23·5	55·5	62·5	·521	60·1	81	NNW, SSW and calm.	48	„	Chiefly clear, ⌓, ≡.
„	7th	119·7	3·5	·900	69·1	77·9	14·7	63·2	66·8	·631	65·6	89	SSW and variable	83	0·43	Chiefly cloudy, o, g, d, t, p, ⌓.
„	8th	121·6	1·7	·973	64·6	69·7	9·7	60·0	62·0	·520	60·0	86	ESE, N and calm	55	0·04	Chiefly cloudy, o g, d, ≡,
„	9th	129·5	10·2	30·005	63·3	72·7	17·5	55·2	57·4	·394	52·4	70	NNE, NNW and calm.	76	Nil	Clear, ⌓.
„	10th	128·3	10·3	·098	60·6	71·7	19·7	52·0	51·7	·267	41·9	50	Nly E and NNW	64	„	Clear.
„	11th	131·2	10·3	·043	61·3	74 8	26·6	48·2	53·9	·319	46·6	58	N and calm ...	32	„	Clear, ⌓.

	Inches.
The mean pressure of the seven days	30·001
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	29·964
	Hours.
The total number of hours of bright sunshine	54·0
The maximum possible number of hours of sunshine	78·6
	°
The mean temperature of the seven days	64·0
The average temperature of the corresponding period for 24 years, S.-G.'s Office	70·7
The extreme variation of temperature	30·8
The maximum temperature	79·0
	Miles.
The highest velocity of the wind in one hour	10
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	71
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	70
	Inches.
The total fall of rain from 5th to 11th February 1893	0·47
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·44
The total fall from 1st January to 11th February 1893	1·17
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·91

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

⌓, dew; ≡, fog; o, overcast; g, gloomy; d, drizzling rain; t, thunder; p, passing temporary showers.

C. LITTLE,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;
Calcutta, the 13th February 1893.

Meteorological Report of the Province of

Meteorological Division.	District.	Representative stations.	Station Observations. Air Pressure. Highest, 8 A.M. barometer reading.	Lowest, 8 A.M. barometer reading.	Mean, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, Lat. 45°.	Variation from normal mean.	Wind. Mean direction at 8 A.M.	Mean velocity in miles daily.	Temperature. Highest of month.	Lowest of month.	Mean daily maximum temperature.	Mean daily minimum temperature.	Mean daily temperature.	Variation from normal mean.	Humidity. Mean, 8 A.M., humidity.	Variation from normal mean.
Orissa.	Puri	Puri	30·144	29·880	30·021	29·970	—	N	107	83·2	50·5	77·8	61·5	69·7	—	81	—
		Gopalpur	30·143	29·893	30·026	29·988	—·042	N66°W	245	85·7	52·0	79·0	59·6	69·3	—1·0	83	—
		False Point	30·145	29·858	30·025	29·989	—·045	N29°W	177	82·4	49·5	77·1	57·6	67·4	—1·5	85	—5
	Cuttack	Cuttack	30·085	29·807	29·966	29·992	—·034	N27°W	38	87·1	51·4	80·5	58·4	69·5	—2·8	75	—3
	Balasore	Balasore	30·122	29·868	29·990	29·995	—·044	N11°E	81	85·4	46·4	78·0	55·4	66·7	—0·7	52	—
South-West Bengal.	Midnapore	Midnapore	30·016	29·745	29·901	30·005	—·046	N8°W	188	85·3	45·1	79·0	54·8	67·0	+0·7	72	—
	24-Parganas	Calcutta	30·140	29·860	30·024	29·992	—·018	N6°W	50	79·7	45·7	74·8	54·1	64·5	—1·6	85	+1
		Saugor Island	30·139	29·840	30·016	29·985	—·044	N27°E	211	78·7	48·1	74·6	58·0	66·3	—1·6	90	+2
	Howrah	......															
	Hooghly	......															
	Nadia	Krishnagar	30·118	29·818	29·998	29·997	—·026	N49°W	70	80·2	40·5	75·9	50·4	63·1	—0·8	83	—
	Khulna	......															
	Jessore	Jessore	30·111	29·862	30·006	29·987	—·044	N14°W	49‡	79·7	43·4	74·4	52·0	63·2	—2·4	88	+8
	Burdwan	Burdwan	30·083	29·814	29·954	30·007	—·042	N27°W	25	82·1	45·1	76·3	53·6	65·0	—1·4	70	—5
		Raniganj	29·838	29·564	29·714	30·035	—·043	N31°W	31	81·7	44·7	75·4	53·1	64·3	—1·2	72	—
	Bankura	Bankura	29·833	29·587	29·718	29·986	—·050	N58°W	42	83·1	45·1	76·3	54·1	65·2	+0·2	75	—
	Birbhum	......															
	Murshidabad	Berhampore	30·110	29·836	29·978	29·997	—·050	S79°W	40	80·1	45·6	74·2	52·8	63·5	—1·5	91	+11
North Bengal.	Pabna	Sirajganj	30·107	29·855	29·986	29·984	—·043	N67°W	23	77·6	40·1	73·4	49·8	61·6	—1·1	52	—
	Bogra	Bogra	30·083	29·836	29·966	29·983	—·027	N8°E	37	79·3	41·2	74·0	49·6	61·9	—1·8	86	—
	Rajshahi	Rampur Boalia	30·088	29·823	29·965	29·988	—·032	N21°W	68	78·6	41·1	72·4‡	49·7	61·1	—0·7	81	—
	Malda	Malda	30·102	29·833	29·964	30·002	—	N67°W	83	78·5	?	73·9	?	?	—	82	—
	Dinajpur	Dinajpur	30·058	29·754	29·920	30·000	—·018	N83°W	43	77·1	40·5	72·4	49·0	60·7	—0·9	86	—
	Rangpur	Rangpur	30·054	29·760	29·912	29·997	—·051	S76°E	35	76·3	40·1	71·4	48·1	59·8	—1·3	91	—
	Jalpaiguri	Jalpaiguri	29·902	29·608	29·751	30·007	—·039	N42°E	35	75·4	42·6	70·1	49·9	60·0	—1·4	92	—
	Kuch Bihár	......															
	Darjeeling	Darjeeling	23·101	22·724	22·906	—	—·073	S7°E	149	44·6	25·7	39·3	31·5	35·4	—4·1	90	+16
	Sikkim	Gnatong	15·265	18·865	19·080	—	—	S63°E	108	43·3	—5·5	30·5	7·2	18·9	—	73	—
East Bengal.	Chittagong	Chittagong	30·076	29·846	29·949	29·988	—·041	N58°E	47	79·2	46·1	75·9	53·5	64·7	—1·8	92	+4
	Chittagong Hill Tracts	Demagri	Observations not received.														
	Backergunge	Barisal	30·132	29·907	30·029	29·979	—·036	N27°E	40	82·3	44·6	75·1	53·1	64·1	+0·1	87	—
	Noakhali	Noakhali ‡	30·135	29·859	29·991‡	29·983	—·030	N3°E	71	78·3	43·0	74·9	51·9	63·4	—1·2	88	—
	Faridpur	Faridpur	30·121	29·848	30·002	29·998	—·030	N14°W	41	78·5	44·0	72·6†	51·9	62·6†	—0·6	89	—
	Dacca	Dacca	30·120	29·879	30·010	29·989	—·040	N18°E	64	79·1	46·2	75·4	53·7	64·6	—1·9	86	+4
	Tippera	Comilla	30·113	29·875	30·001	29·985	—·035	N31°E	31	81·4	44·1	75·9‡	51·7	63·8*	—0·3	88	—
	Mymensingh	Mymensingh	30·004	29·834	29·971	29·990	—·045	N73°E	48	77·2	43·1	72·7	51·0	61·8	—0·9	91	—
North Bihar.	Purnea	Purnea	30·056	29·772	29·912	30·001	—·049	S14°E	34	76·2	39·3	74·1	46·7	59·5	—1·8	90	+5
	Bhagalpur	Bhagalpur	30·011	29·732	29·875	29·997	—·042	S63°W	18	79·8	40·5	73·3	49·4	61·3	—0·1	80	—
	Darbhanga	Darbhanga	30·024	29·759	29·880	30·011	—·047	S84°W	74	75·6	45·1	71·2	50·2	60·7	—1·3	87	+4
	Muzaffarpur	Muzaffarpur	30·018	29·729	29·865	30·010	—	N88°W	85	76·7	41·3	70·9	48·5	59·7	—	93	—
	Champaran	Motihari	29·937	29·648	29·791	29·989	—·031	S76°W	115	78·2	39·0	71·9	45·8	58·9	—0·5	91	—
	Saran	Chapra	29·992	29·709	29·857	30·004	—·016	S54°W	56	79·3	41·9	71·9	49·4	60·7	—0·3	88	—
South Bihar.	Shahabad	Dehri	29·808	29·531	29·678	30·006	—·037	S37°W	54	81·1	43·0	73·0	52·4	62·8	?	82	—
		Buxar	29·938	29·667	29·794	30·005	—·053	N86°W	105	80·4	43·9	69·4*	50·0	59·7*	—1·8	83	—
		Arrah	29·979	29·710	29·840	30·001	—·031	N86°W	58	80·1	40·5	72·9	49·4	61·2	+0·5	84	—
	Gaya	Gaya	29·788	29·518	29·657	30·013	—·051	S7°E	134	81·4	43·0	74·0	51·5	62·7	—0·8	80	+15
	Patna	Bankipore	29·997	29·721	29·868	30·014	—·053	S75°W	97	80·0	41·7	71·0	50·2	60·6	—0·5	78	—1
	Monghyr	......															
	Sonthal Parganas	Naya Dumka	29·658	29·388	29·534	30·016	—·035	N53°W	52	80·6	41·0	73·5	50·3	61·9	—1·0	78	—
Chota Nagpur.	Hazaribagh	Hazaribagh	28·094	27·835	27·962	30·011	—·054	S68°W	179	78·2	40·2	70·2	48·7	59·4	—2·1	72	+12
	Lohardaga	Ranchi	27·958	27·711	27·837	29·985	—·049	N88°W	132	77·1	40·5	70·4	48·9	59·7	—1·2	72	—
	Palamau	......															
	Singhbhum	Chaibassa	29·379	29·122	29·256	30·006	—·027	S81°W	24	81·5	43·6	77·9	53·1	65·5	—0·5	83	—
	Manbhum	......															
Assam.	Sibsagar	Sibsagar	29·897	29·585	29·741	30·052	—·035	N52°E	30	71·0	43·1	63·8	40·3	57·6	—2·2	99	+2
	Goalpara	Dhubri	30·082	29·774	29·923	30·010	—·058	N63°E	101	75·8	46·0	70·8	51·9	61·4	—2·1	91	0
	Cachar	Silchar ‡	30·023	29·816	29·947	30·009	—·033	0	3	80·3	42·9	75·0	52·1	63·6	—0·9	93	+4

* Mean of 23 days. | † Mean of 27 days | ‡ Mean of 30 days.

Bengal for the month of January 1893.

Cloud.			District Observations. Rainfall.										
			Of month.					Since 10th October 1892.					
Mean cloud amount, 8 A. M.	Variation from normal mean, 8 A. M.	Rainfall.	Mean of district.	Normal mean.	Variation from mean.	Number of rainy days.	Normal mean number of rainy days.	Mean of district.	Normal mean.	Variation.	Mean number of rainy days.	Normal mean number of rainy days.	District.
2·3 0·6 2·2	— — —0·2	2·18 0·99 3·56	2·08	0·31	+1·77	2·25	0·61	9·29	7·06	+2·23	11·25	7·81	Puri.
2·3	+0·8	1·89	1·82	0·35	+1·47	2·20	0·66	7·83	4·59	+3·24	13·20	6·47	Cuttack.
0·7	—	0·94	1·03	0·44	+0·59	2·50	0·77	7·59	3·33	+4·26	11·00	5·11	Balasore.
1·5	—	0·35	0·43	0·45	−0·02	1·75	0·82	8·36	3·44	+4·92	7·75	3·94	Midnapore.
2·1 2·4	+0·2 +0·1	0·70 0·88	0·75	0·53	+0·22	2·00	0·97	7·86	3·42	+4·44	8·71	4·76	24-Parganas.
			0·27	0·55	−0·28	1·50	0·90	3·83	2·66	+1·17	7·50	4·14	Howrah.
			0·61	0·40	+0·21	2·00	0·93	7·75	2·47	+5·28	7·67	3·91	Hooghly.
2·3	—	0·32	0·36	0·35	+0·01	1·00	0·78	4·60	2·39	+2·21	5·50	3·54	Nadia.
			0·15	0·56	−0·41	1·00	1·09	7·08	3·34	+3·74	10·00	4·85	Khulna.
2·2	+0·3	0·50	0·33	0·46	−0·13	1·40	0·89	9·51	2·81	+6·70	7·80	4·17	Jessore.
2·2 0·9	+0·6 —	0·81 0·45	0·53	0·38	+0·15	1·25	0·51	5·02	2·39	+2·63	7·00	3·28	Burdwan.
2·5	—	1·17	0·88	0·38	+0·50	2·75	1·03	5·35	2·46	+2·89	8·50	4·09	Bankura.
			0·80	0·50	+0·30	1·33	1·07	4·04	2·08	+1·96	5·99	3·50	Birbhum.
2·5	+0·8	0·84	0·67	0·45	+0·22	1·50	0·91	2·50	2·17	+0·33	4·84	3·12	Murshidabad.
2·1	—	0·65	0·61	0·41	+0·20	2·50	1·01	1·72	2·04	−0·32	5·50	4·18	Pabna.
2·0	—	0·26	0·33	0·37	−0·04	1·25	0·91	1·26	2·44	−1·18	4·00	3·02	Bogra.
2·2	—	0·30	0·48	0·56	−0·08	1·67	1·00	1·00	2·02	−1·02	3·34	3·05	Rajshahi.
2·1	—	0·15	0·26	0·47	−0·21	1·00	0·87	1·05	1·94	−0·89	3·00	2·34	Malda.
2·1	—	0·73	0·44	0·53	−0·09	1·20	0·94	0·87	1·71	−0·84	2·80	2·23	Dinajpur.
1·0	—	1·11	0·65	0·48	+0·17	3·00	0·83	1·75	2·35	−0·60	4·50	2·47	Rangpur.
5·0	—	0·56	0·55	0·55	0	2·00	1·21	1·68	3·49	−1·81	6·00	2·91	Jalpaiguri.
5·8	+0·7	0·67	0·67	0·54	+0·13	3·25	0·01	1·55	3·06	−1·51	4·75	3·16	Kuch Bihar.
1·5	—	2·73	1·99	0·96	+1·03	3·50	2·05	5·40	3·82	+1·58	8·75	4·03	Darjeeling.
2·2	+0·6	0·06	0·08	0·70	−0·62	0·50	0·92	12·86	5·86	+7·00	11·00	6·25	Chittagong.
			1·92	0·59	+1·33	1·00	1·10	8·61	5·18	+3·43	12·00	6·55	Chittagong Hill Tracts.
2·1	—	0·16	0·35	0·71	−0·36	0·75	1·22	8·20	4·41	+3·79	10·00	5·40	Backergunge.
0·5	—	0·15	0·24	0·71	−0·47	1·00	1·09	15·67	5·76	+9·91	13·50	5·93	Noakhali.
1·8	—	0·19	0·20	0·45	−0·25	0·67	1·00	7·44	2·63	+4·81	6·67	4·34	Faridpur.
3·2	+1·6	0·46	0·34	0·43	−0·09	1·25	1·23	9·10	3·13	+5·97	8·25	4·88	Dacca.
1·7	—	0·53	0·53	0·66	−0·13	2·25	1·36	8·90	3·36	+5·54	10·00	5·36	Tippera.
2·5‡	—	0·57	0·55	0·40	+0·15	2·00	0·97	3·41	2·82	+0·59	4·80	4·04	Mymensingh.
1·5	+0·1	1·06	0·80	0·52	+0·28	2·67	0·93	0·82	2·05	−1·23	2·67	2·40	Purnea.
3·0	—	0·29	0·82	0·50	+0·32	2·00	1·33	1·35	1·90	−0·55	2·75	2·86	Bhagalpur.
2·7	+1·5	1·98	1·50	0·64	+0·86	2·67	1·23	1·51	1·60	−0·09	2·67	2·44	Darbhanga.
2·4	—	2·21	1·17	0·66	+0·51	2·00	1·47	1·21	1·74	−0·53	2·00	2·90	Muzaffarpur.
2·3	—	0·68	0·74	0·67	+0·07	1·50	1·37	0·74	1·19	−0·45	1·50	2·38	Champaran.
2·5	—	1·28	1·16	0·75	+0·41	3·33	1·63	1·19	1·77	−0·58	3·33	3·08	Saran.
2·3 3·0 1·8	— — —	0·98 0·66 0·60	0·73	0·66	+0·07	3·40	1·59	1·13	2·27	−1·14	4·40	3·67	Shahabad.
2·4	+0·2	0·46	0·54	0·66	−0·12	2·00	1·34	1·07	1·82	−0·75	3·75	3·69	Gaya.
2·6	+0·5	0·83	0·56	0·57	−0·01	1·75	1·42	0·79	2·02	−1·23	2·50	3·16	Patna.
			0·42	0·57	−0·15	1·33	1·26	1·75	1·92	−0·17	2·66	2·84	Monghyr.
1·5	—	0·80	0·76	0·37	+0·39	2·00	0·89	2·20	1·83	+0·37	4·84	2·81	Sonthal Parganas.
4·0	+2·1	1·37	0·94	0·61	+0·33	2·80	1·28	4·91	1·87	+3·04	7·75	3·75	Hazaribagh.
2·5	—	0·71	0·99	0·74	+0·25	2·50	1·70	7·14	2·45	+4·69	7·50	4·88	Lohardaga.
			1·07	0·77	+0·30	4·00	1·53	1·64	2·29	−0·65	5·00	3·93	Palamau.
3·1	—	0·53	0·53	0·73	−0·20	2·00	1·55	6·53	2·60	+3·93	8·00	5·20	Singhbhum.
			1·32	0·49	+0·83	2·50	1·20	4·35	1·89	+2·47	8·00	3·54	Manbhum.
5·4	−0·1	3·28											Sibsagar.
3·4	+1·5	0·53											Goalpara.
5·4	+1·9	1·78											Cachar.

Table of Rainfall recorded at stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ORISSA ...	Puri ...	Puri ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Khurda ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·20
		Banpur ...	...	...	...	...	...	...	...	...	0·01	...	...	...	...	...	...	...	...	...	...	...
		False Point ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·32
		Gop ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Satpara ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·25
		Pipli ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cuttack ...	Jagatsingpur		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·40
		Banki ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10
		Cuttack ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·41
		Kendrapara .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·05
		Jajpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·45
		Dharmsalla ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·83
		Salipur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·52
		Pal Lahara ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Balasore ...	Akhyapada ...	...	...	...	...	...	...	...	...	0·21	...	...	...	...	...	...	...	...	...	...	0·59
		Chandbali ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·55
		Bhadrak ...	...	...	...	...	...	...	...	...	0·21	...	...	...	...	...	...	...	...	...	...	0·57
		Soro ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Balasore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jellasore ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Baripodah ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
SOUTH-WEST BENGAL.	Midnapore	Contai ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Tamluk ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Midnapore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ghatal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kukrahaty ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·09
		Garhbeta ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	...
	24 Parganas...	Saugor Island	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Diamond Harbour.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Canning Town	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Alipore (Observatory)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Barrackpore...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dum-Dum ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Barasat ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Basirhat ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Howrah ..	Howrah ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mohesreka ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ulubaria ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hooghly ...	Serampore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·06	...	...
		Hooghly ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·04	...	...
		Jahanabad ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·01	...	...
	Nadia ..	Ranaghat ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Krishnagar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·02	...	...
		Chuadanga ..			...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·07	...	...
		Meherpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kushtia .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·04	...	...
	Khulna	Satkhira ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bagerhat ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Khulna ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Nakipur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·08	...
		Rampal ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·98	...
	Jessore ...	Narail ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·21	...
		Jessore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·08	0·16	0·02
		Jhenidah ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·06	...
		Magura .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·02	...
		Bangaon ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Burdwan ..	Kalna .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Burdwan ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·06	...	0·02
		Katwa ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·13	...	...
		Raniganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·02	...	...
		Mankur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bankura .	Bankura ..	...	...	...	...	...	...	...	0·02	...	...	...	...	...	...	...	...	...	0·60	...	0·04
		Vishnupur ...	...	...	...	...	...	...	...	0·03	...	...	...	...	...	...	...	...	...	0·13	...	...
		Malmra ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·13	...	...
		Khatra ...		...	...	...	...	...	...	0·33	...	...	...	...	...	...	...	...	...	0·19	...	...
		Indas ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	...	...
		Kotalpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Anda .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·11	...	...
		Gangajalghati	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·20	...	...
		Raipur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sonamukhi ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Birbhum ..	Suri ..	...	...	...	...	...	...	0·01	0·04	...	...	...	...	...	...	...	...	...	0·13	...	...
		Hetampur ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·13	...	0·01
		Rampur Hât	...	...	...	...	...	...	0·03	...	...	...	...	...	...	...	...	...	...	0·04	...	...
		Bolpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Murarai ...	...	...	...	...	...	...	0·07	...	...	...	...	...	...	...	...	...	...	...	...	...
	Murshidabad	Kandi ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·19	...	...
		Berhampore..	...	...	...	...	...	...	0·09	...	...	...	...	...	...	...	...	...	...	0·24	...	...
		Lalbagh ..	...	...	...	...	...	...	0·03	...	...	...	...	...	...	...	...	...	...	0·12	...	...
		Azimganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jangipur ...	...	...	...	...	...	...	0·07	...	...	...	...	...	...	...	...	...	0·03	...	...	...
		Lalgola	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Akhriganj ...	.	.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·12	...	...
		Patkabari ..	.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
NORTH BENGAL.	Pabna ..	Pabna ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·29	...	...
		Sirajganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·18	...	...
	Bogra ..	Sherpur ...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·27	...
		Nowkhilla ..	...	...	...	...	...	...	0·09	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bogra ...	...	...	...	...	...	...	0·04	...	...	...	...	...	...	...	...	...	...	...	...	...
		Panchbibi ..	...	...	.	...	...	...	...	0·11	...	...	...	...	...	...	...	...	...	...	...	...
	Rajshahi	Boalia ...	...	...	...	...	...	...	0·02	...	...	...	...	...	...	...	...	...	...	0·06	...	...
		Nator ...	...	...	...	...	...	...	0·02	...	...	...	...	...	...	...	...	...	...	0·03	0·37	...
		Naogaon ...	...	...	...	...	...	...	0·23	...	...	...	...	...	...	...	...	...	...	...	...	...
		Lalpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·14	...	...
		Manda ...	...	.	...	...	.	...	0·05	...	...	...	...	...	...	...	...	...	...	...	...	...

in Bengal in January 1893.

21	22	23	24	25	26	27	28	29	30	31	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 16th October 1892 to 31st January 1893.	Average rainfall from 16th October to 31st January.	Station.	District.	Meteorological division.
0·68	1·50	...	...	...	...	...	...	...	...	...	2	0·50	2·18	0·25	1·50	12·21	7·77	Puri ...	Puri ...	ORISSA.
...	0·80	...	...	...	...	...	...	...	...	...	2	0·60	1·00	0·27	0·80	5·72	5·35	Khurda.		
0·71	0·85	...	...	...	...	...	...	...	...	...	2	0·50	1·57	0·08	0·85	7·36	6·94	Banpur.		
0·93	2·22	0·09	...	...	...	...	...	...	...	...	3	0·85	3·56	0·62	2·22	11·89	8·18	False Point.		
0·70	...	...	...	...	...	...	...	...	...	...	1	?	0·70	?	0·70	8·79	?	*Gop.*		
...	0·66	...	...	...	...	...	...	...	...	...	1	?	0·66	?	0·66	8·54	?	*Satpara.*		
0·06	1·22	...	...	...	...	...	...	...	...	...	2	?	1·53	?	1·22	6·61	?	*Pipli*		
2·12	0·02	...	...	...	...	0·06	...	...	...	...	2	0·58	2·60	0·35	2·12	11·00	4·69	Jagatsingpur.	Cuttack.	
0·17	1·22	...	...	...	...	...	...	...	...	...	3	0·63	1·49	0·22	1·22	5·15	5·00	Banki.		
.	1·35	...	...	...	...	...	...	...	...	...	2	0·75	1·76	0·34	1·35	10·25	4·57	Cuttack.		
0·01	1·16	0·02	...	...	...	0·01	...	...	...	...	2	0·60	1·85	0·42	1·16	7·94	4·86	Kendrapara.		
...	0·92	0·05	...	...	...	...	...	...	...	...	2	0·74	1·42	0·42	0·92	4·84	3·84	Jajpur.		
0·70	..	...	...	...	...	...	...	...	...	...	2	?	1·53	?	0·83	5·18	?	*Dharmsala.*		
...	0·14	...	...	...	...	...	...	...	...	...	2	?	0·96	?	0·82	6·14	?	*Salipur.*		
...	0·72	...	...	...	...	...	...	...	...	...	1	?	0·72	?	0·72	3·55	?	Pal Lahara.		
...	0·43	...	...	...	...	...	...	...	...	...	3	?	1·23	?	0·59	4·42	?	Akhyapada.	Balasore.	
...	0·49	...	...	...	...	...	...	...	...	...	2	0·75	1·04	0·51	0·55	5·75	4·72	Chandbali		
...	0·62	...	...	...	...	0·13	...	...	...	...	4	0·67	1·53	0·39	0·62	7·48	3·62	Bhadrak.		
0·50	...	...	...	...	0·60	...	...	...	...	...	2	0·75	1·30	0·25	0·80	7·78	2·91	Soro		
...	0·53	0·02	...	...	0·27	...	...	...	...	...	2	0·75	0·82	0·49	0·53	10·84	4·20	Balasore.		
0·30	...	...	...	...	...	...	...	...	...	...	1	0·87	0·30	0·72	0·30	4·63	2·15	Jellasore.		
0·18	...	...	...	...	0·10	...	...	...	...	...	2	0·82	0·28	0·28	0·18	8·17	2·41	Baripada		
...	0·44	...	...	...	..	...	...	...	...	...	1	0·60	0·44	0·28	0·44	10·68	5·91	Contai ...	Midnapore ...	SOUTH-WEST BENGAL.
...	0·18	...	...	...	0·27	...	...	...	...	...	2	0·74	0·45	0·38	0·27	5·80	3·26	Tamluk.		
..	0·13	...	...	...	0·23	...	...	...	...	...	2	1·09	0·36	0·61	0·23	8·18	3·09	Midnapore.		
...	0·18	...	...	...	0·30	...	...	...	...	...	2	0·92	0·48	0·51	0·30	8·77	1·42	Ghatal.		
...	0·46	...	...	...	0·85	...	...	...	...	...	2	?	1·40	?	0·85	4·91	?	*Kukrahaty.*		
...	0·20	...	...	...	0·40	...	...	...	...	...	3	?	0·70	?	0·40	4·01	?	*Garhbeta.*		
...	0·29	0·03	...	...	0·56	...	...	...	...	...	2	0·90	0·88	0·37	0·56	15·54	5·91	Saugor Island	24-Parganas.	
...	0·40	...	...	...	0·27	...	...	...	...	...	2	1·05	0·67	0·64	0·40	7·30	3·48	Diamond Harbour.		
...	0·31	...	...	...	0·38	...	...	...	...	...	2	?	0·68	?	0·38	9·02	?	*Canning Town.*		
...	0·16	0·04	...	...	0·50	...	...	...	...	...	2	0·84	0·70	0·72	0·50	5·55	3·36	Alipore (Observatory.)		
...	0·20	...	...	...	0·51	...	...	...	...	...	2	0·95	0·71	0·45	0·51	8·50	2·56	Barrackpore.		
...	0·37	...	...	...	0·46	...	...	...	...	...	2	1·05	0·83	0·53	0·46	4·61	2·79	Dum-Dum.		
...	0·32	...	...	...	0·70	...	...	...	...	...	2	1·21	1·02	0·59	0·70	6·80	3·08	Barasat.		
...	...	0·13	...	...	0·28	...	...	...	...	...	2	0·79	0·41	0·41	0·28	6·07	2·81	Basirhat.		
...	...	0·19	...	...	0·10	...	...	...	...	...	2	0·95	0·29	0·59	0·19	3·38	3·10	Howrah ..	Howrah.	
...	0·18	...	...	...	0·06	...	...	...	...	...	1	0·86	0·24	0·51	0·18	4·26	2·17	Mohesreka		
...	0·22	...	...	...	0·08	...	...	...	...	...	1	?	0·30	?	0·22	4·10	?	*Uluberia.*		
...	0·16	...	...	...	0·61	...	...	...	...	...	2	1·00	0·83	0·42	0·61	9·46	2·38	Serampore ...	Hooghly.	
..	0·22	...	...	...	0·30	...	...	...	...	...	2	0·90	0·56	0·38	0·30	8·37	2·28	Hooghly.		
...	0·14	...	...	...	0·27	...	...	...	...	...	2	0·89	0·45	0·39	0·27	5·42	2·53	Jahanabad.		
...	0·08	...	...	...	0·21	...	...	...	...	...	1	0·63	0·29	0·46	0·21	6·25	2·49	Ranaghat ...	Nadia.	
...	0·05	...	...	...	0·25	...	...	...	...	...	1	0·80	0·32	0·30	0·25	6·28	1·73	Krishnagar.		
...	0·04	0·02	...	...	0·22	...	...	...	...	...	1	0·79	0·35	0·31	0·22	?	2·39	Chuadanga.		
...	...	..	...	...	0·30	...	...	...	...	...	1	0·79	0·30	0·31	0·30	2·30	2·09	Meherpur.		
...	..	...	...	...	0·45	0·05	...	...	...	...	1	0·90	0·54	0·38	0·45	3·47	3·04	Kushtia.		
...	0·15	...	...	...	0·15	...	...	...	...	...	2	0·95	0·30	0·40	0·15	5·24	2·85	Satkhira	Khulna.	
...	...	...	...	...	..	...	...	...	...	...	Nil	0·94	Nil	0·69	Nil	8·65	3·05	Bagerhat.		
...	...	0·03	...	...	0·11	...	...	...	...	...	1	1·39	0·14	0·60	0·11	7·34	3·24	Khulna.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	0·08	?	0·08	5·52	?	*Nakipur.*		
...	...	...	...	...	...	0·13	...	...	...	...	2	?	1·09	?	0·96	6·75	?	*Rampal.*		
...	...	0·07	...	...	0·10	...	...	...	...	...	2	1·11	0·38	0·68	0·21	9·48	3·12	Narail ...	Jessore.	
...	0·06	0·04	...	...	0·16	...	...	...	...	...	2	0·93	0·52	0·61	0·16	14·24	3·31	Jessore.		
...	0·07	...	...	...	0·11	...	...	...	...	...	1	1·00	0·24	0·34	0·11	8·81	2·71	Jhenidah		
...	0·06	0·02	...	...	0·14	...	...	...	...	...	1	0·72	0·24	0·32	0·14	7·31	2·09	Magura.		
...	0·04	...	...	...	0·25	...	...	...	...	...	1	0·65	0·29	0·35	0·25	7·77	2·80	Bangaon		
...	0·09	...	...	...	0·29	...	...	...	...	...	1	0·63	0·38	0·40	0·29	7·77	2·32	Kalna ...	Burdwan.	
...	0·07	...	...	...	0·66	...	...	...	...	...	1	0·75	0·81	0·32	0·66	5·87	2·70	Burdwan.		
...	0·02	...	...	...	0·31	...	...	...	...	...	2	0·79	0·46	0·45	0·31	4·27	2·62	Katwa.		
...	0·02	...	...	...	0·41	...	...	...	...	...	1	1·05	0·48	0·33	0·41	2·14	1·86	Raniganj		
...	...	...	...	...	0·39	...	...	...	...	...	1	?	0·39	?	0·39	2·12	?	*Mankur.*		
...	0·05	...	...	...	0·46	...	...	...	...	...	2	1·10	1·17	0·37	0·60	5·67	2·57	Bankura	Bankura.	
...	0·21	...	...	...	0·72	...	...	...	...	...	3	1·00	1·09	0·38	0·72	6·51	2·13	Vishnupur.		
...	0·05	...	...	...	0·31	...	...	...	...	...	2	0·89	0·49	0·33	0·31	1·82	2·25	Malara		
...	0·10	...	...	...	0·14	...	...	...	...	...	4	1·11	0·76	0·44	0·33	7·35	2·89	Khatra.		
...	0·12	...	...	...	0·27	...	...	...	...	...	3	?	0·49	?	1·27	5·91	?	*Indus.*		
...	...	...	...	...	0·56	...	...	...	...	...	1	?	0·56	?	0·56	4·12	?	*Kotalpur.*		
...	...	...	...	...	0·42	...	...	...	...	...	2	?	0·53	?	0·42	5·33	?	*Anda.*		
...	...	...	...	...	0·37	...	...	...	...	..	2	?	0·57	?	0·37	2·37	?	*Gangajalghati.*		
...	...	...	...	...	0·48	...	...	...	...	...	1	?	0·48	?	0·48	8·84	?	*Raipur.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	6·21	?	*Sonamukhi.*		
...	0·01	...	...	...	0·71	...	...	...	...	...	2	0·95	0·99	0·45	0·71	2·51	2·37	Suri	Birbhum.	
...	0·03	...	...	...	0·81	...	...	...	...	...	1	1·13	0·88	0·51	0·81	5·38	1·46	Hetampur.		
...	...	...	...	0·08	0·47	...	...	...	...	...	1	1·12	0·62	0·53	0·47	4·18	2·40	Rampur Hât.		
...	...	...	...	...	0·41	...	...	...	...	...	1	?	0·41	?	0·41	2·66	?	*Bolpore*		
...	...	...	...	0·09	0·48	...	...	...	...	...	1	?	0·64	?	0·48	1·54	?	*Morarai*		
...	...	...	...	...	0·80	...	...	...	...	...	2	0·93	0·99	0·39	0·80	3·40	2·02	Kandi ...	Murshidabad.	
...	...	0·01	...	...	0·50	...	...	...	...	...	2	1·05	0·84	0·54	0·50	2·31	2·32	Berhampore.		
...	...	...	...	...	0·56	...	...	...	...	...	2	0·57	0·71	0·20	0·56	3·72	1·85	Lalbagh.		
...	...	...	...	...	0·35	...	...	...	...	...	1	0·82	0·35	0·56	0·35	1·89	2·14	Azimganj.		
...	...	...	...	0·05	0·42	...	...	...	...	...	1	1·00	0·57	0·44	0·42	1·97	2·14	Jangipur.		
...	...	...	...	...	0·55	...	...	...	...	...	1	1·06	0·55	0·55	0·55	1·70	2·52	Lalgola.		
...	...	...	...	...	0·27	...	...	...	...	...	2	?	0·39	?	0·27	1·34	?	*Akhriganj.*		
...	...	...	...	...	0·50	...	...	...	...	...	1	?	0·50	?	0·50	2·80	?	*Patkabari.*		
...	...	0·05	...	...	0·32	0·10	...	...	...	...	3	0·90	0·76	0·36	0·32	2·71	2·30	Pabna ..	Pabna ...	NORTH BENGAL.
...	...	0·04	...	...	0·23	...	...	...	...	...	2	1·11	0·45	0·45	0·23	0·72	2·85	Sirajganj.		
...	...	...	...	...	0·31	...	...	...	...	...	2	0·85	0·58	0·36	0·31	1·36	2·79	Sherpur ..	Bogra.	
...	...	0·03	...	...	0·24	...	...	...	...	...	1	1·15	0·36	0·36	0·24	1·45	2·80	Nowkhilla.		
...	...	...	...	...	0·22	...	...	...	...	...	1	0·85	0·26	0·45	0·22	1·16	2·44	Bogra.		
...	...	...	...	...	...	...	...	...	...	...	1	0·77	0·11	0·32	0·11	1·02	1·71	Panchbibi.		
...	0·01	...	...	...	0·22	...	...	...	...	...	1	0·80	0·31	0·40	0·22	1·53	2·01	Boalia ..	Rajshahi.	
...	0·02	...	...	...	0·20	...	...	...	...	...	2	1·05	0·64	0·61	0·37	1·01	2·60	Nator.		
...	...	...	...	...	0·25	...	...	...	...	...	2	1·14	0·48	0·66	0·25	0·45	1·44	*Naogaon.*		
...	...	...	...	...	0·26	...	...	...	...	...	2	?	0·19	?	0·26	[illegible]	[illegible]	[illegible]		
...	...	..	...	..	0·25	...	...	...	..	...	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		

Table of Rainfall recorded at Stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
NORTH BENGAL *concld.*	Malda ...	Malda ...	...	...	...	...	...	...	0·01	0·06	...	...	...	...	...	...	...	...	...	0·01	...	...
		Chanchal ...	...	...	...	...	...	...	0·06	0·10	...	...	...	...	...	...	...	...	...	...	...	...
		Gajol ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sibganj ...	...	...	...	...	...	...	0·15	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dinajpur ...	Mohadebpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Churamon ...	...	...	...	...	...	...	0·06	0·23	...	...	...	...	...	...	...	...	...	...	...	...
		Raiganj ...	...	...	...	...	...	...	0·84	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dinajpur ...	...	...	...	...	...	...	0·23	0·21	...	...	...	...	...	...	...	...	...	...	...	...
		Baloorghat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Thakurgaon...	...	...	...	...	...	...	0·21	...	...	...	...	...	...	...	...	...	...	...	...	...
	Rangpur ...	Bhawaniganj (*Gyabanda*).	...	...	...	...	...	...	0·05	...	...	...	...	...	...	...	...	...	...	...	...	...
		Rangpur ...	...	...	...	...	...	...	0·37	0·43	...	...	...	...	...	...	...	...	...	...	...	...
		Kurigram ..	...	...	...	...	...	...	0·22	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bagdogra ... (*Nilphamari*)	...	...	...	...	...	...	0·19	0·18	...	...	...	...	...	...	...	...	...	...	...	...
		Ulipur ...	...	...	...	...	...	...	0·10	0·20	...	...	...	...	...	...	...	...	...	...	...	...
	Jalpaiguri ...	Jalpaiguri ..	...	...	...	...	...	...	0·04	0·05	...	...	...	...	...	...	...	...	...	...	...	...
		Alipore Duar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Falacotta ...	...	...	...	...	...	...	...	0·13	...	...	...	...	...	...	...	...	...	...	...	...
		Dehiganj ...	...	...	...	...	...	...	0·20	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bhagatpur (*Nagrakatta*).	...	...	...	...	...	...	0·23	0·13	0·21	...	...	...	...	...	...	0·25	...	0·50	0·10	...
	Kuch Bihar ...	Dinhatta ...	...	...	...	...	...	...	0·01	0·12	...	...	...	...	...	...	...	...	...	...	0·37	...
		Kuch Bihar ...	...	...	...	...	...	...	...	0·21	...	...	...	...	...	...	...	...	...	...	...	...
		Mickliganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·27	...
		Mathabhanga	...	...	...	...	...	...	0·02	0·10	...	...	...	...	...	...	...	...	...	...	0·02	...
	Darjeeling ...	Buxa ...	...	...	...	...	...	...	0·02	...	0·23	...	...	...	...	...	...	0·20	0·05	0·98	1·16	...
		Siliguri ...	...	...	...	...	...	...	...	0·14	...	...	...	...	...	...	0·06	0·07	...	...	0·06	...
		Darjeeling ...	...	...	...	...	...	...	0·06	...	...	...	...	...	...	...	...	0·03	...	...	...	...
		Kalimpong ...	...	...	...	...	...	...	0·08	0·15	0·04	...	...	...	...	...	...	...	...	0·04	...	...
		Kurseong ...	...	...	...	...	...	...	...	0·20	...	...	...	...	...	...	0·12	0·05	...	...	0·03	...
EAST BENGAL	Chittagong ...	Cox's bazar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chittagong ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·03	...
		Kutubdia ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Satkanya ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kodali ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Fenoa ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·51
		Mirsarai ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·01	0·58
	Chittagong Hill Tracts.	Rangamati ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·92
		Bandarban ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Backergunge...	Patuakhali ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·95	...
		Pirojpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·06	...
		Barisal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gournaddi ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bhola ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·15	...
		Doulatkhan ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bauphal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·18	0·24	...
	Noakhali ...	Noakhali ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·13	0·02
		Fenny ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·32	...	...
		Harishpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·08	0·13
		Ramganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Faridpur ..	Madaripur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Faridpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Goalundo ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dacca ..	Munshiganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dacca ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·23	...	...
		Narainganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·02	...	...
		Manikganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·03	...	...
		Joydebpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·17	...	...
	Hill Tippera	Agartola ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·19	...	...
	Tippera ...	Comilla ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·23	...	...
		Chandpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·18	...	...
		Brahmanbaria	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·20	...	...
		Ramchandrapur.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·01	...	...
		Nasirnagar...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·24	...	...
		Daudkandi ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	...	...
		Kasba ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Laksham ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·31	...	...
	Mymensingh	Kishoreganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·17	0·27	...
		Atia (*Tangail*)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·15	...	...
		Mymensingh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·06	...	...
		Jamalpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Netrokona ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·54	...
		Subornakhali	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Durgapur ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sherpur Town	...	...	...	...	...	...	...	0·06	...	...	...	...	...	...	...	...	...	...	...	...
		Dewanganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
[N]ORTH BIHAR	Purnea ..	Kishanganj ...	...	...	...	...	...	...	0·24	...	...	...	...	...	...	...	...	...	...	...	...	...
		Araria ...	...	...	...	...	...	...	0·09	...	...	...	...	...	...	...	...	...	...	0·09	...	...
		Purnea ...	...	...	...	...	...	...	0·43	0·09	...	...	...	...	...	...	...	...	...	...	...	...
		Gondwara (*Korah*).	...	...	...	...	...	...	0·34	0·02	...	...	...	...	...	...	...	...	...	0·04	...	...
		Barsoe ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Forbesgunj ...	...	...	...	...	...	...	0·11	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kaliaganj ..	...	...	...	...	...	...	...	0·05	...	...	...	...	...	...	...	...	...	...	...	...
	Bhagalpur ...	Madhipura ...	...	...	...	...	...	...	0·35	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bongaon (Syfabad).	...	...	...	...	...	...	0·60	...	...	...	...	...	...	...	...	...	...	...	...	...
		Supaul ...	...	...	...	...	...	...	0·67	...	...	...	...	...	...	...	...	...	...	...	...	...
		Protabganj ...	...	...	...	...	...	...	0·16	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bhagalpur ...	...	...	...	...	...	...	0·04	...	...	...	...	...	...	...	...	...	0·02	0·01	...	...
		Banka ...	...	...	...	...	...	...	0·07	...	...	...	...	...	...	...	...	...	0·08	...	...	...
		Kolgong ...	...	...	...	...	...	...	0·40	...	...	...	...	...	...	...	...	...	0·02	0·01	...	...
	Darbhanga ...	Tajpur ..	...	...	...	...	...	...	0·22	...	...	...	...	...	...	...	...	...	...	0·15	...	...
		Darbhanga ...	...	...	...	...	...	...	0·07	...	...	...	...	...	...	...	...	...	0·03	0·08	...	...
		Madhubani ..	...	...	...	...	...	...	0·63	...	...	...	...	...	...	...	...	...	...	...	...	...
		B[illegible]era ...	...	...	...	...	...	...	0·60	...	...	...	...	...	...	...	...	...	0·27	...	...	...
		Roshera ...	...	...	...	...	...	...	0·30	...	...	...	...	...	...	...	...	0·05	0·09	...	...	...

in Bengal in January 1893—*continued.*

21	22	23	24	25	26	27	28	29	30	31	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 16th October 1892 to 31st January 1893.	Average rainfall from 16th October to 31st January.	Station.	District.	Meteorological division.
...	...	...	...	0·06	0·01	...	...	...	...	...	Nil	0·90	0·15	0·43	0·06	1·47	2·41	Malda	Malda ..	NORTH BENGAL *concld.*
...	0·05	...	...	0·10	0·05	...	...	...	...	...	2	0·83	0·31	0·51	0·10	0·62	1·46	Chanchal.		
...	...	...	...	...	0·04	...	...	...	...	...	Nil	?	0·04	?	0·04	0·38	?	*Gajol.*		
...	...	...	...	0·05	0·56	...	...	...	...	...	2	?	0·76	?	0·56	1·36	?	*Sibganj.*		
...	...	...	...	...	0·10	...	...	...	...	...	1	1·00	0·10	0·57	0·10	0·61	1·63	Mohadebpur .	Dinajpur.	
...	...	...	...	0·09	...	...	...	...	...	...	1	0·70	0·40	0·57	0·25	0·69	1·46	Churamon.		
...	...	...	...	...	0·21	...	...	...	...	...	2	1·08	1·05	0·57	0·84	1·56	1·23	Raiganj.		
...	...	...	...	0·03	0·08	...	...	..	...	...	2	0·90	0·60	0·40	0·23	0·88	2·51	Dinajpur.		
...	...	...	...	...	0·07	...	...	...	...	...	Nil	1·00	0·07	0·55	0·07	0·62	1·71	Baloorghat.		
...	...	...	...	0·19	0·16	...	...	...	..	...	3	?	0·56	?	0·21	0·56	?	*Thakurgaon.*		
...												0·84		0·35			2·27	Bhawaniganj (*Gyabanda*).	Rangpur.	
...	...	...	...	0·19	0·12	...	...	...	...	...	4	0·75	1·11	0·53	0·43	4·03	3·42	Rangpur.		
...	...	...	...	0·14	0·09	...	...	...	...	...	2	0·83	0·45	0·51	0·22	0·66	1·83	Kurigram.		
...	...	...	...	0·15	0·14	...	...	...	...	...	4	0·86	0·66	0·49	0·19	1·39	1·89	Bagdogra. (*Nilphamari.*)		
...	...	...	...	...	0·10	...	...	...	...	...	3	?	0·40	?	0·20	0·40	?	*Ulipur.*		
...	...	...	...	0·18	0·25	0·03	...	...	..	..	2	1·21	0·55	0·55	0·25	1·68	3·49	Jalpaiguri ...	Jalpaiguri.	
...	...	...	...	0·30	...	...	...	...	..	...	1	?	0·39	?	0·30	2·20	?	*Alipore Duar.*		
...	...	...	...	0·41	...	...	...	...	...	...	2	?	0·54	?	0·41	1·65	?	*Falacotta.*		
...	...	...	...	0·27	0·18	..	...	...	...	...	3	?	0·65	?	0·27	1·25	?	*Debiganj.*		
...	...	...	...	...	0·38	0·22	...	...	...	...	8	?	2·02	?	0·59	8·20	?	*Bhagatpur (Nagrakatta).*		
...	...	...	...	0·16	0·18	...	...	...	...	...	4	1·00	0·84	0·68	0·37	1·28	2·57	Dinhatta ...	Kuch Bihar.	
...	...	...	...	0·08	0·29	0·04	...	...	..	...	2	0·91	0·53	0·43	0·21	1·73	2·29	Kuch Bihar.		
...	...	...	...	0·17	0·18	0·16	...	...	...	...	4	0·80	0·78	0·56	0·27	1·60	2·29	Mickliganj.		
...	...	0·05	...	0·10	0·20	0·05	...	...	...	...	3	0·90	0·54	0·48	0·20	1·57	2·17	Matabhanga.		
...	...	1·69	...	0·09	0·28	0·58	...	...	...	...	7	2·70	5·28	1·14	1·69	14·63	6·20	Buxa ...	Darjeeling.	
...	...	0·04	...	0·22	0·42	0·04	...	...	...	...	3	1·43	1·05	0·82	0·42	2·91	1·80	Siliguri.		
...	...	0·05	...	0·06	0·44	..	...	...	...	...	1	1·85	0·64	0·64	0·44	1·56	5·18	Darjeeling.		
...	...	...	...	0·21	0·45	...	...	...	...	...	3	2·22	0·97	1·24	0·45	2·43	2·11	Kalimpong.		
..	...	...	...	0·31	...	0·30	0·21	...	...	..	5	?	1·22	?	0·31	3·18	?	Kurseong.		
...	...	...	...	...	...	0·10	...	...	...	...	1	0·95	0·10	0·77	0·10	13·15	7·07	Cox's Bazar .	Chittagong ..	EAST BENGAL.
...	...	0·02	...	...	...	..	...	...	...	...	Nil	0·90	0·05	0·63	0·03	12·55	4·65	Chittagong.		
...	...	..	...	...	...	0·04	...	...	...	...	Nil	?	0·04	?	0·04	19·17	?	*Kutubdia.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	8·80	?	*Satkanya.*		
...	...	...	...	...	...	...	...	...	0·10	...	1	?	0·10	?	0·10	?	?	Kodali.		
...	...	...	...	...	...	...	...	...	...	...	1	?	0·51	?	0·51	?	?	Fenoa.		
...	...	0·01	...	...	...	...	...	...	...	...	1	?	0·60	?	0·58	?	?	Mirsarai.		
...	...	...	...	...	...	...	...	...	...	...	1	1·10	1·92	0·59	1·92	8·61	5·18	Rangamati ...	Chittagong Hill Tracts.	
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	8·70	?	*Bandarban* ...		
...	0·05	...	...	...	...	0·04	...	...	...	...	1	1·29	1·04	0·79	0·95	8·98	4·81	Patuakhali ...	Backergunge.	
...	...	...	...	...	0·13	...	...	...	...	...	1	1·11	0·19	0·71	0·13	8·05	4·25	Pirojpur.		
...	...	...	...	...	...	...	...	...	...	...	Nil	1·30	Nil	0·77	Nil	7·39	4·27	Barisal.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	5·83	?	*Gournaddi.*		
...	...	...	...	...	...	...	...	...	...	...	1	1·17	0·15	0·58	0·15	8·33	4·31	Bhola.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	11·60	?	*Doulatkhan.*		
...	...	...	...	...	...	...	...	...	...	...	2	?	0·42	?	0·24	8·91	?	*Bauphal.*		
...	...	...	...	...	...	...	...	...	...	...	1	1·10	0·15	0·62	0·13	16·34	5·03	Noakhali ...	Noakhali.	
...	...	...	...	...	...	...	..	...	...	...	1	1·08	0·32	0·79	0·32	14·98	6·49	Fenny.		
...	...	...	...	...	...	...	...	...	...	...	1	?	0·21	?	0·13	19·67	?	*Harishpur.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	10·73	?	*Ramganj.*		
...	...	...	...	...	0·02	...	...	...	...	...	Nil	1·05	0·02	0·61	0·02	6·11	2·54	Madaripur ..	Faridpur.	
...	...	0·03	...	...	0·16	...	...	...	...	...	1	0·85	0·19	0·34	0·16	10·89	2·71	Faridpur.		
...	...	...	...	...	0·40	...	...	...	...	...	1	1·11	0·40	0·40	0·40	5·32	2·63	Goalundo.		
...	...	...	...	...	0·17	...	...	..	...	...	1	1·41	0·17	0·54	0·17	7·26	3·67	Munshiganj ...	Dacca.	
...	...	...	...	...	0·31	...	...	...	...	...	2	0·85	0·54	0·33	0·31	12·05	2·13	Dacca.		
...	...	...	...	...	0·11	...	...	...	...	...	1	1·43	0·13	0·39	0·11	10·13	4·13	Naraingan j.		
...	...	0·03	...	...	0·44	...	...	...	...	...	1	1·24	0·50	0·44	0·44	6·93	2·59	Manikganj		
...	...	...	...	...	0·20	0·11	...	...	...	...	3	?	0·48	?	0·20	4·14	?	*Joydebpur.*		
...	...	...	...	...	0·30	0·28	...	...	...	...	3	1·30	0·77	0·05	0·30	7·41	4·06	Agartola ...	Hill Tippera.	
...	...	...	...	...	0·05	0·24	...	...	...	...	2	1·53	0·52	0·68	0·24	9·22	3·23	Comilla ...	Tippera.	
...	...	0·06	...	...	0·02	...	...	...	...	...	1	1·18	0·26	0·53	0·18	8·01	2·92	Chandpur.		
...	...	...	...	...	0·22	0·15	...	...	...	...	3	1·42	0·57	0·77	0·22	10·94	3·23	Brahmanbaria.		
...	...	...	...	...	0·15	...	...	...	...	...	1	?	0·16	?	0·15	8·13	?	*Ramchandrapur.*		
...	...	...	...	...	0·10	0·25	...	...	...	...	3	?	0·50	?	0·25	11·06	?	*Nasirnagar.*		
...	...	...	...	...	0·15	...	...	...	...	...	2	?	0·25	?	0·15	4·70	?	*Daudkandi.*		
...	...	...	...	...	0·30	...	...	...	...	...	1	?	0·30	?	0·30	12·69	?	*Kasba.*		
...	...	...	...	...	...	...	...	...	...	...	1	?	0·31	?	0·31	9·17	?	*Laksham.*		
...	...	...	...	...	0·17	...	...	...	...	...	3	1·26	0·61	0·57	0·27	6·55	2·68	Kishoreganj.	Mymensingh	
...	...	...	...	...	0·28	0·05	...	...	..	...	2	1·00	0·48	0·43	0·28	3·24	2·69	Atia (*Tangail*).		
...	...	0·03	...	...	0·27	0·21	...	...	...	...	2	0·80	0·57	0·38	0·27	1·18	3·02	Mymensingh.		
...	...	...	...	...	0·29	...	...	...	...	...	1	0·89	0·29	0·13	0·29	2·03	2·80	Jamalpur.		
...	...	...	...	...	0·27	...	...	...	...	...	2	0·88	0·81	0·19	0·54	4·08	2·92	Netrokona.		
...	...	...	...	...	0·28	...	...	...	...	...	1	?	0·28	?	0·28	0·69	?	*Subornakhali.*		
...	...	...	...	...	0·50	0·33	...	...	...	...	2	?	0·83	?	0·50	2·47	?	*Durgapur.*		
...	...	...	...	...	0·19	...	...	...	...	...	1	?	0·25	?	0·19	3·51	?	*Sherepur Town*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	0·78	?	*Dewanganj.*		
...	...	...	...	0·22	0·26	...	...	...	...	...	3	1·06	0·72	0·63	0·26	0·70	1·98	Kishanganj ...	Purnea ...	NORTH BIHAR.
...	...	...	...	0·28	0·15	...	...	...	...	...	2	0·89	0·61	0·18	0·28	0·61	1·84	Araria.		
...	...	...	...	0·25	0·29	...	...	...	...	...	3	0·84	1·06	0·46	0·43	1·09	2·32	Purnea.		
...	...	...	0·90	0·16	...	...	...	...	...	...	3	?	1·46	?	0·90	1·46	?	*Gondwara (Korah).*		
...	...	...	...	...	..	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Baisee.*		
...	...	...	...	0·27	0·20	...	...	...	...	...	3	?	0·58	?	0·27	0·58	?	*Forbesganj.*		
...	...	...	...	0·20	0·10	...	...	..	...	...	2	?	0·35	?	0·20	0·35	?	*Kaliaganj.*		
...	...	...	...	0·35	0·25	...	...	...	...	...	3	1·21	0·95	0·47	0·35	0·95	2·00	Madhipura .	Bhagalpur.	
...	...	...	...	...	0·60	...	...	...	...	...	2	?	1·10	?	0·60	1·10	?	Bongaon. (Syfabad).		
...	...	...	...	0·64	0·16	...	...	...	...	...	3	1·17	1·47	0·46	0·67	1·47	1·63	Supaul.		
...	...	...	...	0·57	...	...	...	...	...	...	2	?	0·73	?	0·57	0·73	?	*Pratabganj.*		
...	...	...	...	0·21	0·01	...	...	...	...	...	1	1·30	0·29	0·48	0·21	0·78	1·73	Bhagalpur ...		
...	...	...	...	0·35	0·06	...	...	...	...	...	1	1·58	0·56	0·59	0·35	2·17	2·27	Banka.		
...	0·08	...	...	0·13	0·01	...	...	...	..	...	2	?	0·65	?	0·40	2·19	?	*Kotgong.*		
...	...	...	...	0·47	...	...	...	...	...	...	3	1·21	0·84	0·64	0·47	0·84	1·61	Tajpur ...	Darbhanga.	
...	...	...	•	0·81	0·38	...	...	0·02	...	...	3	1·20	1·98	0·53	0·81	2·00	1·59	Darbhanga.		
...	...	...	...	1·04	...	...	...	...	...	...	2	1·22	1·67	0·71	1·04	1·67	1·60	Madhubaani		
...	...	...	...	1·00	...	...	...	...	...	...	3	?	1·77	?	1·00	1·77	?	*Bahera.*		
...	...	...	...	0·20	...	...	...	...	...	...	2	?	[illegible]	?	[illegible]	[illegible]	?	*Roshera.*		

Table of Rainfall recorded at Stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
NORTH BIHAR—*concld.*	Muzaffarpur	Sitamarhi ..	...	...	...	...	0·03	...	0·12	...	...	...	...	...	...	...	...	...	0·04	...	...	...
		Muzaffarpur	...	...	...	...	...	...	0·53	...	...	...	...	...	...	...	...	...	...	...	...	...
		Hajipur ...	...	...	...	...	...	...	0·20	...	...	...	...	...	...	...	...	...	0·05	...	...	...
		Paru	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mahua (Chitwara).	...	...	...	...	...	...	0·23	...	...	...	...	...	...	...	...	...	0·05	0·24	...	...
		Sruhar ...	...	...	...	...	...	...	0·10	...	...	...	...	...	...	...	...	...	...	...	...	...
		Pupri ...	...	...	...	...	...	...	0·55	...	...	...	...	...	...	...	...	...	...	...	...	...
	Champaran ...	Motihari ...	...	...	...	...	0·03	...	0·12	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bettiah ..	...	...	...	...	0·04	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bagaha ...	...	...	...	...	0·19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Burhurwa ..	...	...	...	...	0·08	...	0·05	...	...	...	...	...	...	...	...	...	0·08	...	...	...
	Saran ...	Gopalganj ..	...	...	...	...	0·10	...	0·15	...	...	...	...	...	...	...	...	...	0·04	0·07	...	...
		Siwan ...	...	...	...	0·14	...	...	0·30	...	...	...	...	...	...	...	...	...	0·10	0·18	...	...
		Chupra ..	...	...	...	...	...	...	0·23	...	...	...	...	...	...	...	...	...	0·05	...	...	...
SOUTH BIHAR	Shahabad ..	Buxar ..	...	...	...	0·08	0·10	...	0·10	...	...	...	...	...	...	...	...	...	0·02	0·12	...	...
		Dehri ...	...	...	...	...	0·13	...	0·34	...	...	...	...	...	...	...	...	...	0·05	0·20	...	...
		Bhabhua ..	...	...	...	0·10	0·14	...	0·13	...	...	...	...	...	...	...	...	...	0·13	...	...	...
		Sasaram ..	...	...	...	...	0·20	...	0·23	...	...	...	...	...	...	...	...	...	0·04	0·09	...	...
		Arrah ...	...	...	...	...	...	...	0·26	...	...	...	...	...	...	...	...	...	0·06	...	...	...
		Mohaniah ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·05	...	...	...
		Khiri ...	...	...	...	...	...	...	0·20	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ageaon ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ramnagar ..	...	...	...	...	0·15	...	0·10	...	...	...	...	...	...	...	...	...	...	...	...	...
		Koath .	...	...	...	...	...	...	0·05	...	...	...	...	...	...	...	...	...	0·04	...	...	...
		Sikroul ...	...	...	...	...	0·10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bassawan ..	...	...	...	...	...	...	0·11	...	...	...	...	...	...	...	...	...	0·11	...	...	...
		Manaharpur	...	...	...	0·16	...	...	0·16	...	...	...	...	...	...	...	...	...	0·05	...	...	...
	Gaya ...	Aurungabad..	...	...	...	...	0·01	...	0·27	...	...	...	...	...	...	...	...	...	0·16	0·18	...	...
		Gaya ...	...	...	...	...	...	...	0·12	...	...	...	...	...	...	...	...	...	0·08	0·10	...	...
		Nawada ...	...	...	...	...	...	...	0·02	...	...	...	...	...	...	...	...	...	0·05	...	...	...
		Jahanabad ..	...	...	...	...	0·04	...	0·04	...	...	...	...	...	...	...	...	...	0·14	...	...	...
		Arwal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Daudnagar ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·20	...	...	...
		Sherghati ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Rajauli ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·04	...	...	...
		Pakri Barawan.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Patna ..	Patna ..	...	...	...	...	...	...	0·22	...	...	...	...	...	...	...	...	...	0·05	...	...	...
		Dinapore ...	...	...	...	...	...	...	0·25	...	...	...	...	...	...	...	...	...	0·07	...	...	...
		Bihar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·14	...	...	...
		Barh ...	...	...	...	...	...	...	0·05	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bickram ...	...	...	...	...	...	...	0·05	...	...	...	...	...	...	...	...	...	...	...	...	...
		Hilsa ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·04	...	...
	Monghyr ...	Begusarai ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·20	...	...	...
		Monghyr ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·04	...	...	...
		Jamui ...	...	...	...	...	...	...	0·03	...	...	...	...	...	...	...	...	...	0·09	0·01	...	...
		Gogri ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sheikpura ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chahai Bamda	...	...	...	...	...	...	0·10	...	...	...	...	...	...	...	...	...	0·08	...	...	...
	Sonthal Parganas.	Rajmahal ...	...	...	...	...	...	...	...	0·07	...	...	...	...	...	...	...	...	...	0·04	...	...
		Godda ...	...	...	...	...	...	...	0·32	...	...	...	...	...	...	...	...	...	0·07	0·02	...	...
		Pakour	...	...	...	...	...	...	0·12	...	...	...	...	...	...	...	...	...	...	...	...	...
		Naya Dumka	...	...	...	...	...	...	0·08	...	...	...	...	...	...	...	...	...	0·09	0·22	...	...
		Deoghur ..	...	...	...	...	...	...	0·23	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jamtara ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Belbadda ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Nanihat ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
CHOTA NAGPUR.	Hazaribagh ..	Pachamba (*Giridi*).	...	...	...	...	...	...	0·13	...	...	...	...	...	...	...	...	...	...	0·04	...	...
		Hazaribagh ...	...	...	...	...	...	...	0·12	...	...	...	...	...	...	...	...	...	0·05	0·15	...	...
		Semtagurah .	...	...	...	...	...	...	0·05	...	...	...	...	...	...	...	...	...	0·06	0·22	...	...
		Mahudi Hills	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·25	...	...	...
		Jhoomrah Hills		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·20	...	...	...
		Barhi ...	...	...	...	...	...	...	0·11	...	...	...	...	...	...	...	...	...	...	0·08	...	...
		Chatra .	...	...	...	...	...	...	0·09	...	...	...	...	...	...	...	...	...	0·23	0·21	...	...
		Karagdeha ...	...	...	...	...	...	...	0·17	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ramghar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·05	...	...	...
	Lohardaga ...	Lohardaga ...	...	...	...	...	...	...	0·23	...	...	...	...	...	...	...	...	...	0·06	...	...	...
		Ranchi ..	...	...	...	...	...	...	0·05	0·08	...	...	...	...	...	...	...	...	0·02	...	...	...
		Silli ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Palamau ...	Palamau (*Daltonganj*).	...	...	...	...	...	...	0·09	...	...	...	...	...	...	...	...	...	0·10	...	...	...
		Balumat ..	...	...	...	...	...	...	0·05	...	...	...	...	...	...	...	...	...	0·03	0·03	...	...
		Hoseinabad...	...	...	...	...	...	...	0·53	...	...	...	...	...	...	...	...	...	0·04	0·31	...	...
		Garwah ..	...	...	...	...	...	...	0·08	...	...	...	...	...	...	...	...	...	0·13	...	...	...
	Singhbhum ..	Chaibassa ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·30
		Chakradharpur.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·09
		Ghatsila ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Baharagura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Manbhum ...	Purulia ...	...	...	...	...	...	...	...	0·15	...	...	...	...	...	...	...	...	...	0·20	...	...
		Gobindpur ...	...	...	...	...	...	...	0·01	...	...	...	...	...	...	...	...	...	...	0·16	...	...
		Raghunathpur.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·05	...	...
		Barrabhum ..	...	...	...	...	...	...	0·07	...	...	...	...	...	...	...	...	...	...	0·12	...	0·05
		Jhalda ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chas ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·35	...	...
		Pandra ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·30	...	...
	Chota Nagpur	Suguja ...																				
		Jushpur ...	...	...	...	...	...	0·01	...	...	...	...	...	...	...	...	...	...	...	...	...	0·04
	Orissa Tributary Mahals.	Gangpur ...	...	...	...	...	...	...	0·90	...	...	...	...	...	...	...	...	...	...	...	0·05	0·15
		Keonjher ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·20	0·60
		Anandpur ...																				
		Talcher ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·07	0·20
		Nursingpur ...																				
		Angul ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·33
		Dhenkanal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·02	0·23
		Bispara ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	0·70
		Kunjabongai	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·03	1·94	0·50
		Baramba ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·87
	Darjeeling ...	Mongpoo ...	...	...	...	...	...	...	0·23	...	...	...	...	...	...	0·07	...	...	...	0·12	...	...
	British Bhutan.	Pedong ...	...	...	...	...	...	...	...	0·28	...	...	...	...	...	...	...	...	...	...	...	0·07
	Sikkim ...	Gnatong ..	0·02	0·02	...	...	0·02	...	0·21	0·24	...	...	...	...	...	0·02	0·01	0·02	0·05	0·22	0·33	0·02
	Chittagong Hill Tracts.	Demagiri ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·60	...

in Bengal in January 1893—*concluded.*

21	22	23	24	25	26	27	28	29	30	31	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 16th October 1892 to 31st January 1893.	Average rainfall from 16th October to 31st January.	Station.	District.	Meteorological Division.
...	...	...	...	1·26	...	...	...	...	...	...	2	1·16	1·45	0·53	1·26	1·43	1·39	Sitamarhi	Muzaffarpur	NORTH BIHAR —*concluded.*
...	...	...	...	0·77	...	..	...	...	...	...	2	1·53	1·33	0·79	0·77	1·33	2·28	Muzaffarpur.		
...	...	...	...	0·49	...	...	...	...	...	...	2	1·72	0·74	0·65	0·49	0·88	1·63	Hajipur.		
...	...	...	...	0·67	...	..	..	...	...	...	1	?	0·67	?	0·67	0·67	?	*Paru.*		
...	...	...	...	0·25	...	...	...	...	...	...	3	?	0·77	?	0·25	0·85	?	*Mahua* (Chitwarra.)		
...	...	...	...	0·04	...	...	...	...	...	...	1	?	0·14	?	0·10	0·14	?	*Siuhar.*		
...	...	...	...	1·07	...	...	...	...	...	...	2	?	1·42	?	1·07	1·43	?	*Papri.*		
...	...	...	...	0·53	...	...	...	...	...	...	2	1·41	0·68	0·65	0·53	0·68	1·22	Motihari ...	Champaran.	
...	...	...	...	0·76	...	...	...	...	...	...	1	1·33	0·80	0·69	0·76	0·80	1·17	Bettia.		
...	...	...	...	1·13	...	...	...	...	...	...	2	?	1·52	?	1·13	1·41	?	*Bagaha.*		
...	...	...	...	0·23	...	0·02	...	0·03	...	...	1	?	0·49	?	0·23	0·49	?	*Burhurwa.*		
...	...	...	...	0·48	...	...	...	...	...	...	3	1·36	0·84	0·81	0·48	0·84	1·26	Gopalganj ...	Saran.	
...	...	...	...	0·58	...	...	...	0·06	...	...	5	1·84	1·36	[illegible]	0·38	1·36	2·09	Siwan.		
...	...	...	...	0·99	0·01	...	...	...	...	...	2	1·70	1·28	0·66	0·99	1·37	1·97	Chapra.		
...	...	...	...	0·29	0·05	...	...	...	...	...	3	1·80	0·66	0·79	0·29	1·34	2·30	Buxar ...	Shahabad	SOUTH BIHAR.
...	...	...	...	0·26	...	...	...	...	...	...	4	1·43	0·98	0·62	0·34	1·31	2·38	Dehri.		
...	...	...	...	0·17	0·03	...	...	...	...	...	5	1·37	0·70	0·68	0·17	0·91	2·56	Bhabhua.		
...	...	...	...	0·20	...	...	...	..	...	...	3	1·63	0·73	0·50	0·20	0·96	2·19	Sasaram.		
...	...	...	...	0·27	...	...	...	..	...	...	2	1·70	0·59	0·71	0·27	0·88	1·93	Arrah.		
...	...	...	...	0·04	...	...	...	...	...	..	Nil	?	0·09	?	0·05	0·09	?	*Mohaniah.*		
...	...	...	...	0·30	...	...	...	...	...	...	2	?	0·50	?	0·30	0·50	?	*Khiri.*		
...	...	...	...	0·34	...	...	.	...	...	...	1	?	0·34	?	0·34	0·34	?	*Ageaon.*		
...	...	...	...	1·25	...	...	...	...	...	...	3	?	1·50	?	1·25	1·50	?	*Ramnagar.*		
...	...	...	...	0·10	0·03	...	...	...	..	...	1	?	[illegible]	?	0·10	1·34	?	*Koath.*		
...	...	...	...	0·50	...	...	...	...	...	...	2	?	0·60	?	0·50	0·60	?	*Sikroul.*		
...	..	...	...	0·10	...	...	...	0·01	...	...	3	?	0·33	?	0·11	1·44	?	*Bassiwan.*		
...	...	...	...	0·34	0·04	...	...	...	...	...	3	?	0·74	?	0·36	0·82	?	*Manaharpur.*		
...	...	...	...	0·38	...	...	...	...	...	...	4	1·16	1·00	0·61	0·38	1·74	1·63	Aurungabad ...	Gaya.	
...	...	...	...	0·26	...	...	...	...	...	...	2	1·40	0·46	0·61	0·26	0·87	1·97	Gaya.		
...	...	...	...	0·32	0·01	...	...	...	...	...	1	1·26	0·40	0·70	0·32	1·21	1·87	Nawada.		
...	...	...	...	0·09	...	...	...	...	...	...	1	1·53	0·31	0·71	0·14	0·43	1·82	Jahanabad.		
...	...	...	...	0·13	...	..	...	...	...	..	1	?	0·13	?	0·13	0·43	?	*Arwal.*		
...	...	...	...	0·15	...	...	...	...	...	...	2	?	0·35	?	0·20	0·35	?	*Daudnagar.*		
...	...	...	...	0·85	0·19	...	...	...	...	...	2	?	1·04	?	0·85	2·03	?	*Sherghati.*		
...	...	...	...	0·10	0·05	...	..	...	...	...	1	?	0·49	?	0·40	3·44	?	*Rajauli.*		
...	...	...	...	0·20	...	...	...	...	...	...	1	?	0·20	?	0·20	0·62	?	*Pakri Barawan.*		
...	...	...	...	0·56	...	...	...	...	...	...	2	1·35	0·83	0·59	0·56	0·97	2·00	Patna	Patna.	
...	...	...	...	0·47	0·03	...	...	...	..	..	2	1·45	0·82	0·56	0·47	0·82	1·92	Dinapore.		
...	...	...	...	0·11	...	...	...	...	...	...	2	1·63	0·23	0·67	0·11	0·55	2·19	Bihar.		
...	...	...	...	0·30	...	...	...	...	...	...	1	1·26	0·35	0·47	0·30	0·83	1·96	Barh.		
...	...	...	...	0·48	...	...	...	...	...	...	1	?	0·56	?	0·48	0·76	?	*Bickram.*		
...	...	...	...	0·43	..	...	...	...	...	...	1	?	0·47	?	0·43	0·74	?	*Hilsa.*		
...	...	...	...	0·35	...	...	...	...	...	...	2	1·26	0·55	0·56	0·35	2·75	2·18	Begusarai ...	Monghyr.	
...	...	...	...	0·24	...	...	...	...	...	...	1	1·35	0·28	0·48	0·24	1·23	1·96	Monghyr.		
...	...	...	...	0·31	...	...	...	...	...	...	1	1·16	0·44	0·67	0·31	1·28	1·64	Jamui		
...	...	...	...	0·32	...	...	...	...	...	...	1	?	0·32	?	0·32	0·89	?	*Gogri.*		
...	...	...	...	0·45	...	...	..	...	...	...	1	?	0·45	?	0·45	1·65	?	*Sheikpura.*		
...	...	...	...	0·43	0·17	...	...	...	...	...	3	?	0·78	?	0·43	2·00	?	*Chahai Bamda.*		
...	...	...	...	0·07	...	...	...	...	...	...	Nil	0·67	0·18	0·17	0·07	0·86	1·47	Rajmahal ...	Sonthal Parganas.	
...	...	...	...	0·20	0·05	...	...	...	...	...	2	1·06	0·66	0·35	0·32	1·14	1·56	Godda.		
...	...	...	...	0·25	0·74	...	...	...	...	...	3	0·54	1·11	0·25	0·74	4·40	1·40	Pakour.		
...	...	...	...	0·19	0·22	...	...	..	...	...	3	1·28	0·89	0·58	0·22	2·25	2·32	Naya Dumka.		
...	...	...	...	0·27	0·17	...	...	...	...	..	3	1·00	0·67	0·44	0·23	1·17	2·53	Deoghur.		
...	...	...	...	...	1·12	...	...	...	...	...	1	0·80	1·12	0·41	1·12	3·31	1·68	Jamtara		
...	...	...	...	...	.	...	0·14	..	...	...	1	?	0·14	?	0·14	0·14	?	*Belbadda.*		
...	...	...	...	...	0·50	...	..	...	...	...	1	?	0·50	?	0·50	0·62	?	*Nanihat*		
...	...	...	...	0·20	0·21	...	...	...	...	...	3	1·11	0·58	0·40	0·21	3·55	1·82	Pachamba ... (*Giridi*).	Hazaribagh ...	CHOTA NAGPUR.
...	0·08	...	...	0·14	0·83	...	...	...	...	...	4	1·45	1·37	0·60	0·83	4·05	2·03	Hazaribagh.		
0·06	...	...	...	0·20	0·44	...	...	...	...	...	3	1·27	1·05	[illegible]	0·46	4·82	1·47	Somtagurah.		
...	...	...	...	0·55	...	...	...	...	...	...	2	1·45	0·89	0·83	0·55	5·85	1·86	Mahudi Hills.		
...	...	...	...	0·70	...	...	...	...	...	...	2	1·11	0·90	0·70	0·70	6·20	2·16	Jhoomrah Hills		
...	...	...	...	0·07	0·30	...	...	...	...	...	2	?	0·59	?	0·30	1·83	?	*Barhi.*		
...	...	...	...	0·13	0·20	...	...	...	...	...	4	?	0·86	?	0·23	2·31	?	*Chatra.*		
...	...	...	...	0·31	0·12	...	...	...	...	...	3	?	0·60	?	0·31	1·77	?	*Karagdeha.*		
...	...	...	...	0·73	...	...	...	...	...	...	1	?	0·78	?	0·73	4·05	?	*Ramghar.*		
...	0·16	...	...	0·51	0·33	...	...	...	...	...	4	1·86	1·29	0·84	0·51	7·11	2·68	Lohardaga ...	Lohardaga.	
...	0·03	...	...	...	0·50	...	...	...	...	...	1	1·53	0·68	0·64	0·50	7·16	2·21	Ranchi.		
...												?		?			?	*Silli.*		
...	0·31	...	...	0·37	0·20	...	...	...	...	...	4	1·53	1·07	0·77	0·37	1·64	2·29	Palamau. (*Daltongunj*).	Palamau.	
...	0·05	...	...	0·46	0·38	...	...	...	...	...	2	?	1·03	?	0·46	4·62	?	*Balumat.*		
...	...	...	...	0·45	...	...	...	...	...	...	3	?	1·39	?	0·59	2·01	?	*Hoseinabad.*		
...	0·13	...	...	0·32	0·20	...	...	...	...	...	4	?	0·86	?	0·32	2·19	?	*Garwah.*		
...	0·08	...	...	...	0·15	...	...	...	...	...	2	1·55	0·53	0·73	0·30	6·53	2·60	Chaibassa ...	Singhbhum.	
...	0·05	...	...	...	0·13	...	...	...	...	...	1	?	0·27	?	0·13	6·34	?	*Chakradharpur.*		
...	...	...	...	...	0·85	...	...	...	...	...	1	?	0·85	?	0·85	5·00	?	*Ghatsila.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	4·35	?	*Baharagura.*		
...	...	...	...	...	1·00	...	...	...	...	...	3	1·40	1·35	0·46	1·00	5·70	1·88	Purulia ...	Manbhum.	
...	...	...	...	...	1·11	...	...	...	...	...	2	1·00	1·28	0·51	1·11	2·98	1·88	Gobindpur.		
...	...	...	...	...	0·90	...	...	...	...	...	1	?	0·35	?	0·90	2·64	?	*Raghunathpur.*		
...	0·05	...	...	...	0·25	...	...	...	...	...	2	?	0·54	?	0·25	5·71	?	*Barrabhum.*		
...	...	...	...	0·60	...	...	...	...	..	...	1	?	0·60	?	0·60	2·48	?	*Jhalda.*		
...	...	...	...	0·13	0·43	...	...	...	...	...	3	?	0·91	?	0·43	3·52	?	*Chas.*		
...	...	...	...	0·15	0·50	...	...	...	...	...	3	?	1·04	?	0·59	2·12	?	*Pandra.*		
												?		1·07				Sirguja ...	Chota Nagpur.	
0·04	...	...	0·50	0·15	...	...	...	...	...	...	2	?	0·74	1·09	0·50			Jushpur.		
0·60	...	...	...	0·05	...	...	...	...	...	...	3	?	1·75	0·33	0·90			Gangpur.		
0·08	...	...	...	0·18	...	...	...	...	...	...	3	?	1·06	?	0·60			Keonjher ...	Orissa Tributary Mahals.	
												?		?				Anundapur.		
0·35	0·13	...	...	...	0·02	...	...	...	...	...	3	?	0·77	0·25	0·35			Talcher.		
												?		[illegible]				Narsingpur.		
0·58	0·42	...	...	...	...	...	...	...	...	...	3	?	1·33	0·21	0·58			Angul.		
1·30	0·35	...	...	...	...	...	...	...	...	...	3	?	1·99	[illegible]	1·39			Dhenkanal.		
0·55	...	...	...	...	...	...	...	...	...	...	3	?	1·35	0·37	0·70			Bispara.		
...	1·00	...	...	0·04	...	...	...	...	...	...	2	?	1·57	0·16	1·04			Kunjabongar.		
...	0·11	...	...	0·77	..	...	...	...	...	...	2	?	1·91	?	1·00			Baramba.		
...	...	...	...	...	...	...	...	...	...	...	4	?	1·30	0·97	0·77			Mongpoo ...	Darjeeling.	
...	...	...	0·03	...	0·54	...	...	...	...	...	2	?	0·92	1·60	0·34			Pedong ...	British Bhutan.	
0·15	0·04	0·25	0·01	0·15	0·90	0·05	...	...	...	...	8	?	2·73	?	0·90			Gnatong ...	Sikkim	
...	...	...	...	...	...	...	0·12	...	...	...	2	?	0·72	0·62	0·60			Demagiri ...	Chittagong Hill Tracts.	

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVATIONS TAKEN IN ASSAM, FOR THE MONTH OF JANUARY 1893.

The following have been the principal features in the meteorology of January 1893 :—

1. The changes of pressure from day to day have been unusually large, and on two or three periods large defects have been recorded owing to the passage of depressions, so that the mean pressure for the month has been in defect of the normal in all districts, the defect ranging from 0·05″ to 0·06″ at the western stations to 0·03″ to 0·04″ at the south-eastern stations, the general defect of the whole province equalling about 0·045″.

2. The mean temperature has been below the normal by from 1° to 2°, the defects being usually largest in Central, Southern, and Northern Bengal.

3. Humidity has been very decidedly in excess of the normal, the usual excess averaging from 5 to 10 per cent.

4. Cloud proportion has also been in very distinct excess of the normal in all districts.

5. No less than five periods of disturbed weather, connected with the passage of barometric depressions advancing from North-Western India, existed during the month. The first depression advanced from North-Western India at the close of December, the second on the 3rd of January, the third, which consisted of no less than three low pressure areas, advanced on the 15th, the fourth a severe depression on the 23rd, and the fifth a feeble depression on the 28th. All these advanced in an easterly direction and rather largely affected the weather in Bengal, giving a wave of high temperature and humidity in front of the disturbance, low pressure with clouded skies, and in some cases rain during the disturbance and a rapid increase of pressure followed by a wave of cold dry air in the rear of the disturbance.

6. Owing to these numerous disturbances rainfall has been in excess of the normal in all districts except East Bengal, the excess being fairly large in Orissa, Chota Nagpur, and North Bihar, and small in all other districts.

The following is a brief summary of the principal meteorological changes during the month :—

At the close of December a very considerable barometric depression crossed the Indus Valley and moved eastward over Rajputana. It continued to travel eastward very rapidly, but also filled up quickly in its advance, and did not reach Bengal as a definite depression, but the wave of high temperature and humidity and the feebly unsettled conditions left after the filling up of the depression with the moderately clouded skies advanced over Bengal from about the 1st of January, and thus very early in the month one or two very light showers were reported in the hills to the north of Bengal. From about the 3rd instant the effects of this depression had passed away, and fine settled weather again obtained in Bengal, but another considerable barometric depression had appeared in North-Western India over Rajputana on this date, and this again advanced rapidly in an easterly direction, gradually filling up in its advance. On the 4th it was near Saugor, and was comparatively slight, but it nevertheless gave rather heavily clouded skies over the western half of the province, and on the 4th and 5th a number of rain showers were reported in Bihar. On the 5th the depression had ceased to have any well-defined existence, but pressure continued to fall over Bengal up to the 7th, on which date a feeble form of low pressure area existed over the west of the province, while readings were comparatively high in North-East Bengal. Accompanying these disturbed conditions, temperature had become about 4° in excess of the normal. The sky had clouded over rapidly, and fairly general rain was reported in Bihar, Chota Nagpur, and North Bengal, while showers also occurred in South-West Bengal. The disturbed conditions were confined on the 8th to North Bengal, and pressure was generally rising rapidly. On the 9th pressure had become in excess of the normal, the disturbed conditions had quite disappeared, and a wave of very low temperature following after the low pressure area began to sweep over the province, and by the 10th the general temperature of the province was from 4° to 6° below the normal of the day. These very strongly pronounced cold weather conditions then commenced steadily to disappear; the high pressure slowly gave way until by the 14th it had become about an eighth of an inch below the normal, while the temperature had steadily risen, and it was only about 1° below the normal of the day. A further fall of pressure took place on the 15th, and it became about a fifth of an inch in defect in the western districts, while on the same date no less than three feeble low pressure areas existed over Northern India. On the 16th pressure again fell in Bengal, and owing to the very low pressure, moist southerly winds began to set in at a few stations, while a wave of comparatively high temperature began to advance over the western half of the province. On the 17th a distinct low pressure area still existed over parts of South-West and Central Bengal, while a large low pressure area was shown over the Central and North-West Province; southerly winds were blowing over Orissa, South Bengal, and part of East Bengal, giving very high humidity, while temperature also rose rapidly, and became largely in excess of the normal, the excess equalling about 5° at many stations. With these very abnormal and disturbed conditions, numerous but rather light showers were reported in North and South Bihar and parts of Chota Nagpur. On the 18th the low pressure area existed over South and South-East Bengal, and rainfall had extended to South-West, North and East Bengal, while on the 20th and

21st it had extended to Orissa, and the remainder of the province had become almost rainless. During the 20th and 21st also pressure rose, and the low pressure area wa on the 21st instant apparently in the north-west angle of the Bay, where it continued to give disturbed weather and rain to Orissa on the 22nd, but from the 23rd it had quite disappeared. Fine weather of normal south-east monsoon conditions set in from the 21st and 22nd over the greater part of the province, but it only lasted a short time, for on the 23rd instant a severe barometric depression or storm had entered North-Western India, and was near Jacobabad. On the 24th it had advanced rather rapidly in an easterly direction, and was over Rajputana, while a deep secondary barometric depression had appeared near Rawalpindi. On the 25th these depressions had advanced eastwards, and the original depression existed as a shallow storm over part of the North-West and Central Provinces and the west of Bengal, while the secondary depression had perhaps moved along the line of the hills, for at Darjeeling very rough weather with almost a gale of wind and snow were reported, and on the 25th rain was recorded at almost all stations in North Bengal, and also in North Bihar, South Bihar, and Chota Nagpur, and which extended on the 26th to almost the whole of the province. On the 26th the primary barometric depression had passed over South Bengal and the north and north-west of the Bay, while on the 27th it had again advanced rather rapidly in an easterly direction and was probably over Upper Burma. With the disappearance of the depression pressure rose very rapidly, the sky cleared quickly, rainfall ceased, except for a few showers in and near the hills, and weather became fine and settled, while a steady dry north-westerly and westerly wind commenced to blow again over the province. Immediately the depression had passed away, it was followed by an exceedingly cool wave of air produced to a considerable extent probably by the heavy fall of snow which had occurred in the hills, and on the 28th instant the defect in the mean temperature exceeded 10° at such stations as Calcutta, Jessore, Saugor Island, Dacca, Gaya, Hazaribagh, Ranchi, and Cuttack, while some unusually low minimum temperatures were recorded, the night temperature at Calcutta registering 45·7°, or within seven-tenths of a degree of the lowest temperature ever registered at the Alipore Observatory. On the 28th instant, however, two more barometric depressions had appeared in North-Western India, and by the 29th one of these had apparently travelled rapidly in an easterly direction, and was over Chota Nagpur and the western parts of Bengal, and in front of this depression again the usual rather rapid increase of temperature took place. The depression was, however, very feeble, and only slightly influenced the province on the 29th, and on the 30th and 31st again fine settled weather of unusually strongly pronounced cold season type existed over Bengal, and temperature was still rather largely below the normal, pressure was considerably in excess, and a fairly strong dry westerly and north-westerly wind was blowing over the whole province. Thus there have been no less than five periods of disturbance in Bengal in January due to the passage of depressions from North-Western India, and for a certain part of the month conditions were very disturbed, but on the whole the after-effects of these depressions have been to intensify the ordinary cold season conditions to a considerable extent.

Pressure.—For the first week the pressure variations from day to day were large, but the mean pressure was only 0·01" to 0·02" in excess of the normal. In the second week there was a considerable defect registered, amounting to 0·05" to 0·07"; in the third week the defect had increased, and it averaged about a tenth of an inch, and varied between 0·09" to 0·12", the defect being generally largest in the west of the province. In the fourth week this defect had been to a great extent neutralized, and the general defect only equalled 0·04", and ranged from 0·02" in North Bengal to 0·06" to 0·07" in the west of the province. Hence the mean pressure of the month has been in defect of the normal by from 0·04" to 0·05", and the defect has been largest in Bihar and Chota Nagpur, where at several stations it has equalled from 0·05" to 0·06", while on the other hand in South-East Bengal it has been from 0·03" to 0·04".

Temperature.—The changes of temperature have also been unusually large during the month, but the principal variations have been already discussed. General defects for the month of from 1° to 2° have been reported in Orissa, South-West and North Bengal, Chota Nagpur and Assam, and of nearly 1° in the remaining divisions. The defects on the whole have been largest in the maximum or day temperatures which average nearly 2°, while on the other hand the defects of the night or minimum temperatures only equal about half to one degree.

The actual oscillations and variations of the maximum, minimum, and mean temperature from the normal week by week for the month at nine typical stations in different districts of the province are given in the following table:—

Stations.	Week ending 7th January 1893.			Week ending 14th January 1893.			Week ending 21st January 1893.			Week ending 28th January 1893.		
	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.
Cuttack	—0·6	+0·3	—0·2	—4·2	—3·9	—4·1	—1·7	+0·2	—0·8	—9·2	—2·9	—6·1
Calcutta	+1·5	—0·3	+0·6	—2·4	—3·2	—2·7	+0·8	+2·3	+1·5	—5·9	—3·0	—4·5
Dacca	+0·9	+0·5	+0·7	—2·6	—2·0	—2·4	—1·2	+1·4	+0·1	—6·4	—3·1	—4·8
Burdwan	+2·2	+0·8	+1·5	—2·6	—3·2	—2·9	+0·5	+1·1	+0·8	—6·3	—1·9	—4·1
Patna	+1·1	+6·6	+3·9	—3·6	—1·7	—2·6	+2·0	+0·1	+1·0	—4·6	—1·3	—3·0
Gaya	+2·1	+4·4	+3·2	—2·8	—1·5	—2·2	+0·5	+1·1	+0·8	—5·2	—1·5	—3·4
Purnea	+1·4	+0·9	+1·1	—3·8	—0·5	—2·1	—1·0	—0·9	—0·9	—5·9	—3·5	—4·7
Hazaribagh	+1·8	+3·3	+2·6	—2·9	—4·3	—3·6	—0·5	—1·1	—0·8	—6·1	—3·5	—4·8
Darjeeling	—1·7	+0·4	—0·7	—5·5	—3·7	—4·6	—4·9	—3·1	—4·1	—8·8	—5·3	—7·1

Rainfall.—A fall of 1·56 inches has been recorded in Orissa, which is about four times the usual fall; and in North Bihar the fall has slightly exceeded an inch, and is about twice as much as usual. In Chota Nagpur the fall is slightly less than an inch, and is about fifty per cent. more than the normal. Falls of about half an inch have been recorded in South-West Bengal, North Bengal, East Bengal and South Bihar, and are in all cases slightly exceeding the normal amounts.

In the case of the smaller districts Puri has received 2·03 inches; Cuttack, Darjeeling, and Chittagong Hill Tracts nearly two inches; Balasore, Darbhanga, Muzaffarpur, Sarun, Palamau and Manbhum from an inch to an inch and a half; 24-Parganas, Bankura, Birbhum, Purnea, Bhagalpur, Sonthal Parganas, Hazaribagh, and Lohardaga from three quarters to an inch; and Hooghly, Burdwan, Murshidabad, Pabna, Rangpur, Jalpaiguri, Kuch Bihar, Tippera, Mymensingh, Champaran, Shahabad, Gaya, Patna, and Singhbhum falls of half to three quarters of an inch. The smallest falls have been received in Khulna, Chittagong, and Faridpur, where they have been a fifth of an inch and less.

In Assam Sibsagar has received 3·28 inches, Silchar 1·78 inches, and Dhubri 0·53 inch of rain.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the month of January 1893:—

Meteorological Divisions.	Temperature.						Rainfall.							
	Highest observed during month.	Lowest observed during month.	Averages for month.			Average mean of month above or below normal mean of month.	Of month.			Rainy days.			Since 16th Oct. 1892.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in month.	Normal average number in month.	Variation.	Average.	Normal average.
Orissa	87·1	46·4	78·5	58·5	68·5	—1·5	1·56	0·37	+1·19	2·33	0·69	+1·64	8·11	4·7
South-West Bengal	85·3	40·5	75·7	53·7	65·8	—1·1	0·54	0·45	+0·09	1·61	0·92	+0·69	6·10	2·71
North Bengal	79·3	40·1	72·5	49·4	60·8	—1·2	0·51	0·49	+0·02	2·04	0·89	+1·15	1·32	2·23
East Bengal	82·3	43·0	74·6	52·4	63·6	—0·9	0·45	0·56	— 0·11	1·32	1·13	+0 19	8·41	3·76
North Bihar	79·8	39·0	71·9	48·3	60·1	—0·7	1·04	0·61	+0·43	2 39	1·31	+1·08	1·18	1·75
South Bihar	81·4	40·5	72·3	50·6	61·5	—0·7	0·63	0·55	+0·08	2·18	1·27	+0·91	1·43	1·97
Chota Nagpur	84·5	40·2	72·5	50·2	61·5	—1·3	0·99	0·64	+0·35	2·73	1·39	+1·34	5·06	2·0
Assam	80·3	42·9	70·5	51·1	60·9	—1·7								

METEOROLOGICAL OFFICE, BENGAL;
The 14th February 1893.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 5th to 11th February 1893.

MONTH	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature.				Hygrometry.					Rainfall at 10 A.M. for past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
February ...	5th ...	30·057	65·1	78·9	27·6	51·3	69·4	56·2	·279	43·1	39	Nil
" ...	6th ...	·040	68·7	80·4	23·5	56·9	70·1	66·1	·590	63·6	80	"
" ...	7th ...	29·973	71·4	78·9	15·0	63·9	74·6	70·6	·695	68·4	81	"
" ...	8th ...	30 039	65·7	70·9	10·5	60·4	64·6	62·7	·545	61·4	90	0·68
" ...	9th ...	·129	64·4	73·9	19·0	54·9	66·4	59·7	·423	54·8	65	Nil
" ...	10th ...	·135	62·5	72·9	20·8	52·1	65·6	54·7	·285	43·7	45	"
" ...	11th ...	·121	62·6	75·9	26·6	49·3	68·6	56·7	·317	46·5	43	"

	Inches.
The mean 10 A.M. pressure of the seven days	30·071
	°
The mean temperature of the seven days	65·8
The extreme variation of temperature	31·1
The maximum temperature	80·4
	%
The mean 10 A.M. relative humidity of the seven days	63
The total fall of rain from 5th to 11th February 1893	0·68 inch.

The daily mean temperatures are the crude means of maximum and minimum temperatures.

C. LITTLE,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 13th February 1893.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS. Air Pressure. Mean barometric height, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. Prevailing direction.	Mean wind velocity.	Temperature. Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri ...	30·022	29 971	—	Nly	213	80·6	5, 7, 8 Feb.	59·1	10th Feb.	79·4	65·0	72·2
		Gopalpore ...	30·021	29·982	—·001	NNW	322	83·2	9th „	61·9	5, 10 „	80·1	64 8	72·5
		False Point ...	30·028	29·990	—·003	Variable	223	80·9	8th „	54·0	11th „	79·9	61·6	69·7
	Cuttack	Cuttack ...	29·964	29 990	+·003	Calm	53	87·1	7th „	57 3	11th „	82 0	61·7	71·9
	Balasore	Balasore ...	30·005	30·010	+·013	Variable	105	84 4	8th „	49·4	11th „	78·9	56·4	67·7
South-West Bengal.	Midnapore	Midnapore ...	29·921	30·024	+·016	N	236	85·3	7th „	50·2	10 & 11 „	79·1	56·2	67·7
	24-Parganas	Calcutta ...	30·040	30·007	+·004	Calm & N	55	79 2	7th „	48·2	11th „	74 9	54·3	64·6
		Saugor Island	30·030	29·998	+·004	NEly	226	80·7	8th „	51·2	11th „	74·9	58 6	66 8
	Howrah													
	Hooghly													
	Nadia	Krishnagar ...	30·022	30·021	+·038	NNW	98	81·4	7th „	43 1	10th „	74·6	49·1	61·9
	Khulna													
	Jessore	Jessore ...	30 032	30 013	+·017	Variable	70	78·7	7th „	46·4	5th „	74·3	51·2	62 8
	Burdwan ...	Burdwan ...	29·975	30·028	+·019	Calm	50	81·5	7th „	46 9	10th „	75 8	53·1	64·5
		Raniganj ...	29 733	30·050	+·015	NWly	55	79·7	7th „	46·2	6th „	73·3	51 2	62·2
	Bankura	Bankura ...	29 741	30·010	—·013	NWly	58	81·0	7th „	48 3	10 & 11 „	76·0	53 0	64·5
	Birbhum													
	Murshidabad	Berhampore...	30·001	30·021	+·015	Variable	49	78·1	7th „	47·2	5th „	72·9	51·9	62·4
North Bengal.	Pabna	Sirajganj ...	30·004	30·002	+·011	WSW	33	75·3	7th „	42·3	5th „	71·8	47·9	59·8
	Bogra	Bogra ..	29·948	29·975	+·005	NW	69	76·3	8th „	42·2	5th „	74·7	48·2	61·5
	Rajshahi	Rampur Boalia.*	29·992	30·016	+·041	Nly	87	76·3	7th „	44·2	10th „	72·3	49·2	60·8
	Malda	Malda ...	30·001	30·038	—	NW	92	75·8	7th „	41·7	5th „	75·0	48·4	61·7
	Dinajpur	Dinajpur ...	29·946	30·027	+·018	Variable	55	74·6	7th „	44·0	5th „	72 5	48·1	60·3
	Rangpur	Rangpur ...	29·928	30·013	+·029	Ely	66	73·6	9th „	44 3	5th „	71·5	47·8	59 9
	Jalpaiguri	Jalpaiguri ..	29·775	30·031	+·038	Calm & Ely	55	72·9	10th „	45·6	10th „	70 8	49·2	60·0
	Kuch Behar													
	Darjeeling	Darjeeling ...	22·932	—	+·017	NWly	130	43·0	10th „	27·7	5th „	38 7	30·6	34·7
	Sikkim	Gnatong ...	19·095	—	—	WNW	159	33·5	11th „	0·1	10th „	26·7	6 0	16·4
East Bengal.	Chittagong	Chittagong ...	29·958	29·998	—·005	Calm & Nly.	48	81 2	8th „	49·1	5th „	73 6	54·0	66·3
	Chittagong Hill Tracts	Demagiri ...					Observations not received.							
	Backergunge	Barisal ...	30·042	30·001	+·027	Calm	69	79·8	7th Feb.	48·1	5th „	75·7	51·5	63·6
	Noakhali	Noakhali ...	30·017	30·009	+·013	N	90	77·9	7th „	47·0	5th „	76·2	51·1	63·7
	Faridpur	Faridpur ...	30·025	30·024	+·018	Calm	69	73·5	7th „	45 0	5th „	70·1*	50·9	61·0*
	Dacca	Dacca ...	30·031	30·0·2	+·005	Variable	82	78·6	7th „	49·7	5th „	74·0	52 6	63 3
	Tippera	Comilla ...	30 016	30·000	0	WNW	38	78·4	6th „	46 1	5th „	75 5	50·4	63·0
	Mymensingh	Mymensingh	29·991	30·009	—·004	Variable	73	74·4	9th „	46·1	5th „	71·4	50·4	61·0
North Bihar.	Purnea	Purnea ..	29·937	30·026	+·026	Calm	39	73 2	7th „	43·3	5th „	71·6	46·7	59·2
	Bhagalpur	Bhagalpur ...	29·896	30·018	+·031	Calm	22	76 3	7th „	44·0	9 & 10 „	71·8	48 2	60·1
	Darbhanga	Darbhanga ...	29·903	30 032	+·026	Variable	81	72·8	8th „	46 7	10 & 11 „	69·8	48 9	59·4
	Muzaffarpur	Muzaffarpur...	29·887	30·033	—	WSW	90	71·7	6th „	44·8	10th „	68 6	48 7	58·7
	Champaran	Motihari ...	29·824	30·023	+·032	Variable	108	74·2	8th „	41·9	9 & 10 „	69·9	46·0	58·0
	Saran	Chapra ...	29 888	30·035	+·043	WSW & Calm.	102	74·5	8th „	45·7	9 & 10 „	71·1	49 1	60·1
South Bihar.	Shahabad	Dehri ...	29·707	30·037	+·021	NE	56	76·7	6th „	45·0	11th „	71 9	49·4	60·7
		Buxar ...	29 828	30·040	+·019	E	105	73·6	8th „	44·1	10th „	70·6	48·5	60·3
		Arrah ..	29 877	30·033	+·030	W	67	74·5	5th „	43·5	10th „	72·0	47·7	59·9
	Gaya	Gaya ...	29·689	30·044	+·023	SSE	114	77·5	7th „	45·9	9th „	73·5	49·1	61·3
	Patna	Bankipore ..	29·901	30·048	+·031	Variable	93	74·4	6th „	45·0	10th „	70·4	48·7	59·0
	Monghyr													
	Sonthal Parganas ..	Naya Dumka	29·557	30·040	+·029	Variable	58	78·1	7th „	44·5	10 & 11 „	72 8	49·5	61·2
Chota Nagpur.	Hazaribagh	Hazaribagh ..	27·989	30·042	+·005	Variable	202	78·2	7th „	41·1	10th „	70 2	46·9	58·6
	Lohardaga	Ranchi ..	27·851	30 029	+·001	NW	171	78 0	7th „	42·1	10th „	71·3	47·5	59·4
	Palamau													
	Singhbhum ...	Chaibassa .	29·272	30·022	+·021	Calm	28	83·9	6th „	48·0	11th „	77 6	52·9	65·3
	Manbhum													

* Mean of 6 days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period

The *humidity* of the atmosphere is expressed at percentage, saturation being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01

rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station

district, *i.e.*, from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one or

for the week ending Saturday, the 11th of February 1893.

Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	DISTRICT OBSERVATIONS. Of week. Mean for district.	Of week. Normal mean.	Of week. Average number of rainy days.	Of week. Normal number of rainy days.	Rainfall. Since 1st of month. Mean for district.	Since 1st of month. Normal mean.	Since 1st of month. Variation.	Since 16th October 1892. Mean for district.	Since 16th October 1892. Normal mean.	Since 16th October 1892. Variation.	DISTRICT.
—	68·3	79	2·1	0·29	0·39	0·33	1·00	0·66	0·39	0·43	—0·04	9·67	6·98	+2·69	Puri.
—0·3	67·9	85	2·3	0·24											
—2·3	68·4	84	2·3	0·13											
—4·2	65·5	71	2·1	0·40	0·25	0·38	1·00	0·51	0·25	0·41	—0·16	8·11	4·80	+3·31	Cuttack.
—2·4	62·3	80	1·1	1·08	0·45	0·23	0·67	0·45	0·45	0·42	+0·03	7·96	3·74	+4·22	Balasore.
—1·0	61·5	64	3·4	0·20	0·41	0·18	1·00	0·41	0·41	0·43	—0·02	8·77	3·77	+5·00	Midnapore.
—4·5	59·6	85	2·9	0 47	0·87	0·34	1·00	0·64	0·87	0·59	+0·28	8·74	3·84	+4·90	24-Parganas.
—4·6	61·8	85	0·9	0·67											
					0·39	0·36	1·00	0·68	0·39	0·64	—0·25	4·22	3·07	+1·15	Howrah.
					0·74	0·37	1·00	0·68	0·74	0·55	+0·19	8·50	3·04	+5·46	Hooghly.
—2·5	57·1	77	2·9	0·30	1·25	0·43	1·80	0·54	1·25	0·59	+0·66	5·85	2·75	+3·10	Nadia.
					0·62	0·40	1·00	0·54	0·62	0·57	+0·05	7·69	3·65	+4·04	Khulna.
—5·2	57·9	82	3·1	0·72	1·00	0·37	1·20	0·57	1·00	0·53	+0·47	10·52	3·14	+7·38	Jessore.
—4·5	56·1	69	3/6	0·14	0·29	0·44	1·00	0·53	0·29	0·60	—0·31	5·31	2·69	+2·62	Burdwan.
—4·6	57·4	71	1·1	0·23											
—1·9	57·8	66	2·9	0·08	0·15	0·28	0·50	0·52	0·15	0·39	—0·24	5·49	2·43	+3·06	Bankura.
					1·09	0·38	2·00	0·43	1·09	0·56	+0·53	5·10	2·18	+2·92	Birbhum.
—4·7	54·2	90	3·0	0·66	0·52	0·36	1·33	0·53	0·52	0·44	+0·08	3·02	1·97	+1·05	Murshidabad.
—2·6	54·6	90	2·1	0·63	1·31	0·57	2·00	0·52	1·31	0·69	+0·62	3·03	2·77	+0·26	Pabna.
—1·5	54·9	77	3·7	0·07	0·14	0·44	0 75	0·61	0·14	0·50	—0·36	1·39	2·07	—0·68	Bogra.
—1·5	56·9	82	3·3	0·32	0·34	0·28	1·00	0·40	0·34	0·36	—0·02	1·33	2·15	—0 82	Rajshahi.
—	54·3	65	1·9	0·17	0·13	0·29	0·00	0 56	0·13	0·33	—0·20	1·18	2·14	—0·96	Malda.
—1·1	54·7	82	3·4	Nil	0·05	0·28	0·00	0·56	0·05	0·33	—0·28	0·96	1·65	—0·69	Dinajpur.
—0·7	53·9	87	1·1	Nil	Nil	0·25	0·00	0·53	Nil	0·30	—0·30	1·69	1·96	—0·27	Rangpur.
—0·1	53·4	89	4·7	Nil	Nil	0·17	0·00	0·47	Nil	0·18	—0·18	1·68	3·11	—1·43	Jalpaiguri.
					0·05	0·22	0·05	0·67	0·05	0·24	—0·19	1·61	1·79	—0·18	Kuch Bihar.
—3·1	34·2	87	6·9	0·08	0·02	0·18	0·02	0·61	0·02	0·30	—0·28	5·38	3·52	+1·86	Darjeeling.
—	20·4	80	5·0	0·24											Sikkim.
—2·1	59·9	87	1·4	Nil	Nil	0·26	0·00	0·39	Nil	0·41	—0·41	12·86	6·08	+6·78	Chittagong.
					0·21	0·45	1·00	0·65	0·21	0·66	—0·45	8·82	5·63	+3·19	Chittagong Hill Tracts.
—2·4	59 2	84	0·4	0·09	0·06	0·38	0·25	0·47	0·03	0·54	—0·48	8·26	4·84	+3·42	Backergunge.
—2·2	60·6	83	0·6	Nil	0·03	0·48	0·00	0·63	0·03	0·54	—0·51	15·69	6·10	+9·59	Noakhali.
—2·5*	57·4	81	3·3	1·40	1·21	0·41	1·33	0·59	1·21	0·54	+0·67	8·64	2·76	+5·88	Faridpur.
—5·2	57·0	85	2·6	0·91	1·05	0·45	1·00	0·73	1·05	0·57	+0·48	10·19	3·48	+6·71	Dacca.
—3·2	58·0	82	1·4	0·12	0·29	0·43	1·00	0·63	0·29	0·58	—0·29	9·19	3·62	+5·57	Tippera.
—2·8	55·7	84	3·3	0·24	0·26	0·46	0·60	0·61	0·26	0·53	—0·27	3·67	2·91	+0·76	Mymensingh.
—3·9	50·8	88	3·3	0·02	0·06	0·30	0·33	0·51	0·06	0·35	—0·29	0·87	2 20	—1·33	Purnea.
—2·1	55·0	75	4·7	0·25	0·13	0·24	0·50	0·41	0·13	0·32	—0·19	1·48	1·92	—0·44	Bhagalpur.
—3·9	53·7	86	3·1	0·03	0·28	0·19	0·33	0·41	0·28	0·30	—0·02	1·78	1·88	—0·10	Darbhanga.
—	52·5	93	2·9	Nil	0·29	0·13	0·67	0·43	0·29	0·28	+0·01	1·50	1·94	—0·44	Muzaffarpur.
—0·9	51·8	87	4·6	0·12	0·16	0·14	1·00	0·43	0·16	0·23	—0·07	0·91	1·49	—0·58	Champaran.
—1·0	52·5	80	5·3	0·36	0·20	0·23	0·67	0·42	0·20	0·31	—0·11	1·19	2·00	—0·60	Saran.
—1·6	54·7	69	3·7	Nil											
—1·7	53·8	71	5·3	0 12	0·07	0·13	0·40	0·39	0·07	0·20	—0·19	1·20	2·39	—1·19	Shahabad.
—1·2	52·6	79	2 9	0·18											
—5·2	54·5	70	3·4	0·02	0·10	0·13	0·50	0·36	0·10	0·23	—0·13	1·18	2·07	—0·89	Gaya.
—3·8	56·2	73	6·4	0·17	0·26	0·15	1·00	0·35	0·26	0·28	—0·02	1·08	2·14	—1·06	Patna.
					0·16	0·23	1·00	0·48	0·16	0·30	—0·14	1·91	2 27	—0·36	Monghyr.
—2·9	55·5	73	2·9	0·36	0·32	0·15	1·17	0·39	0·32	0·20	+0·12	2·53	1·89	+0·64	Sonthal Parganas.
—5·6	54·0	63	4·0	0·86	0·65	0·25	1·80	0 59	0·65	0·40	+0·25	5·56	2·26	+3·30	Hazaribagh.
—7·5	53·0	76	2·7	0·28	0·25	0·14	1·00	0·53	0·25	0·32	—0·07	7·40	2·89	+4·51	Lohardaga.
					0·06	0·11	0	0·12	0·06	0·26	—0·20	1·70	2·61	—0·91	Palamau.
—2·3	57·7	78	2·9	0·38	0·38	0·21	1·00	0·40	0 38	0·46	—0·08	6·91	3·25	+3·66	Singhbhum.
					0·48	0·34	1·00	0·56	0·48	0·52	—0·04	4·82	2·57	+2·25	Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 11th of February 1893.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 5th.	Monday, 6th.	Tuesday, 7th.	Wednesday, 8th.	Thursday, 9th.	Friday, 10th.	Saturday, 11th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th October 1892.	Average rainfall from 16th October to date.
ORISSA ...	Puri ...	Puri ...	...	...	...	0·29	...	...	...	1	0·29	0·42	0·29	0·47	12·52	7·77
		Khurda ...	...	...	...	1·00	...	...	...	1	1·00	0·23	1·00	0·30	6·72	5·27
		Banpur ...	...	...	...	0·13	...	...	...	1	0·13	0·43	0·13	0·52	7·49	6·51
		False Point ...	...	...	...	0·13	...	...	...	1	0·13	0·31	0·13	0·42	11·93	8·33
		Gop ...										?		?		?
		Satpara ...	...	...	...	0·60	...	...	...	1	0·60	?	0·60	?	9·14	?
		Pipli ...	...	...	...	0·57	...	...	...	1	1·57	?	0·57	?	7·18	?
	Cuttack ...	Jagatsingpore	...	...	...	0·30	...	...	...	1	0·30	0·38	0 30	0·41	11·30	4·56
		Banki ...	...	...	...	0·28	...	...	...	1	0·28	0·18	0·28	0·24	5·43	4·63
		Cuttack ...	...	...	...	0·41	...	...	...	1	0·41	0·31	0·41	0·38	10·66	4·94
		Kendrapara ...	...	...	...	0·14	...	...	...	1	0·14	0·46	0·14	0·53	8·08	5·18
		Jajpur ...	...	...	...	0·13	...	...	...	1	0·13	0·32	0·13	0·43	4·97	4·58
		Dharmsala ...	...	...	...	0·50	...	...	...	1	0·50	?	0 50	?	5·68	?
		Salipore ...	...	...	...	0·20	...	...	...	1	0·20	?	0·20	?	6·34	?
		Pal Lahara ...										?		?		?
	Balasore ...	*Akhyapada* ...	...	...	...	0·21	...	...	...	1	0·21	?	0·21	?	4·63	?
		Chandbali ...	...	...	...	0·18	...	...	...	1	0·18	0·27	0·18	0·48	5·93	5·03
		Bhadrak ...	...	...	...	0·05	...	...	...	Nil	0·05	0·15	0·05	0·30	7·53	4·08
		Soro ...	...	...	...	0·80	...	...	...	1	0·80	0·17	0·80	0·30	8·58	3·44
		Balasore ...	...	...	...	1·45	...	...	...	1	1·45	0·49	1·45	0·67	12·29	4·86
		Jellasore ...										0·12		0·30		2·56
		Baripodah ...	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·41	8·17	2·50
SOUTH-WEST BENGAL.	Midnapore	Contai ...	...	...	...	0·73	...	...	...	1	0·73	0·17	0·73	0·38	11·41	5·93
		Tamluk ...	...	...	...	0·40	...	...	...	1	0·40	0·12	0·46	0·42	6·20	3·73
		Midnapore ...	...	...	...	0·22	...	...	...	1	0·22	0·31	0·22	0·55	8·40	3·52
		Ghatal ...	...	...	...	0·28	...	...	...	1	0·28	0·11	0·28	0·37	9·05	1·79
		Kukrahaty ...	...	...	...	0·85	...	...	...	1	1·85	?	0·85	?	5·76	?
		Garhbeta ...	...	...	...	0·22	...	...	...	1	0·22	?	0 22	?	4·23	?
	24-Parganas ...	Saugor Island	...	...	...	0·67	...	...	...	1	0·67	0·31	0·67	0·52	10·21	6·21
		Diamond Harbour ...	...	...	...	1·33	...	...	...	1	1·33	0·36	1·33	0·67	8·63	4·18
		Canning Town	...	...	...	0·70	...	...	...	1	0·70	?	0·70	?	10·62	?
		Alipore Observatory ...	...	...	...	0·47	...	...	...	1	0·47	0·40	0·47	0·65	6·02	3·80
		Barrackpore...	...	...	...	1·00	...	...	...	1	1·00	0·33	1·00	0·56	9·50	3·13
		Dum-Dum ...	...	...	...	1·24	...	...	...	1	1·24	0·32	1·24	0·57	5·55	3·20
		Barasat ...	...	...	...	0·93	...	...	...	1	0·93	0·26	0·93	0·58	7·73	3·40
		Basirhat ...	...	...	...	0·43	...	...	...	1	0·43	0·37	0·43	0·54	7·10	2·99
	Howrah ...	Howrah .	...	...	...	0·48	...	...	...	1	0·48	0·29	0·48	0·50	3·86	3·33
		Mohesreka ...	...	...	...	0·29	...	...	...	1	0·29	0·43	0·29	0·79	4·55	2·79
		Ulubaria ...	...	...	...	0·28	...	...	...	1	0·28	?	0·28	?	4·44	?
	Hooghly ..	Serampore ...	...	...	...	0·86	...	...	...	1	0·86	0·30	0·86	0·48	10·32	3·03
		Hooghly ...	...	...	...	1·05	...	...	...	1	1·05	0·40	1·05	0·47	9·42	3·14
		Jahanabad ...	...	...	...	0·32	...	...	...	1	0·32	0·43	0·32	0·71	5·74	2·99
	Nadia ...	Ranaghat ...	...	...	...	0·32	...	...	...	1	0·32	0·37	0·32	0·57	6·57	2·96
		Krishnagar ...	...	...	0·11	0·19	...	...	...	2	0·30	0·37	0·30	0·56	6·58	2 30
		Chuadanga ...	...	...	0·81	0·62	...	...	...	2	1·43	0·48	1·43	0·63	?	3·02
		Meherpore ...	...	...	1·60	1·15	...	...	...	2	2·75	0·50	2·75	0·59	5·14	2·56
		Kushtia .	...	...	0·25	1·20	...	...	...	2	1·45	0·45	1·45	0·62	4·92	2·89
	Khulna ...	Satkhira .	...	...	...	0·44	...	...	...	1	0·44	0·31	0·44	0·46	5·68	3·27
		Bagerhat ..	...	...	...	0·69	...	...	...	1	0·69	0·51	0·69	0·77	9·34	3·88
		Khulna ...	...	...	...	0·73	...	...	...	1	0·73	0·57	0·73	0·46	8·07	3·74
		Nakipur ...	...	...	...	0·36	...	...	...	1	0·36	?	0·36	?	5·88	?
		Rampal ...	...	...	...	0·50	0 20	...	...	2	0·70	?	0·70	?	7·45	?
	Jessore ...	Narail .	...	...	...	0·61	..	...	...	1	0·61	0·30	0·61	0·47	10·09	3·62
		Jessore ...	...	...	...	0·72	...	...	...	1	0·72	0·41	0·72	0·51	14·96	3·55
		Jhenidah ...	...	...	0·40	0·62	...	...	...	2	1·02	0·46	1·02	0·68	9·83	3·05
		Magura ...	...	...	...	1·26	...	...	...	1	1·26	0·39	1·26	0·49	8·56	2·56
		Bangaon .	...	...	...	1·40	...	...	...	1	1·40	0·28	1·40	0·48	9·17	3·05
	Burdwan ...	Kalna ...	...	...	...	0·30	...	...	...	1	0·30	0·26	0·30	0·40	8·07	2 66
		Burdwan ...	...	...	...	0·14	...	...	...	1	0·14	0·33	0·14	0·46	6·01	2·62
		Katwa ...	...	...	0·03	0·47	...	...	...	1	0·50	0·49	0·50	0·69	4·77	2 98
		Raniganj ..	...	...	0·05	0·18	..	...	...	1	0 23	0·67	0·23	0·81	2·37	2 54
		Mankur ...	...	...	...	...	0·12	...	...	1	0·12	?	0·12	?	2·24	?
	Bankura ...	Bankura ...	...	...	...	0·08	...	...	...	Nil	0·08	0·29	0·08	0·41	5·75	2·64
		Vishnupur ...	...	...	...	0·21	...	...	...	1	0·21	0·39	0·21	0·50	6·72	2 35
		Maliara ...	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·28	1·82	1·88
		Khatra ...	...	...	...	0·31	...	...	...	1	0 31	0·24	0·31	0·35	7·66	2·83
		Indas ...	...	...	...	0·04	...	...	...	Nil	0·04	?	0·04	?	5·95	?
		Kotalpur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·12	?
		Onda ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·33	?
		Gangajalghati	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·37	?
		Raipur ...	...	...	...	0·17	...	...	...	1	0·17	?	0·17	?	9·01	?
		Sonamukhi ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	6·21	?
	Birbhum ...	Suri ..	...	...	0·84	0·91	...	...	...	2	1·75	0·28	1·75	0·45	4·26	2·50
		Hetampore ...	...	...	0·53	0·51	...	...	...	2	1·04	0·52	1·04	0·74	6·42	1·94
		Rampur Hat...	...	...	0·15	0 33	...	...	...	2	0·48	0·31	0·48	0·48	4·66	2·11
		Bolpur ..	...	...	0·10	0·92	...	...	...	2	1·02	?	1·02	?	3·68	?
		Murari ...	...	...	0·07	0·10	...	...	...	1	0·17	?	0·17	?	1·71	?
	Murshidabad	Kandi ...	...	...	0·56	0·90	...	...	...	2	1·46	0·50	1·46	0·60	4·86	2·21
		Berhampore ...	...	...	0·21	0·45	...	...	...	2	0·66	0·43	0·66	0·54	2·97	2·29
		Lalbagh ...	...	...	0·16	0·34	...	...	...	2	0·50	0·42	0·50	0·47	4·22	1·65
		Azimganj ...	...	...	0 10	0·24	...	...	...	2	0·34	0·28	0·34	0·35	2·23	2·08
		Jangipur ..	...	...	0·08	0·06	..	...	...	Nil	0·14	0 26	0·14	0·33	2·11	1·76
		Lalgola ..	...	...	...	...	...	...	...	Nil	Nil	0·29	Nil	0·38	1·70	1·83
		Akhriganj ..	...	...	...	0·22	...	...	...	1	0·22	?	0·22	?	1·56	?
		Patkabari ..	...	...	1·40	1·20	...	...	...	2	2·60	?	2·60	?	5·10	?
NORTH BENGAL.	Pabna ...	Pabna ..	...	...	0·42	1·56	...	...	...	2	1·98	0·50	1·98	0·61	4·69	2·48
		Sirajganj ...	..	...	0·33	0·30	...	...	...	2	0·63	0·61	0·63	0·77	1·35	3·03
	Bogra ...	Sherepore ...	...	...	0·10	0·14	...	...	...	2	0·24	0·62	0·24	0·73	1·60	2·43
		Nowkhilla ...	...	...	...	0·09	...	...	...	Nil	0·09	0·53	0·09	0·57	1·54	2·12
		Bogra ...	...	...	0·03	0·04	...	...	...	Nil	0·07	0·30	0·07	0·35	1·23	2·39
		Panchbibi ...	...	...	...	0·16	...	...	...	1	0·16	0·32	0·16	0·35	1·18	1·30
	Rajshahi ...	Boalia ...	...	...	0·06	0·32	...	...	...	1	0·38	0·34	0·38	0·40	1·91	2·17
		Nator ...	...	...	0·22	0·33	...	...	...	2	0·55	0·41	0·55	0 52	1·56	2·66
		Naugaon ...	...	...	0 05	0·05	...	...	...	Nil	0·10	0·09	0·10	0·16	0·58	1·60
		Lalpore ...	...	...	0·33	0·46	...	...	...	2	0·79	?	0·79	?	1·77	?
		Manda ...										?		?		?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 11th of February 1893—contd.

Meteorological Division.	District.	Station.	Rainfall.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
			Sunday, 5th.	Monday, 6th.	Tuesday, 7th.	Wednesday, 8th.	Thursday, 9th.	Friday, 10th.	Saturday, 11th.							
NORTH BENGAL—concld.	Malda	Malda	...	...	0·09	0·08	...	...	...	Nil	0·17	0·25	0·17	0·29	1·64	2·35
		Chanchal	...	...	0·06	0·03	...	...	...	Nil	0·09	0·33	0·09	0·36	0·71	1·88
		Gajol	...	...	0·02	0·02	...	...	...	Nil	0·04	?	0·04	?	0·42	?
		Sibganj	...	...	0·20	...	...	...	...	1	0·20	?	0·20	?	1·56	?
	Dinajpur	Mohadebpore	...	...	0·06	0·06	...	...	...	Nil	0·12	0·41	0·12	0·43	0·73	1·45
		Churaman	...	...	0·02	0·02	...	...	...	Nil	0·04	0·32	0·04	0·33	0·73	1·38
		Raiganj	...	...	...	...	...	...	...	Nil	Nil	0·39	Nil	0·45	1·56	1·38
		Dinajpur	...	...	...	...	...	...	...	Nil	Nil	0·21	Nil	0·30	0·88	2·77
		Balurghat	...	...	...	0·08	...	...	...	Nil	0·08	0·06	0·08	0·11	0·70	1·39
		Thakurgaon	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·56	?
	Rangpur	Bhawanigunge (*Gyabanda*)	...	...	...	...	...	...	...	...	...	0·24	Nil	0·31		2·01
		Rangpur	...	...	...	...	...	...	...	Nil	Nil	0·23	Nil	0·25	4·03	2·49
		Kurigaon	...	...	...	...	...	...	...	Nil	Nil	0·22	Nil	0·26	0·66	1·74
		Bagdogra (*Nilphamari*)	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	0·36	1·30	1·60
		Ulipore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·40	?
	Jalpaiguri	Jalpaiguri	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·18	1·68	3·11
		Alipore Dooar	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·20	?
		Fallacotta	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·65	?
		Debiganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·25	?
		Bhagatpore (Nagrakatta)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·20	?
	Kuch Bihar	Dinhatta	...	...	...	...	...	...	...	Nil	Nil	0·29	Nil	0·32	1·28	1·91
		Kuch Bihar	...	...	...	0·21	...	...	...	1	0·21	0·17	0·21	0·19	1·94	1·87
		Mickliganj	...	...	...	...	...	...	...	Nil	Nil	0·21	Nil	0·23	1·60	1·78
		Mathabhanga	...	...	...	...	...	...	...	Nil	Nil	0·22	Nil	0·24	1·57	1·50
	Darjeeling	Buxa	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	0·41	14·63	5·09
		Siliguri	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·06	2·91	1·66
		Darjeeling	...	...	0·08	...	...	...	...	Nil	0·08	0·22	0·08	0·43	1·64	4·88
		Kalimpong	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·28	2·43	2·42
		Kurseong	...	...	0·07	...	...	...	...	Nil	0·07	?	0·07	?	3·25	?
EAST BENGAL	Chittagong	Cox's Bazar	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·34	13·15	7·10
		Chittagong	...	...	...	...	...	...	...	Nil	Nil	0·32	Nil	0·48	12·55	4·90
		Kutubdia	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	19·17	?
		Satkanya	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·80	?
		Kodala	...	...	...	...	...	...	...	Nil	Nil	?	0·10	?	?	?
		Fenua	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	?	?
		Mirsarai	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	?	?
	Chittagong Hill Tracts.	Rangamati	...	...	...	0·21	...	...	...	1	0·21	0·45	0·21	0·66	8·83	5·63
		Bundarban										?		?		?
	Backergunge	Patuakhali	...	...	...	...	...	...	...	Nil	Nil	0·35	Nil	0·57	8·98	5·39
		Pirojpur	...	...	...	0·16	...	...	...	1	0·16	0·43	0·16	0·58	8·21	4·64
		Barisal	...	...	...	...	...	...	...	Nil	Nil	0·39	Nil	0·54	7·39	4·83
		Gournaddi	...	...	...	0·16	...	...	...	1	0·16	?	0·16	?	5·99	?
		Bhola	...	...	...	0·07	...	...	...	Nil	0·07	0·33	0·07	0·44	8·40	4·41
		Daulatkhan	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	11·00	?
		Bauphal	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·91	?
	Noakhali	Noakhali	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	0·41	16·34	5·22
		Fenny	...	...	...	0·06	...	...	...	Nil	0·06	0·04	0·06	0·65	15·04	6·93
		Harishpore	...	...	...	0·02	...	...	...	Nil	0·02	?	0·02	?	19·09	?
		Ramganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	10·73	?
	Faridpur	Madaripur	...	...	...	0·33	...	...	...	1	0·33	0·20	0·33	0·33	6·44	2·05
		Faridpur	...	...	...	1·40	...	...	...	1	1·40	0·57	1·40	0·68	12·29	2·83
		Goalundo	...	...	0·41	1·50	...	...	...	2	1·91	0·46	1·91	0·60	7·23	2·89
	Dacca	Munshiganj	...	...	...	0·43	...	...	...	1	0·43	0·42	0·43	0·61	7·69	3·55
		Dacca	...	...	...	0·83	...	...	...	1	0·83	0·39	0·83	0·57	12·88	2·73
		Narayanganj	...	...	...	0·50	...	...	...	1	0·50	0·43	0·50	0·49	10·63	4·56
		Manikganj	...	...	0·05	2·40	...	...	...	1	2·45	0·54	2·45	0·60	6·38	2·65
		Joydebpore	...	...	...	1·09	...	...	...	1	1·09	?	1·09	?	5·23	?
	Hill Tippera	Agartola	...	...	...	0·43	...	...	...	1	0·43	0·46	0·43	0·66	7·84	4·11
	Tippera	Comilla	...	...	...	0·10	...	...	...	1	0·10	0·29	0·10	0·44	9·32	3·65
		Chandpore	...	...	...	0·18	...	...	...	1	0·18	0·33	0·18	0·39	8·19	2·90
		Brahmanbaria	...	...	...	0·45	...	...	...	1	0·45	0·63	0·45	0·80	11·39	3·82
		Ramchandrapore	...	...	...	0·40	...	...	...	1	0·40	?	0·40	?	8·53	?
		Nasirnagar	...	...	...	0·40	...	...	...	1	0·40	?	0·40	?	11·46	?
		Daudkandi	...	...	...	0·20	...	...	...	1	0·20	?	0·20	?	4·90	?
		Kasba										?		?		?
		Laksham										?		?		?
	Mymensingh	Kishorganj	...	...	...	0·08	...	...	...	Nil	0·08	0·44	0·08	0·53	6·63	2·93
		Atia (*Tangail*)	...	...	0·58	0·38	...	...	...	2	0·96	0·58	0·96	0·64	4·20	2·68
		Mymensingh	...	...	...	0·24	...	...	...	1	0·24	0·49	0·24	0·53	1·42	3·01
		Jamalpur	...	...	0·03	...	...	...	...	Nil	0·03	0·52	0·03	0·64	2·06	2·88
		Netrakona	...	...	...	...	...	...	...	Nil	Nil	0·25	Nil	0·29	4·08	2·99
		Subornakhally	...	...	...	0·49	...	...	...	1	0·49	?	0·49	?	1·18	?
		Durgapore										?		?		?
		Sherepore Town	...	...	...	0·18	...	...	...	1	0·18	?	0·18	?	3·60	?
		Dewanganj										?		?		?
NORTH BIHAR	Purnea	Kishanganj	...	...	...	...	0·15	...	...	1	0·15	0·29	0·15	0·39	0·91	2·18
		Araria	...	...	...	...	...	...	...	Nil	Nil	0·29	Nil	0·35	0·61	1·88
		Purnea	...	...	0·02	...	...	...	...	Nil	0·02	0·31	0·02	0·38	1·11	2·48
		Gondwara (Korah)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·46	?
		Barsoe	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Forbesganj	...	...	...	0·12	...	...	...	1	012	?	0·12	?	0·70	?
		Kaliaganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·35	?
	Bhágalpur	Madhipura	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	0·40	0·95	1·89
		Bongaon (Syfabad)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·10	?
		Supaul	...	...	...	0·18	...	...	...	1	0·18	0·33	0·18	0·33	1·65	1·72
		Protabganj	...	...	...	0·26	...	...	...	1	0·26	?	0·26	?	0·99	?
		Bhagalpur	...	...	0·09	0·16	...	...	...	1	0·25	0·20	0·25	0·27	1·03	1·95
		Banka	...	...	...	0·07	...	...	...	Nil	0·07	0·22	0·07	0·28	2·24	2·11
		Colgong	...	...	0·06	0·10	...	...	...	1	0·16	?	0·16	?	2·35	?
	Darbhanga	Tajpur	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·31	0·84	1·79
		Darbhanga	...	...	...	0·03	...	...	...	Nil	0·03	0·21	0·05	0·31	2·03	1·92
		Madhubani	...	...	...	0·81	...	...	...	1	0·81	0·23	0·81	0·29	2·48	2·02
		Bahera	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·77	?
		Roshera	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·64	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 11th of February 1893—concld.

Meteorological Division.	District	Station.	Rainfall. Sunday, 5th.	Monday, 6th.	Tuesday, 7th.	Wednesday, 8th.	Thursday, 9th.	Friday, 10th.	Saturday, 11th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BIHAR—*concluded.*	Muzaffarpur...	Sitamarhi ...	...	...	...	0·32	...	...	...	1	0·32	0·12	0·32	0·19	1 77	1·41
		Muzaffarpur	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·31	1·33	2·53
		Hajipur	...	...	0 04	0·50	...	...	...	1	0·54	0·10	0·54	0·32	1·40	1·82
		Paru										?		?		?
		Mahwa (Chitwarra.)	...	...	0·10	...	...	...	...	1	0·10	?	0·10	?	0·95	?
		Sinhar ..										?		?		?
		Pupri ...	...	...	...	0·85	...	...	...	1	0·85	?	0·85	?	2·27	?
	Champaran ...	Motihari ..	...	...	...	0·12	...	...	...	1	0·12	0·17	0·12	0·26	0·80	1·40
		Bettiah ..	...	...	...	0·20	...	...	...	1	0·20	0·10	0·20	0·18	1·00	·45
		Bagaha ...	...	...	0·05	0·19	...	...	...	1	0·24	?	0·24	?	1·65	?
		Burhurwa ...	...	...	...	0·07	...	...	...	Nil	0·07	?	0·10	?	0·56	?
	Saran ..	Gopalganj ...	...	...	...	0·14	...	...	...	1	0·14	0·33	0·14	0·38	0·98	1·62
		Siwan ...	...	...	0·09	...	...	...	...	Nil	0·09	0·24	0·15	0·34	1·45	2·34
		Chapra ...	...	...	0·03	0·33	...	...	...	1	0·36	0·13	0·36	0·23	1·73	2·08
SOUTH BIHAR	Shahabad ...	Buxar ...	...	...	0·12	...	...	...	...	1	0·12	0·13	0·12	0·21	1·46	2·31
		Dehri ...	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·16	1·34	2·30
		Bhabhua ...	...	...	0·06	...	...	...	...	Nil	0·06	0·10	0·06	0·38	0·97	2·70
		Sasaram ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·24	0·96	2·43
		Arrah ...	...	...	0·18	...	...	...	...	1	0·18	0·14	0 18	0·26	1·06	2·08
		Mohanea ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·09	?
		Khiri ...	...	...	0·23	...	...	...	...	1	0·23	?	0·23	?	0·73	?
		Ageaon ...	...	...	0·16	...	...	...	...	1	0·16	?	0·16	?	0·50	?
		Ramagar ...	...	...	0·20	...	...	...	...	1	0·20	?	0·20	?	1·70	?
		Koath ...	...	...	0·15	...	...	...	...	1	0·15	?	0·15	?	1·49	?
		Sikroul ...	...	...	0·20	...	...	...	...	1	0·20	?	0·20	?	0·80	?
		Bassowan ...	...	...	...	...	...	...	...	Nil	Nil	?	0·01	?	1·44	?
		Monaharpur	...	...	0·20	...	...	...	...	1	0·20	?	0·20	?	1·04	?
	Gaya ...	Aurangabad ...	...	...	0·01	...	...	...	...	Nil	0·01	0·12	0·01	0·17	1·75	1·76
		Gaya ...	...	...	0·02	...	...	...	...	Nil	0·02	0·16	0·02	0·25	0·89	2·24
		Nawadah ...	...	...	0·03	0·11	...	...	...	1	0·14	0·12	0·14	0·22	1 35	2·17
		Jahanabad ...	...	...	0·15	0·09	...	...	...	1	0·24	0·11	0·24	0·27	0·67	2·03
		Arwal	...	...	0·13	...	...	...	...	1	0·13	?	0·13	?	0·56	?
		Daudnagar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·35	?
		Sherghati .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·03	?
		Rajauli	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·44	?
		Pakri Barawan	...	...	...	0·10	...	...	...	1	0·10	?	0·10	?	0·72	?
	Patna ...	Patna ..	...	...	0·09	0·08	...	...	...	Nil	0·17	0·14	0·17	0·26	1·14	2·11
		Dinapore ...	...	...	0·07	0·09	...	...	...	Nil	0·16	0·13	0·16	0·27	0·98	1·98
		Bihar ...	...	...	0·11	0·25	...	...	...	2	0·36	0·18	0·34	0·30	0·91	2·36
		Barh ...	...	...	0·26	0·10	...	...	...	2	0·36	0·16	0·36	0·28	1·16	2·11
		Bickram ...	...	...	0·17	...	...	...	...	1	0·17	?	0·17	?	0·93	?
		Hilsa ..	...	...	0·15	0·04	...	...	...	1	0·19	?	0·19	?	0·93	?
	Monghyr ...	Begusarai ...	...	...	0·15	0·08	...	...	...	1	0·23	0·24	0·23	0·32	2·98	2·56
		Monghyr ...	...	...	0·10	0·10	...	...	...	2	0·20	0·22	0·20	0·31	1·43	2·23
		Jamui .	...	...	...	0·06	...	...	...	Nil	0·06	0·24	0·06	0·27	1·34	2·04
		Gogri ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·89	?
		Shaikpura ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·65	?
		Chahai Bamda	...	...	0·07	0·05	...	...	...	Nil	0·12	?	0·12	?	2·12	?
	Sonthal Parganas.	Rajmahal ...	...	...	0·19	0·11	...	...	...	2	0·30	0·17	0·30	0·20	1·16	1·49
		Godda ..	...	...	0·08	0·06	...	...	...	Nil	0·14	0·22	0·14	0·28	1 28	1·63
		Pakour ...	...	...	0·06	...	...	...	...	Nil	0·06	0·07	0·06	0·09	4·55	1·36
		Naya Dumka	...	...	0·16	0·20	...	...	...	2	0·36	0·23	0 36	0·32	2·61	2·38
		Deoghur ..	...	...	0·09	0·40	...	...	...	1	0·49	0·13	0·49	0·18	1·63	2·51
		Jamtara ...	...	...	0·23	0·34	...	...	...	2	0·57	0·09	0·57	0·16	3·88	1·96
		Belbodda ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·14	?
		Nanihat ...	...	...	...	0·28	...	...	...	1	0·28	?	0·28	?	0·90	?
CHOTA NAGPUR.	Hazaribagh ...	Pachamba (Giridih).	...	...	0·30	0·05	...	...	...	1	0·35	0·22	0·35	0·39	4·00	2·21
		Hazaribagh	...	...	0·62	0·24	...	...	...	2	0·86	0·18	0·86	0·42	4·91	2·50
		Somtaguran	...	...	0·52	0·18	...	...	...	2	0·70	0·37	0·70	0·41	5·52	1·89
		Mahudi Hills	...	...	0·36	0·24	...	...	...	2	0·60	0·30	0·60	0·44	6·45	2·23
		Jhumra Hill										0·20		0·34		2·37
		Barhi ...	...	...	...	0·53	...	...	...	1	0 53	?	0·53	?	2·36	?
		Chatra ...	...	...	0·10	0·11	...	...	...	2	0·21	?	0·21	?	2·52	?
		Karangacha .	...	...	0·17	0·16	...	...	...	2	0·33	?	0·33	?	2·10	?
		Ramgar ...	...	...	0·05	0·25	...	...	...	1	0·30	?	0·30	?	4·35	?
	Lohardaga ..	Lohardaga ...	...	...	0·18	...	...	...	...	1	0·18	0·04	0·18	0·22	7·29	2·82
		Ranchi ...	...	...	...	0·32	...	...	...	1	0·32	0·24	0·32	0·53	7·48	2·95
		Silli ...										?		?		?
	Palamau ...	Palamau (Daltonganj).	...	...	0·06	...	...	...	...	Nil	0·06	0·11	0·06	0·26	1·70	2·61
		Balumath	...	...	0·41	0·54	...	...	...	2	0·95	?	0·95	?	5·57	?
		Husainabad	...	...	0·12	...	...	...	...	1	0·12	?	0·12	?	2·13	?
		Garhwa .	...	...	0·20	...	...	...	...	1	0·20	?	0·20	?	2·39	?
	Singhbhum ...	Chaibassa ...	...	...	...	0·38	...	...	...	1	0·38	0·21	0·38	0·46	6·91	3 25
		Chakardharpur.	...	...	...	0·85	...	...	...	1	0·85	?	0·85	?	7·19	?
		Ghatsila .	...	...	...	0·45	...	...	...	1	0·45	?	0·45	?	5·45	
		Baharagura										?		?		?
	Manbhum	Purulia ...	...	...	0·03	0·30	..	...	...	1	0·33	0·33	0·33	0·59	6·03	2·53
		Gobindpur .	...	...	0·07	0·55	...	...	...	1	0·62	0 20	0·62	0·40	3·60	2·52
		Raghunathpore	...	...	...	0·07	...	...	...	Nil	0·07	?	0·07	?	2·71	?
		Barahabhum	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·71	?
		Jhalda ..	...	...	...	0·15	...	...	...	1	0·15	?	0 15	?	2·63	?
		Chas .	...	...	...	0·22	...	...	...	1	0·22	?	0·22	?	3·74	?
		Pandra ...	...	...	0·08	0·40	...	...	...	1	0 48	?	0·48	?	2·60	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the* 14*th February* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 11TH OF FEBRUARY 1893.

DURING the previous week a barometric depression had passed across the province, but it was of feeble nature and had given practically no rainfall. In the rear of the depression, however, the usual wave of cold air had swept over the province, and on the 5th instant, or the first day of the week under review, the mean temperature was in defect of the normal by from about 2° to 4°, pressure was rising moderately to rapidly, and was generally in slight excess of the normal over the northern half of the province and about normal over the southern half, while a steady north-westerly wind prevailed at all except a few stations in the north and north-east of the province. Hence fine settled weather, with generally lightly clouded skies prevailed in all districts and rainfall was quite absent. In North-West India, however, on this date weather was very distinctly disturbed from the existence of two depressions, the primary depression which had entered North-West India on the 4th having advanced over South-West Rajputana and Sind, while a secondary depression existed over the North-West Himalayas, and these depressions were as usual advancing in an easterly direction. On the 6th these depressions had advanced rather slowly and pressure was falling slowly in Bengal, while temperature was rising, particularly at the western stations, where also winds were beginning to show the influence of the depressions and had become southerly in a few cases. On the 7th the depressions had again advanced in an easterly direction and had apparently joined together, and a large shallow barometric depression covered Bengal and the neighbouring parts of the Central Provinces. Hence pressure was again falling moderately, the fall being largest in South-West Bengal and Orissa; temperature had risen very rapidly and had become from 1° to 4° in excess of the normal at all except a few of the eastern and northern stations, while winds generally over Bengal were easterly and south-easterly, forming part of an irregular cyclonic circulation round the depression. At the same time the sky clouded over very rapidly and rain was reported in South-West Bengal, Bihar, Chota Nagpur, and parts of North Bengal. On the 8th the depression had passed over the Bay, and its centre was some little distance to the south of the Sundarbans. With the advance of the depression pressure began to rise in Bengal, especially at the western stations, where in some cases the rise was 0·15″ and 0·16″; temperature, on the other hand, was falling in the rear of the depression, and it had become generally slightly below the normal. Very unsettled weather had therefore prevailed over the whole of Bengal from the 7th to the 8th, and general rain was reported on the 8th over almost the whole province. On the 9th the depression had either passed over Burma or perhaps filled up; pressure continued to rise in Bengal and became nearly a tenth of an inch in excess of the normal, while temperature was in defect by from about 3° to 6,° and a steady northerly and north-westerly wind prevailed over the whole province. Hence again the sky became almost cloudless and rainfall ceased. On the 10th pressure continued generally to rise slowly, and the cold wave of air following in the rear of the previous depression had swept over the whole of Bengal and the mean temperature had become below the normal by amounts ranging up to from 8° to 10° at some of the western stations. On the 11th the pressure changes were small and variable, and temperature was increasing, but the mean temperature was still in defect by about 5° to 7°. Hence at the close of the week the cold weather conditions were still strongly developed, fine weather with lightly clouded skies obtained and there was no rainfall reported.

Pressure.—The pressure variations during the week have been large, but on the whole the mean pressure has not been very far removed from the normal. The variations have indeed been a little irregular, and at the majority of stations there has been a slight excess, but defects are reported at two or three stations in the south of the province, while on the other hand excess pressures of 0 03″ and 0·04″ are recorded at some of the stations in North Bihar.

Temperature—Has been unusually low during the week in all districts, and defects of about 4° are reported in Chutia Nagpur and South-West Bengal. For the whole province the defect in the mean temperature for the week has been 2·8°.

The distribution of temperature for the week and its variation from the normal value are best seen in the table below, where the average maximum, minimum and mean temperatures for the week at nine typical stations in different districts of the province are compared with the normal values for the week. The defect, it will be seen, has been largest in the day or maximum temperatures which have generally been from 5° to 6° below the normal:—

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 11th February 1893.

	Normal mean maximum temperature for the week ending 11th February.	Actual mean maximum temperature for the week ending 11th February 1893.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 11th February.	Actual mean minimum temperature for the week ending 11th February 1893.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 11th February.	Actual mean daily temperature for the week ending 11th February 1893.	Variation of actual mean from the normal.
Cuttack	88·8	82·0	—6·8	63·4	61·7	—1·7	76·1	71·9	—4·2
Calcutta	80·1	74·9	—5·2	58·1	54·3	—3·8	69·1	64·6	—4·5
Dacca	80·9	74·0	—6·9	56·0	52·6	—3·4	68·5	63·3	—5·2
Burdwan	81·7	75·8	—5·9	56·3	53·1	—3·2	69·0	64·6	—4·4
Patna	75·4	70·4	—5·0	50·4	48·7	—1·7	63·1	59·6	—3·5
Gaya	79·3	73·5	—5·8	53·9	49·4	—4·5	66·6	61·5	—5·1
Purnea	77·1	71·6	—5·5	49·0	46·7	—2·3	63·2	59·2	—4·0
Hazaribagh	76·1	70·2	—5·9	52·0	46·9	—5·1	64·1	58·6	—5·5
Darjeeling	43·4	38·7	—4·7	32·1	30·6	—1·5	37·7	34·7	—3·0

Rainfall —The rainfall during the week has been light, and the heaviest falls have been in South-West Bengal, where they have averaged 0·70 inch. The falls in Orissa, East Bengal, and Chota Nagpur have averaged about four-tenths of an inch, and those in North Bengal and in Bihar about a fifth of an inch. The falls have been in distinct excess of the normal in South-West Bengal, Chota Nagpur, Orissa, and South Bihar, and in slight defect in the other Divisions.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 11th of February 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th Oct. 1892.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	87·1	49·4	79·7	61·9	70·8	—2·3	0·41	0·30	+0·11	1·00	0·53	+0·47	0·41	0·42	8·53	4·97
South-West Bengal ...	85·3	43·1	75·1	53·2	64·2	—3·7	0·70	0·35	+0·35	1·20	0·55	+0·65	0·70	0·53	6·80	2·96
North Bengal	76·3	41·7	72·7	48·4	60·6	—1·3	0·20	0·31	—0·11	0·44	0·55	—0·11	0·20	0·36	1·52	2·04
East Bengal	81·2	45·0	74·5	51·6	63·0	—2·9	0·42	0·42	0	0·70	0·59	+0·11	0·42	0·54	8·83	3·93
North Bihar	76·3	41·9	70·5	47·9	59·3	—2·4	0·20	0·21	—0·01	0·61	0·44	+0·17	0·20	0·30	1·39	1·90
South Bihar	78·1	43·8	71·9	48·9	60·5	—2·7	0·20	0·16	+0·04	0·82	0·39	+0·43	0·20	0·25	1·02	2·10
Chota Nagpur	83·9	41·1	73·0	49·1	61·1	—5·1	0·43	0·23	+0·20	1·18	0·50	+0·68	0·43	0·41	5·44	2·52

METEOROLOGICAL OFFICE, BENGAL,
The 14*th February* 1893.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

IRRIGATION DEPARTMENT,—BENGAL.

Statement showing heights over mean sea-level and low-water in the Rivers Ganges, Bhagirathi, Jalangi, and Brahmaputra, for the month of January 1893.

Date.		River Ganges.																River Bhagirathi.		River Jalangi.		River Brahmaputra.	
		Mirzapur.		Benares.		Buxar.		Dinapore.		Monghyr.		Sahibganj.		Rampur Boalia.		Goalundo.		Berhampore.		Sarupganj.		Gowhatty.	
	Miles.	96		134	48	90		177	87	297	110	391	94	471	90	591	120						
	Distance.	From Allahabad		From Allahabad	From Mirzapur	From Benares		From Benares	From Buxar ...	From Benares	From Dinapore	From Benares	From Monghyr	From Benares	From Sahibganj ...	From Benares	From Rampur Boalia ...						
		Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.
																						Below zero.	
1st ...	...	2·75	208·97	0·42	197·22	1·08	170·13	7·10	141·33	0·62	102·47	1·42	69·42	0·75	42·75	2·25	11·19	4·21	37·95	3·25	7·55	0·50	148·26
2nd ...	...	2·75	208·97	0·38	197·18	1·08	170·13	7·52	141·28	0·60	102·45	1·33	69·33	0·71	42·71	2·25	11·19	4·17	37·91	3·25	7·55	0·50	148·26
3rd ...	...	2·67	208·89	0·33	197·13	1·00	170·05	7·00	141·23	0·58	102·43	1·25	69·25	0·67	42·67	2·25	11·19	4·12	37·86	3·67	7·97	0·45	148·31
4th ...	...	2·67	208·89	0·29	197·09	1·00	170·05	7·00	141·23	0·54	102·39	1·25	69·25	0·62	42·62	2·25	11·19	4·08	37·82	3·67	7·97	0·50	148·26
5th ...	...	2·58	208·80	0·25	197·05	0·92	169·97	7·00	141·23	0·50	102·35	1·17	69·17	0·58	42·58	2·17	11·11	4·04	37·78	3·00	7·30	0·40	148·36
6th ...	...	2·58	208·80	0·21	197·01	0·92	169·97	6·95	141·18	0·46	102·31	1·08	69·08	0·56	42·56	2·17	11·11	4·00	37·74	3·00	7·30	0·50	148·26
7th ...	...	2·75	208·97	0·25	197·05	0·92	169·97	6·90	141·13	0·42	102·27	1·08	69·08	0·52	42·52	2·17	11·11	3·96	37·70	3·00	7·30	0·55	148·21
8th ...	...	2·92	209·14	0·33	197·13	0.92	169·97	6·85	141·08	0·29	102·14	1·00	69·00	0·50	42·50	2·17	11·11	3·92	37·66	3·00	7·30	0·55	148·21
9th ...	...	3·00	209·22	0·58	197·38	0·92	169·97	6·85	141·08	0·33	102·18	0·92	68·92	0·46	42·46	2·17	11·11	3·87	37·61	3·00	7·30	0·60	148·16
10th ...	...	3·08	209·30	0·67	197·47	1·08	170·13	6·80	141·03	0·21	102·06	0·92	68·92	0·40	42·40	2·08	11·02	3·83	37·57	2·67	6·97	0·60	148·16
11th ...	...	3·00	209·22	0·75	197·55	1·17	170·22	6·80	141·03	0·25	102·10	0·83	68·83	0·37	42·37	2·00	10·94	3·79	37·53	2·67	6·97	0·65	148·11
12th ...	...	2·92	209·14	0·75	197·55	1·25	170·30	6·80	141·03	0·23	102·08	0·75	68·75	0·35	42·35	1·92	10·86	3·75	37·49	2·58	6·88	0·70	148·06
13th ...	...	2·92	209·14	0·75	197·55	1·33	170·38	6·80	141·03	0·21	102·06	0·67	68·67	0·33	42·33	1·83	10·77	3·71	37·45	2·58	6·88	0·70	148·06
14th ...	...	2·83	209·05	0·75	197·55	1·33	170·38	7·00	141·23	0·21	102·06	0·67	68·67	0·31	42·31	1·75	10·69	3·67	37·41	2·58	6·88	0·70	148·06
15th ...	...	2·83	209·05	0·75	197·55	1·25	170·30	7·20	141·43	0·17	102·02	0·58	68·58	0·29	42·29	1·75	10·69	3·62	37·36	2·58	6·88	0·60	148·16
16th ...	...	2·83	209·05	0·75	197·55	1·25	170·30	7·30	141·53	0·12	101·97	0·50	68·50	0·29	42·29	1·67	10·61	3·58	37·32	2·50	6·80	0·65	148·11
17th ...	...	2·92	209·14	0·92	197·72	1·25	170·30	7·25	141·48	0·12	101·97	0·50	68·50	0·29	42·29	1·58	10·52	3·54	37·28	2·75	7·05	0·70	148·06
18th ...	...	3·00	209·22	1·00	197·80	1·33	170·38	7·20	141·43	0·08	101·93	0·42	68·42	0·29	42·29	1·58	10·52	3·50	37·24	2·67	6·97	0·75	148·01
19th ...	...	3·50	209·72	1·17	197·97	1·42	170·47	7·00	141·23	0·04	101·89	0·33	68·33	0·27	42·27	1·58	10·52	3·46	37·20	2·50	6·80	0·70	148·06
20th ...	...	3·67	209·89	1·33	198·13	1·50	170·55	6·90	141·13	0·04	101·89	0·33	68·33	0·27	43·27	1·58	10·52	3·42	37·16	2·67	6·97	0·70	148·06
21st ...	...	3·75	209·97	1·42	198·22	1·67	170·72	6·85	141·08	0·02	101·87	0·25	68·25	0·29	42·29	1·75	10·69	3·38	37·12	2·67	6·97	0·70	148·06
										Below zero.													
22nd ...	...	3·83	210·05	1·83	198·63	1·75	170·80	6·85	141·08	0·04	101·81	0·17	68·17	0·29	42·29	1·75	10·69	3·33	37·07	2·58	6·88	0·72	148·04
23rd ...	...	3·92	210·14	1·83	198·63	1·83	170·88	6·80	141·03	0·08	101·77	0·08	68·08	0·31	42·31	1·75	10·69	3·29	37·03	2·58	6·88	0·70	148·06
24th ...	...	4·00	210·22	1·83	198·63	1·92	170·97	6·80	141·03	0·12	101·73	0·00	68·00	0·31	42·31	1·67	10·61	3·25	36·99	2·50	6·80	0·65	148·11
												Below zero.											
25th ...	...	4·08	210·30	1·83	198·63	2·00	171·05	6·90	141·13	0·17	101·68	0·08	67·92	0·31	42·31	1·67	10·61	3·21	36·95	2·50	6·80	0·60	148·16
26th ...	...	4·08	210·30	1·87	198·67	1·92	170·97	7·00	141·23	0·21	101·64	0·17	67·83	0·31	42·31	1·58	10·52	3·17	36·91	2·67	6·97	0·63	148·13
27th ...	...	4·08	210·30	1·83	198·63	2·08	171·13	7·00	141·23	0·25	101·60	0·17	67·83	0·29	42·29	1·50	10·44	3·12	36·86	2·67	6·97	0·70	148·06
28th ...	...	3·83	210·05	1·83	198·63	2·08	171·13	7·00	141·23	0·27	101·58	0·25	67·75	0·29	42·29	1·50	10·44	3·08	36·82	2·67	6·97	0·73	148·03
29th ...	...	3·67	209·89	1·75	198·55	2·08	171·13	7·00	141·23	0·29	101·56	0·33	67·67	0·29	42·29	1·42	10·36	3·06	36·80	2·67	6·97	0·75	148·01
30th ...	...	3·58	209·80	1·50	198·30	2·08	171·13	7·10	141·33	0·33	101·52	0·25	67·75	0·27	42·27	1·42	10·36	3·04	36·78	2·67	6·97	0·78	147·98
31st ...	...	3·58	209·80	1·50	198·30	1·92	170·97	7·20	141·43	0·35	101·50	0·50	67·50	0·25	42·25	1·33	10·27	3·02	36·76	2·75	7·05	0·78	147·98

Calcutta,
The 13th February 1893.

G. C. Maconchy,
Under-Secy. to the Govt. of Bengal.

IRRIGATION DEPARTMENT, BENGAL.

Abstract statement showing Tollage on Canals in Bengal classed as Major Works for the month of December 1892, as compared with that of the corresponding month of the previous year.

Canals.	Tollage, 1892-93.						Tollage, 1891-92.					
	During the month.			To end of the month.			During the month.			To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Orissa Circle.												
Taldanda Canal System	106	8	7	5,550	13	1	52	10	3	3,277	1	0
Kendrapara ditto ...	7,447	13	2	47,292	15	10	9,118	4	9	66,470	3	4
High Level, Range I	1,218	9	6	9,796	3	0	1,302	1	3	7,814	13	9
Ditto " II	305	3	6	1,868	11	3	320	15	0	1,765	1	6
Ditto " III	183	11	3	1,053	8	1	183	15	6	1,205	13	5
Jajpur Canal ...	29	15	3	162	9	0	13	9	9	164	8	0
Total Orissa Circle ...	9,291	13	3	65,724	12	3	10,991	8	6	80,697	9	0
South-Western Circle.												
Midnapore Canal ...	8,357	3	6	86,010	5	9	12,579	0	3	80,970	10	0
Hidgellee Tidal Canal	2,714	10	0	37,787	4	3	4,407	7	6	20,818	0	3
Total South-Western Circle	11,071	13	6	1,23,797	10	0	16,986	7	9	1,01,788	10	3
Sone Circle.												
Patna Canal System ...	1,301	0	3	15,955	5	9	1,230	2	0	18,665	15	0
Arrah ditto ...	1,256	10	6	13,350	10	3	993	5	3	16,218	13	9
Buxar ditto ...	605	3	9	7,722	3	6	542	13	0	7,907	6	0
Total Sone Circle ...	3,162	14	6	37,028	3	6	2,766	4	3	42,792	2	9
GRAND TOTAL ...	23,526	9	3	2,26,550	9	9	30,744	4	6	2,25,278	6	0

Government Transport Service.

Canal.	Tollage, 1892-93.						Tollage, 1891-92.					
	During the month.			To end of the month.			During the month.			To end of the month.		
	Passengers.	Goods.	Total receipts.	Passengers.	Goods.	Total receipts.	Passengers.	Goods.	Total receipts.	Passengers.	Goods.	Total receipts.
	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.
Orissa Circle.												
High Level ..	2,555	4,267	2,805 3 10	11,953	11,251	12,390 9 4	1,596	2,198	1,494 14 5	8,604	8,227	8,454 11 9
Total Orissa Circle	2,555	4,267	2,805 3 10	11,953	11,251	12,390 9 4	1,596	2,198	1,494 14 5	8,604	8,227	8,454 11 9

Total Navigation Receipts.

Canals.	Earnings, 1892-93.						Earnings, 1891-92.					
	During the month.			To end of the month.			During the month.			To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Orissa Canals ...	12,097	1	1	78,115	5	7	12,486	6	11	89,152	4	9
Midnapore Canal ...	8,357	3	6	86,010	5	9	12,579	0	3	80,970	10	0
Hidgellee Tida, Canal...	2,714	10	0	37,787	4	3	4,407	7	6	20,818	0	3
Sone Canals ...	3,162	14	6	37,028	3	6	2,766	4	3	42,792	2	9
Total ...	26,331	13	1	2,38,941	3	1	32,239	2	11	2,33,733	1	9

CALCUTTA,
The 14th February 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

IRRIGATION DEPARTMENT, BENGAL.

Abstract statement showing Tollage on Canals in Bengal classed as Minor Works and Navigation for the month of December* 1892, *as compared with that of the corresponding month of the previous year.

Canals.	Tollage, 1892-93.						Tollage, 1891-92.					
	During the month.			To end of the month.			During the month.			To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Calcutta and Eastern Canals	41,833	4	9	2,29,249	4	3	38,147	7	3	2,55,001	1	6
Tolly's Nala ...	10,639	11	6	60,653	0	6	10,714	14	0	79,123	9	9
Total ...	52,473	0	3	2,89,902	4	9	48,862	5	3	3,34,124	11	3
Orissa Coast Canal ...	3,452	3	3	36,148	1	3	4,642	2	6	36,668	9	9
Nadia Rivers ..	12,005	7	0	1,38,831	0	3	11,306	10	6	1,67,259	6	6
Grand Total ...	67,930	10	6	4,64,881	6	3	64,811	2	3	5,38,052	11	6

Calcutta,
The 14*th February* 1893.

G. C. McConchy,
Under-Secy. to the Govt. of Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the* 11*th February* 1893, *as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 11th February 1893.			Week ending Saturday, the 13th February 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	1 520	2.88,026	4,852	1,322	3,71,280	6,524
Jute	106	53,000	940	14	8,000	120
Firewood	83	53.150	752	107	74.100	1,130
Other articles	900	2,12,755	3,106	979	2,46,375	3,495
Total ...	2,609	6,06,930	9,650	2,422	6,99,755	11,269

EAST INDIAN RAILWAY.

Statement of Goods Traffic in Staples carried during the five weeks ending 31*st December* 1892, *as compared with the same period of* 1891.

Staples.	1891.		1892.		Increase.		Decrease.	
	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.
	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.
Cotton, raw	53,125	41,549	1,78,916	80,844	1,25,791	39,295	...	...
Cotton twist and yarn—								
1.—European	10,396	9,669	9,706	9,281	...	...	690	388
2.—Indian	22,499	12,455	22,424	11,782	...	...	75	673
Cotton piece-goods—								
1.—European	1,31,040	1,44,637	1,57,366	1,83,182	26,326	38,545	...	...
2.—Indian	13,061	9,074	18,357	11,455	5,296	2,381	...	...
Drugs and chemicals—								
1.—Intoxicating other than opium	417	134	262	89	...	...	155	45
2.—Non-intoxicating	12,485	12,797	13,590	12,648	1,105	...	...	149
Dyes and tans—								
1.—Indigo	75,011	84,849	68,946	82,716	...	...	6,065	2,133
2.—Myrabolams	33,369	8,693	15,086	4,759	...	...	18,283	3,934
3.—Aniline dyes	433	412	474	384	41	...	...	28
4.—Cutch	2,898	1,085	2,010	825	...	...	888	260
5.—Paints and colours	13,827	3,711	13,091	5,858	...	2,147	736	...
6.—Others	4,056	2,218	2,349	1,348	...	...	1,707	870
Grains—								
1.—Wheat	8,25,478	2,12,965	3,50,022	1,25,827	...	...	4,75,456	87,138
2.—Rice	8,46,272	1,31,251	11,15,446	2,02,986	2,69,174	71,735	...	...
3.—Jawar and bajra	95,596	12,238	74,094	9,028	...	...	21,502	3,210
4.—Gram	1,56,145	39,673	2,18,205	1,02,509	61,760	62,836	...	...
5.—Indigo seed	17,726	3,997	33,158	7,558	15,432	3,561	...	...
6.—Seeds other than oil-seeds	85,914	25,042	94,316	32,693	8,402	7,651	...	...
7.—Others	4,45,342	1,10,959	5,60,472	1,80,719	1,15,130	69,760	...	...
Hides and skins—								
1.—Hides of cattle	49,513	32,192	58,423	38,567	8,910	6,375	...	...
2.—Skins of sheep, &c.	14,672	8,273	19,861	9,640	5,189	1,367	...	...
Horns	5,550	1,544	1,570	916	...	...	3,980	628
Jute—								
1.—Raw	1,67,468	25,326	1,26,275	29,320	18,867	3,994	...	...
2.—Gunny bags and cloth	1,06,060	51,205	1,24,644	63,404	18,584	12,199	...	...
Lac—								
1.—Stick	27,6 9	8,145	49,481	18,208	21,872	10,063	...	...
2.—Shell lac	15,351	11,261	1,273	546	...	...	14,078	10,715
Leather—								
1.—Unmanufactured	2,090	4,039	2,928	6,203	838	2,164	...	...
2.—Manufactured	4,902	5,714	5,303	7,045	401	1,331	...	...
Liquors—								
1.—Beer	11,279	6,720	12,041	6,354	762	...	...	366
2.—Wines	4,769	7,104	4,582	6,384	...	...	187	720
3.—Spirits	2,350	3,163	2,332	2,901	...	...	18	262
Metals—								
1.—Copper, unwrought	5,717	6,709	5,953	7,328	236	619	...	...
2.—Brass, unwrought	4,335	2,052	11,238	4,217	6,903	2,165	...	...
3.—Brass and copper, wrought	18,500	10,847	20,430	10,032	1,939	...	...	815
4.—Iron	2,40,807	1,06,525	2,86,288	1,01,844	45,481	...	...	4,681
5.—Tin	5,539	5,.22	6,784	5,213	1,245	...	...	309
6.—Others	16,962	12,596	12,825	8,822	...	...	4,137	3,774
Oils—								
1.—Castor	7,729	1,033	5,928	1,865	...	772	1,792	...
2.—Kerosine	1,52,196	78,641	1,46,128	61,373	...	...	6,068	17,268
3.—Others	12,410	5,194	16,344	7,577	3,934	2,383	...	...
Oil-seeds—								
1.—Linseed	2,04,459	61,063	1,43,024	41,121	...	...	61,435	19,942
2.—Rape and mustard	1,00,748	22,988	1,84,391	53,768	83,643	30,780	...	...
3.—Til or jinjili	39,308	9,071	66,003	17,239	26,695	8,165	...	...
4.—Castor	74,206	18,283	77,710	19,877	3,504	1,594	...	...
5.—Poppy	63,418	20,976	11,313	2,706	...	...	52,105	18,270
6.—Others	10,522	1,836	9,328	4,907	...	71	1,194	...
Opium	85,708	89,054	88,311	90,620	2,603	666	...	...
Paper and pasteboard	11,906	7,806	10,789	9,048	...	1,248	1,117	...
Provisions—								
1.—Ghee	37,043	30,794	44,390	28,675	7,347	...	...	2,119
2.—Dried fruits and nuts	39,834	31,314	36,815	33,7 5	...	...	3,019	3,579
3.—Cocoanuts	16,735	6,687	13,427	3,925	...	...	3,308	2,762
4.—Turmeric	11,611	8,671	11,365	6,533	...	...	246	2,138
5.—Others	1,60,967	89,551	1,70,675	1,09,930	9,708	11,379	...	...
Salt	5,69,361	1,02,128	6,05,159	1,18,283	35,798	16,155	...	...
Saltpetre, &c.—								
1.—Saltpetre	72,374	30,246	1,16,150	42,088	43,776	11,842	...	...
2.—Borax	1,013	362	2,203	1,518	1,190	1,156	...	...
3.—Other saline substances	37,265	10,059	39,240	10,510	1,975	451	...	...
Silk, raw—								
1.—Foreign	...	...	8	10	8	10	...	...
2.—Indian	1,954	998	4,630	2,039	2,676	1,041	...	...
Silk piece-goods—								
1.—Foreign	35	85	27	76	...	...	8	9
2.—Indian	673	792	871	1,077	198	285	...	...
Spices—								
1.—Pepper	2,932	2,678	3,318	3,744	386	1,066	...	...
2.—Other	16,988	7,0 7	13,126	7,994	...	957	3,862	...
Sugar—								
1.—Drained	32,033	12,755	23,155	9,167	...	...	8,878	3,648
2.—Undrained	4,25,304	79,442	2,61,134	1,37,154	1,95,839	57,712	...	...
Stone and lime	2,56,226	38,089	3,19,378	60,911	63,152	22,822	...	...
Tea—								
1.—Foreign	14	28	2	1	...	...	12	27
2.—Indian	4,572	4,167	3,498	3,605	...	...	7,044	562
Timber, &c.—								
1.—Timber	1,47,212	24,080	1,03,107	17,303	...	...	44,105	6,777
2.—Firewood	23,678	1,591	38,672	1,917	14,994	326	...	...
Tobacco	33,901	16,839	33,323	16,139	...	...	578	709
Umbrellas	236	328	199	177	...	...	37	151
Wool—								
1.—Raw	3,171	2,653	3,967	2,870	796	217	...	...
2.—Piece-goods—								
a.—European	1,401	1,348	1,728	1,127	327	...	...	221
b.—Indian	4,922	5,807	3,994	5,998	..	191	928	...
3.—Shawls	...	...	...	...	...	...	...	...
All other articles of merchandise	4,64,682	1,71,692	4,90,342	1,96,525	25,660	24,833	...	...
Total	66,17,601	21,79,408	71,63,702	25,14,438	5,46,101	3,35,030	...	...
Military stores	22,492	27,838	22,491	33,294	...	5,456	1	...
Coal—								
1.—For public	44,78,280	6,05,348	47,09,181	6,39,486	2,30,901	34,138	...	...
2.— „ Railway	5,59,103	1,00,350	6,38,105	76,996	79,002	...	...	23,354
Railway Materials—								
1.—For construction and revenue	7,44,955	31,432	13,88,198	63,673	6,43,243	32,241	...	...
Live-stock	...	19,335	...	13,229	...	...	...	6,107
Total	1,24,22,431	29,63,712	1,39,21,677	33,41,116	14,99,246	3,77,404	...	...

T. Simpson, *Assistant Auditor.*

Traffic Audit Office, Goods Division, Jamalpur, *the 7th February* 1893.

EASTERN BENGAL STATE RAILWAY.

Abstract of principal commodities carried over the Eastern Bengal State Railway during the month of November 1892, as compared with the same month of the previous year.

STAPLES.	1892.		1891.		Total.		Increase.	Decrease.
	Up.	Down.	Up.	Down.	1892.	1891.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal	4,686	2,681	2,660	9,203	15,151*	23,758*	.....	8,607
Cotton, raw	73	224	59	133	297	192	105	......
Cotton twist and yarn—								
1.—European								
2.—Indian								
Cotton piece-goods—								
1.—European—								
a.—In bales and bundles	4,311	135	3,112	181	4,446	3,293	1,153	......
b.—In boxes								
2.—Indian—								
a.—In bales and bundles								
b.—In boxes								
Grains—								
2.—Rice	4,706	925	4,020	1,660	5,631	5,680	.....	49
5.—Others	2,231	1,897	2,131	2,667	4,128	4,798	... ..	670
Hides and skins—								
1.—Hides of cattle—								
a.—Dressed								
b.—Undressed								
2.—Skins of sheep, &c.—	11	375	4	516	386	520	......	134
a.—Dressed								
b.—Undressed								
Jute—								
1.—Raw—								
a.—Screwed	16	21,107	......	7,879	21,123	7,879	13,244	......
b.—Unscrewed	100	49,947	15	28,·26	50,047	28,641	21,406	......
2.—Gunny-bags and cloth	437	2,834	409	1,226	3,271	1,635	1,636	......
Metals—								
1.—Copper, unwrought								
2.—Brass, unwrought								
3.—Brass and copper, wrought	1,386	196	839	63	1,582	901	681	......
4.—Iron								
5.—Tin								
6.—Others								
ls—								
2.—Kerosine	7,499	31	1,196	4	7,530	1,202	6,328	....
3.—Others	360	68	246	25	428	271	157	... ..
Oil-seeds—								
1.—Linseed								
2.—Rape and mustard								
3.—Til or gingelly								
4.—Niger	397	1,459	224	1,520	1,856	1,744	112	.. ..
5.—Castor								
6.—Poppy								
7.—Others								
Provisions—								
2.—Betel-nuts	133	1,235	97	1,116	1 373	1,213	160	...
3.—Others	731	365	513	180	1,104	693	411	... ..
Railway plant and rolling-stock	......	... ..	... ..	......	9,694†	9,045†	649	......
Salt	5,411	31	4,164	14	5,442	4,178	1,264	......
Sugar—								
1.—Drained	789	260	950	173	1,149	1,123	26	......
2.—Undrained								
Tea—								
1.—Foreign	6	4,277	2	2,081	4,283	2,083	2,200	......
2.—Indian								
Wood—								
1.—Timber	2 5	316	167	126	531	2 3	238	......
2.—Firewood	1,657	.. ..	1,643	.. ..	1,657	1,643	14	......
Tobacco	81	1,369	57	591	1,450	648	802	......
All other articles of merchandise—								
1.—Unmanufactured	5,229	2,355	2,808	2,397	7,584	5,205	2,379	... ..
2.—Manufactured								
Hay, straw, and wooloo (C. & S.-E. Sections)...	557	... ..	534	.... .	557	534	23	......
Total ...	41,035	92,087	25,852	60,380	150,700	107,172	52,988	9,640

* Includes 7,884 tons and 11,895 tons of coal during 1892 and 1891, respectively, carried for Revenue, for which no "Up" and "Down" register maintained.

† Railway plant and rolling-stock, 9,694 tons and 9,045 tons for the years 1892 and 1891, respectively, for which no "Up" and "Down" register maintained.

Comparative Statement of principal commodities carried on the Eastern Bengal State Railway during the month of November 1892.

INCREASES.

	Tons.
Cotton twist and yarn and cotton piece-goods ..	1,153

Ordinary fluctuation

Jute, screwed	13,244

Principal increases from Belakoba, Rangpur, Mymensing, Goalundo and Sirajganj. The crop of 1891 was a short one.

Jute, unscrewed	21,406

Domar, Atrai, Dawani, Nilphamari and Baninagore how large increases. The crop of 1891 was a short one.

	Tons.
Kerosine oil	6,328

Due to the prohibition of carriage by boat within certain limits of the port of Calcutta.

Tea	2,200

Of this increase Jalpaiguri contributed about one-half. Much of the crop could not be brought earlier into the market on account of the cart roads having been washed away by heavy rains.

Tobacco	802

Kaunea, Rangpur and Domar contributed about one-half to this increase, said to be due to markets at Rangoon and Moulmein being favourable.

DECREASES.

	Tons.
Coal	8,607

Sufficiency in stock for Railway and Flotilla consumption.

JAMES SHAW,
Examiner of Accounts.

CALCUTTA, *the 30th January 1893.*

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 4th February 1893, *on* 1,610½ *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	321,831	3,61,120 6 0	28,43,694 30	6,57,329 8 0	17,526 8 0	10,35,976 6 0	78,908½	108,655¾	187,564¼
Or per mile of railway	......	224 3 8	......	408 2 5	10 14 2	643 4 3	......	......	......
For previous 4 weeks of half-year	1,130,897	13,10,061 4 0	1,08,92,057 0	23,97,842 7 0	72,567 3 0	37,80,470 14 0	302,389½	441,300	743,689½
Total for 5 weeks ...	1,452,728	16,71,181 10 0	1,37,35,751 30	30,55,171 15 0	90,093 11 0	48,16,447 4 0	381,297¾	549,955¾	931,253½
Comparison.									
Total for corresponding week of previous year	310,813½	3,67,651 14 2	26,49,699 0	6,02,128 12 8	17,677 9 7	9,86,858 4 5	76,994	100,671	177,665
Per mile of railway corresponding week of previous year ...	......	231 14 5	......	380 6 9	11 2 8	623 7 10	......	......	......
Total for corresponding 5 4/7 weeks of previous year	1,443,651½	16,33,342 12 1	1,38,22,633 20	31,90,817 5 6	85,280 4 7	49,09,440 6 2	403,510	514,360	917,870

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 4th February 1893, *on* 22¼ *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	25,772	6,557 12 0	12,780 0	391 11 0	11 0 0	6,960 7 0	859	109	968
Or per mile of railway	......	294 11 8	......	17 9 8	0 7 11	312 13 3	......	......	......
For previous 4 weeks of half-year	76,790	18,875 12 0	38,387 0	1,384 13 0	50 0 0	20,310 9 0	3,461	483	3,944
Total for 5 weeks ...	102,562	25,433 8 0	51,167 0	1,776 8 0	61 0 0	27,271 0 0	4,320	592	4,912
Comparison.									
Total for corresponding week of previous year ...	22,471	5,702 1 11	37,998 20	801 6 0	9 12 3	6,513 4 2	852	116	968
Per mile of railway corresponding week of previous year .	......	256 4 5	......	36 0 3	0 7 0	292 11 8	......	......	......
Total for corresponding 5 4/7 weeks of previous year ...	101,233	25,682 11 2	96,393 0	2,864 1 9	64 13 0	28,611 9 11	4,597	529	5,126

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 4th February 1893, *on* 161⅗ *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*17,188	*10,933 10 0	52,351 30	7,647 9 0	36 0 0	18,617 3 0	5,332½	3,241	8,573½
Or per mile of railway	......	67 11 11	......	47 6 1	0 3 7	115 5 7	......	......	......
For previous 4 weeks of half-year	67,308	41,402 11 0	2,03,088 0	32,808 10 0	195 0 0	77,406 5 0	20,810	12,997	33,807
Total for 5 weeks ...	84,496	55,336 5 0	2,55,439 30	40,456 3 0	231 0 0	96,023 8 0	26,142½	16,238	42,380½
Comparison.									
Total for corresponding week of previous year	13,055½	9,476 7 4	46,775 30	7,861 12 0	67 6 0	17,405 9 10	5,805	2,202	8,007
Per mile of railway corresponding week of previous year ...	......	58 11 5	......	48 11 5	0 6 8	107 13 6	......	......	......
Total for corresponding 5 4/7 weeks of previous year	71,051½	50,537 7 2	2,40,497 20	41,122 0 0	318 6 3	91,977 13 5	30,899	11,539	42,438

* The increase is partly due to running of a Special train from Umballa to Delhi, and partly to ordinary development of traffic.

EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., DACCA, K.-D., AND ASSAM-BIHAR SECTIONS.)

Approximate Return of Traffic for the week ended 4th February 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	235,747	98,510 0 0	7,16,086 0	96,750 0 0	14,440 0 0	2,09,700 0 0	27,746	25,257	53,003
Or per mile of railway	303	127 0 0	922 0	125 0 0	*2 0 0	254 0 0	......	......	......
For previous 4 weeks of half-year	712,185	3,35,390 0 0	27,10,326 0	4,64,420 0 0	67,420 0 0	8,67,230 0 0	110,546	128,696	239,242
Total for 5 weeks ...	947,932	4,33,900 0 0	34,26,412 0	5,61,170 0 0	81,860 0 0	10,76,930 0 0	138,292	153,953	292,245
COMPARISON.									
Total for corresponding week of previous year	204,714	93,182 0 0	5,13,334 0	69,339 0 0	10,518 0 0	1,73,039 0 0	27,675	29,561	57,236
Per mile of railway corresponding period of previous year ...	263	120 0 0	661 0	89 0 0	*1 0 0	210 0 0	......	......	......
Total to corresponding date of previous year	902,309	4,39,045 0 0	30,01,317 0	4,55,283 0 0	71,998 0 0	9,66,326 0 0	144,301	154,165	298,466

* Excluding steamer earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 4th February 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	36,294	12,730 0 0	60,580 0	4,490 0 0	100 0 0	17,320 0 0	3,423	2,249	5,672
Or per mile of railway	290	102 0 0	485 0	36 0 0	1 0 0	139 0 0	......	......	......
For previous 4 weeks of half-year	116,621	44,450 0 0	2,18,184 0	12,950 0 0	800 0 0	58,200 0 0	15,089	7,599	22,688
Total for 5 weeks ...	152,915	57,180 0 0	2,78,764 0	17,440 0 0	900 0 0	75,520 0 0	18,512	9,848	28,360
COMPARISON.									
Total for corresponding week of previous year	36,898	12,874 0 0	68,608 0	4,700 0 0	109 0 0	17,683 0 0	3,423	2,249	5,672
Per mile of railway corresponding week of previous year ...	295	103 0 0	549 0	37 0 0	1 0 0	141 0 0	......	......	......
Total to corresponding date of previous year	153,630	56,792 0 0	3,30,173 0	19,903 0 0	566 0 0	77,261 0 0	19,197	10,818	30,015

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 4th February 1893, on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	20,070	5,860 0 0	14,513 0	1,480 0 0	290 0 0	7,620 0 0	2,500	724	3,224
Or per mile of railway	233	68 0 0	169 0	17 0 0	4 0 0	89 0 0	......	......	......
For previous 4 weeks of half-year	72,071	23,760 0 0	80,904 0	7,390 0 0	660 0 0	31,810 0 0	9,896	3,000	12,896
Total for 5 weeks ...	92,141	29,620 0 0	95,417 0	8,870 0 0	940 0 0	39,430 0 0	12,396	3,724	16,120
COMPARISON.									
Total for corresponding week of previous year	16,698	5,696 0 0	15,781 0	1,529 0 0	85 0 0	7,310 0 0	2,412	720	3,132
Per mile of railway corresponding week of previous year ...	194	66 0 0	184 0	18 0 0	1 0 0	85 0 0	......	......	......
Total to corresponding date of previous year	90,504	30,456 0 0	55,445 0	8,455 0 0	699 0 0	36,610 0 0	13,113	3,809	16,922

BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

Approximate Return of Traffic for the week ending 4th February 1893, *on* 756 *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	97,130	43,100	4,36,080	59,660	11,880	1,14,640	9,596	15,771	25,36
Or per mile of railway	128·48	57·01	576·83	78·92	15·71	151·64	......	......	......
For previous 4 weeks of half-year	331,920	1,36,860	16,74,850	2,37,360	46,920	4,21,140	41,737	63,052	104,78
Total for 5 weeks ...	429,050	1,79,960	21,10,930	2,97,020	58,800	5,35,780	51,333	78,823	130,15
COMPARISON.									
Total for corresponding week of previous year on 751 miles open	82,075	34,845	3,88,955	55,407	8,486	98,738	11,350	19,371	30,72
Per mile of corresponding week of previous year	109·29	46·40	517·92	73·78	11·30	131·48	......	......	......
Total to corresponding date of previous year	396,204	1,66,432	16,84,264	2,35,630	49,435	4,51,497	62,586	85,567	148,15

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REPORT ON THE STATE OF THE SALT MARKET FOR THE THIRD QUARTER OF 1892-93.

No. 150B., dated Calcutta, the 13th February 1893.

From—T. INGLIS, ESQ., Secretary to the Board of Revenue, L.P.,
To—The Secretary to the Government of Bengal, Financial Department.

SALT.

D. R. LYALL, ESQ., C.S.I.

I AM directed by the Board of Revenue to submit the following report on the state of the salt market for the 3rd quarter of 1892-93, comprising the months of October, November, and December 1892.

2. The quantity of salt of every description on which duty was paid during the quarter under report amounted to 26,48,867 maunds, against 26,38,321 maunds in the previous quarter, and 24,29,086 maunds in the corresponding quarter of the previous year; and the net amount of duty levied thereon was Rs. 62,46,890, against Rs. 61,91,983 in the previous quarter, and Rs. 56,68,109 in the corresponding quarter of the previous year. In all cases fractions are omitted.

3. The quantity of excise salt removed from the golas in Orissa during the quarter under review, and the quantity which remained in store at the close of the quarter, are shown in table I:—

TABLE I.

	Cuttack.	Puri.	Balasore.
		Mds. s.	Mds. s.
Balance at close of the last quarter	......	57,435 10	1,544 0
Manufactured or added during the quarter	......	......	......
Total ...	......	57,435 10	1,544 0
Sales during the quarter	......	32,491 0	1,130 0
Wastage	......	995 0	130 0
Total ...	......	33,486 0	1,260 0
Balance at close of the quarter	......	23,949 10	284 0

4. The total sale of excise salt during the quarter under review amounted to 33,621 maunds, against 27,734 maunds in the previous quarter, and 3,439 maunds in the corresponding quarter of the previous year. The total amount of excise salt on which duty was paid during the quarter was 30,920 maunds.

5. The subjoined table shows in detail the importations into the port of Calcutta and the total clearances of sea-imported salt during the quarter under review compared with the figures of the corresponding quarters of the previous two years:—

TABLE II.

	1890-91.		1891-92.		1892-93.	
	Third quarter.		Third quarter.		Third quarter.	
	Imported.	Cleared.	Imported.	Cleared.	Imported.	Cleared.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Liverpool	11,23,407	15,51,162	15,40,715	14,18,941	18,37,888	13,55,067
Hamburg	2,67,459	1,93,475	4,81,972	3,85,961	2,90,082	4,56,240
Russia	......	......	......	4	......	1
Ceylon	......	2,060	......	190	......	......
Aden	1,80,483	1,89,276	1,08,072	2,04,702	3,22,583	3,60,427
Arabian and Persian Gulfs ...	4,26,304	2,63,088	1,35,053	1,62,815	2,75,071	2,10,455
Bombay	68,926	1,15,340	1,62,166	1,37,476	1,70,175	1,33,677
Tuticorin	......	......	39,978	11,320	......	21,870
Coconada	10,482	10,482	......	......	......	......
Total ...	20,77,061	23,24,883	24,67,956	23,21,439	28,95,790	25,52,377

6. Table III shows the quantity of sea-imported salt remaining in the warehouses at the close of the quarter as compared with the results of the previous four quarters:—

TABLE III.

WHERE STORED.	Third quarter of 1891-92.	Fourth quarter of 1891-92.	First quarter of 1892-93.	Second quarter of 1892-93.	Third quarter of 1892-93.
	Mds.	Mds.	Mds.	Mds.	Mds.
Sulkea Government golas	16,91,716	13,73,050	8,89,875	8,13,492	8,40,647
Chittagong ditto do.	1,13,972	94,230	29,451	1,03,167	1,56,714
Ditto private do.	22,178	5,257	2,176	......	......
Narayanganj ditto do.	868	......	......	......	......
Total ...	18,28,734	14,72,537	9,21,502	9,16,659	9,97,361

7. The despatches of salt from Calcutta by water and the three railways passing the several salt-pass stations into the interior of the country, both east and west of the river Hooghly, as well as the despatches by steamers and

flats, during the quarter under review and the corresponding quarters of the previous two years, are shown in the table below:—

TABLE IV.

PERIOD.	BY WATER.					BY RAIL.			BY STEAMERS AND FLATS.	
	Viâ Balikhal.	*Viâ* Sankrail.	*Viâ* Gewakhally.	*Viâ* Kidderpore.	*Viâ* Balliaghata.	*Viâ* Ruthtollah Ghat.	By the East Indian Railway.	By the Eastern Bengal and South-Eastern Railways or *viâ* Chitpur.	Quantity despatched to the interior (excluding Orissa).	Quantity despatched to Orissa.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Third quarter of 1890-91	2,14,663	1,21,233	76,252	90,620	4,92,110	1,366	8,25,344	2,83,306	1,24,862	49,150
Ditto of 1891-92	2,00,900	1,21,129	80,707	87,337	5,82,883	410	8,25,610	2,78,293	1,40,406	51,630
Ditto of 1892-93	2,15,326	1,26,036	84,566	68,850	5,21,917	161	8,90,246	2,54,718	1,63,672	39,870

8. The quantity of salt despatched by the East Indian Railway to stations beyond Buxar during the quarter under review amounted to 5,508 maunds as noted in the margin, against 4,131 maunds 10 seers in the previous quarter, and 1,903 maunds 20 seers in the corresponding quarter of the previous year.

		Mds.	s.
October	...	1,032	30
November	...	2,754	0
December	...	1,721	10
Total	...	5,508	0

9. The quantity of saltpetre-salt removed from the refineries on payment of duty amounted to 7,017 maunds, against 5,526 maunds in the previous quarter.

10. The shipments of Liverpool salt for the port of Calcutta, according to published market reports, were as follow:—

			Tons.
October	...	...	21,210
November	...	...	16,770
December	...	...	23,280
	Total	...	61,260

11. Table V shows the market price per 100 maunds of Liverpool and other descriptions of salt at the close of each fortnight during the quarter, as compared with the prices obtaining during the same period last year:—

TABLE V.

DESCRIPTION OF SALT.	Prices on the 15th October		Prices on the 31st October		Prices on the 15th November		Prices on the 30th November		Prices on the 15th December		Prices on the 31st December.	
	1891.	1892.	1891.	1892.	1891.	1892.	1891.	1892.	1891.	1892.	1891.	1892.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Liverpool	56	71	60	71	55	64	61	63	61	60	68	61
Jedda *karkach*	...	...	...	...	...	43	...	48	...	43	.	43
Bombay ditto	55	40	45	40	45	45	45	50	45	55	45	53
Muscat ditto	44	42	44	42	45	41	45	38	45	43	45	45
Hamburg ditto	43	52	50	55	46	57	50	51	52	53	55	55
Rock	110	95	102	95	105	95	105	95	110	95	120	95

12. The following table shows the quantity of sea-imported salt admitted into bond and cleared from bond and shipboard at Chittagong and Narayanganj during the quarter under review and the corresponding quarter of 1891-92:—

TABLE VI.

PORT.	Description of Salt.	ADMITTED INTO BOND.		CLEARED.	
		Third quarter of 1891-92.	Third quarter of 1892-93.	Third quarter of 1891-92.	Third quarter of 1892-93.
		MDS. S.	MDS. S.	MDS. S. C.	MDS. S. C.
Chittagong ...	Liverpool	36,698 0	1,00,293 0	53,190 30 8	52,434 12 0
	Maldive	......	......	0 15 0	......
	Cochin	......	......	0 15 0	......
	Hamburg	......	......	......	400 0 0
	Akyab	......	......	......	0 0 8
	Tirumalavasal	......	......	......	1 0 0
Narayanganj	Liverpool	......	......	50,565 20 0	12,375 0 0
	Total ...	36,698 0	1,00,293 0	1,04,057 0 8	65,210 12 8

No transactions in sea-imported salt have been reported for the quarter from the ports of Cuttack, Puri and Balasore.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 18th February, 1893.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.				
BURDWAN DIVN.	1	Burdwan Feb. 18, '93 Kalna ... Katwa ... Raniganj ..	1·77 0·78 0·84 0·89	Weather—cloudy and cold. Ploughing of lands has commenced. No more rain is wanted. Prospects of *rabi* and sugarcane fair. Condition of cattle good. Fodder sufficient. Prices of common rice:— Srs. Burdwan ... ... 11 to 13 per rupee. Kalna ... ... 10 to 13 per rupee. Katwa ... ... 13½ per rupee. Raniganj ... ... 13 per rupee.
	2	Bankura „ 18, '93 Vishnupur ..	1·22 1·16	Weather—cloudy, but to-day (18th) fair. Ploughing has been much facilitated by the recent rain, though it has done some injury to such of the mango blossom as was out. Pressing of sugarcane going on. Fodder and water sufficient. Common rice sells at 12 seers per rupee both at Sadar and Vishnupur.
	3	Birbhum .. 18, '93 Rampur Hát ...	1·57 0·59	Weather—rainy but at last clear. There were good showers of rain in the week which facilitated ploughing. Sugarcane is being pressed. Wheat is flourishing. Common rice sells at 13 to 15 seers per rupee. Fodder and water sufficient.
	4	Midnapore „ 18, '93	1·35	Weather—unusually cold for the time of year. Prospects of crops favourable. Prices of common rice:— Srs. Sadar ... ... 12 per rupee. Contai ... ... 13 to 15 per rupee. Tamluk ... ... 12 to 14 per rupee.
	5	Hooghly .. 18, '93 Serampore ... Jahanabad ...	2·35 3·45 1·09	Weather—cloudy and rainy. This week's rain is to some extent damaging the *rabi* which is in flower or fruit, but greatly benefiting the water-supply and facilitating cultivation of next *aman* crop. It will also greatly benefit hot weather vegetables and the sugarcane crop. Prices of common rice:— Srs. Sadar ... ... 11 per rupee. Serampore ... ... 10 to 11½ per rupee. Jahanabad ... ... 11 to 12½ per rupee.
	6	Howrah „ 18, '93 Ulubaria ...	1·23 1·12	Weather—cold and cloudy. Reaping of *rabi* crops and pressing of sugarcane continue. Condition of cattle good. Fodder and water-supply ample. Price of rice 11 to 12½ seers per rupee.
PRESIDENCY DIVN.	7	24-Parganas „ 20, '93	1·31	Weather—cold and rainy. Sugarcane being pressed. General prospect of crops fair. Sufficient water and fodder. Prices of rice:— Srs. Srs. c. Sadar ... ... 10 to 14 0 per rupee. Barasat ... ... 14 4 per rupee. Basirhat ... ... 12 5 per rupee. Diamond Harbour ... 13 0 per rupee. Barrackpore ... ... 12 4 per rupee. Dum-Dum ... ... 12 0 per rupee.
	8	Nadia „ 18, '93 Kushtia ... Meherpur ... Ranaghat ...	1·96 0·69 0·72 0·47	Heavy rain yesterday (17th). Prospects of *rabi* crops good, but the rain is likely to cause some damage to linseed, gram, and mango blossoms; it will however, facilitate ploughing. Price of rice stationary. Health of cattle good. Fodder and water-supply sufficient.
	9	Khulna „ 18, '93 Bagerhat ... Satkhira ...	3·45 1·80 3·38	Weather—cloudy with pretty heavy rain on two days. Transplanting of *boro* going on. The rain which has fallen in the week will do much good to this crop as well as to the standing *rabi* crops. Common rice selling at from 11 to 14 seers per rupee. Supply of fodder and water sufficient.
	10	Jessore „ 18, '93 Jhenida ... Magura .. Narail ... Bangaon ...	1·00 0·22 0·10 0·42 0·80	Weather—cold and cloudy at times with light showers. The rain has done much good to the standing *rabi* crops, as also to the ploughing of lands for paddy, indigo, &c. Condition of cattle good except in some parts of Bangaon, where cattle-disease is reported to have appeared. Supply of fodder and water sufficient. Prices of rice stationary.
	11	Murshidabad „ 18, '93	0·76	Weather—seasonably cold and cloudy at intervals with rain on the 13th and 14th. The recent rain has done much good to *rabi* crops. Prospects seem to be favourable. Price of rice almost stationary. Fodder and water sufficient.

Division	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and State and prospects of the crops.
BENGAL—*concld.*					
CHITTAGONG DIVN.	12	Chittagong	Feb. 18, '93	0·30	Weather—seasonable. Prospects of crops good. Prices stationary. Condition of cattle good. Supply of fodder sufficient.
	13	Noakhali	" 18, '93	1·18	Weather—seasonable. Occasional rain during the week. The rain has done much good to the *rabi* crops. Fodder and water sufficient. *Damka* disease and cow-pox reported from Sundip and Companiganj. Price of rice stationary.
	14	Tippera	" 18, '93	0·34	Weather—cool and healthy. Lands being ploughed. *Rabi* doing well. Prospects good. Prices stationary.
	15	Chittagong Hill Tracts.	" 17, '93	0·22	Weather—cloudy with occasional showers of rain. The recent rain rendered prospects of vegetables good. Condition of cattle generally good. Prices of common rice:— Srs. Rangamati ... ... 10 } Bandarban ... ... 9½ } per rupee. Manicksury ... ... 20 }
DACCA DIVN.	16	Dacca	" 18, '93	Not reported.	Weather—very cold and cloudy. *Boro* paddy being sown. Cultivation for *aus* and *aman* paddy going on. *Rabi* crops being gathered. Fodder available. No cattle-disease. Common rice selling at from 11 to 14 seers per rupee.
	17	Faridpur	" 18 '93	0·50	Weather—uncertain and cold for the season. Harvesting of mustard nearly completed with fairly good outturn. State of other *rabi* crops favourable. Rain has enabled progress to be made in preparing ground for *aus*. Jute and *boro* paddy being sown. Common rice sells at 13 seers per rupee at Goalundo and Madaripur and at 12 seers at Sadar. Cattle get fodder.
	18	Backergunge	" 18, '93	1·03	Weather—cloudy in the latter part of the week. Prospects of crops good. Common rice sells at about 12 seers per rupee. Fodder and water sufficient.
	19	Mymensingh	" 18, '93	0·93	Weather—seasonably cold. Prospects of crops good. Fodder and water available. No cattle-disease. Prices of common rice:— Srs. Sadar ... ... 11 to 14½ } Kishorganj ... ... 12½ } Netrakona ... ... 13 } per rupee. Jamalpur ... ... 12½ } Tangail ... ... 13 }
RAJSHAHI DIVN.	20	Dinajpur Thakurgaon	" 18 '93 ...	0·38 0·35	Weather—cool and cloudy. The rain will facilitate the cultivation of lands for *bhadoi* and jute. Pressing of sugarcane still going on. Prices of rice:— Srs. c. Sadar ... ... 14 10 } Thakurgaon ... . 15 to 16 0 } per rupee. Condition of cattle good at Sadar, that at Thakurgaon reported to be fair. Fodder and drinking water plentiful.
	21	Rajshahi Nator Naugaon	" 18, '93	0·92 0·52 0·80	Weather—cold and cloudy. The rain and wet weather will facilitate ploughing of lands for the next crops. Pressing of sugarcane still going on. Some cases of small-pox among cattle reported from the Tanore thana. Fodder and water plentiful generally. Price of rice varying from 12 to 15 seers per rupee.
	22	Rangpur Kurigaon Nilphamari Gaibanda Ulipur	" 18, '93	0·42 0·08 0·38 0·22 0·23	Weather—cold and rainy. Prospects of standing crops good. Harvesting of mustard nearly finished. Ploughing for *aus* and jute vigorously going on. Common rice from 12 to 14 seers per rupee.
	23	Bogra Sherpur Naukhila	" 18, '93	0·73 0·70 0·78	Weather—cold and often wet. Most of the *rabi* has been harvested. Land is being prepared for *aus* paddy and jute with good prospects owing to the damp weather. Common rice sells at 13½ seers per rupee. Fodder and water sufficient.
	24	Pabna	" 18, '93	0·81	Weather—cloudy with occasional rain. Rainfall so far has done good, but more may cause injury. Hemp is being harvested and steeped. Price of common rice 12½ seers per rupee at Pabna and Rs. 3-6 to Rs. 4-12 per maund at Sirajganj. Condition of cattle good. Fodder and water-supply sufficient.
	25	Darjeeling Siliguri	" 18, '93 ...	0·08 0·44	Weather—clearer and more sun. Hoarfrost at night. *In the hills*:—Wheat, barley and *tori* progressing favourably. *Bhutta* and potatoes being harvested. *In the terai*:—State and prospects of crops favourable. Mustard and potatoes being harvested. Fodder improved by late rain. No cattle-disease. Prices of coarse rice:— Srs. Hills ... ... 11 } Terai ... ... 12 } per rupee.
	26	Jalpaiguri	" 18, '93	0·50	Weather—cloudy and cold. Prospects of *rabi* crops favourable. Mustard is being gathered; a 16-anna crop expected. Fodder and water sufficient. No cattle-disease reported. Common rice selling at from 13 to 14 seers per rupee.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
Bhagalpur Divn.	27	Monghyr Feb. 18, '93 Begusarai ... Jamui ...	2·14 0·46 0·38	Weather—cold and cloudy. The rainfall of the week has done some injury to the poppy plants. Other crops doing well. Indigo lands being prepared. Prices of common rice :— Srs. Sadar ... ... 13 to 16 } Begusarai ... ... 16 } per rupee. Jamui ... ... 15 }
	28	Bhagalpur „ 18, '93 Banka ... Madhipura ... Supaul ...	1·56 0·33 0·28 0·27	Weather—cold. Outturn of mustard 14 to 15 annas. Yesterday's (17th) hail-storm and the late rain likely to injure the standing crops slightly. Common rice selling at 15 seers per rupee.
	29	Purnea „ 18, '93 Kishanganj ... Araria ...	0·55 0·49 0·39	Weather—cloudy with slight rain; becoming warmer. The rain has done good to the standing *rabi*. *Tori* and tobacco still being cut. Lands being cultivated for the next *bhadoi*. Fodder and water sufficient. No cattle-disease. Prices of common rice almost the same as before.
	30	Malda „ 18, '93 Shibganj ... Gajole ...	1·58 1·25 0·61	Weather—cloudy with rain on almost every day. *Boro* paddy still being transplanted. *Rabi* crops maturing and their prospects good. Price of coarse rice varies from 13 to 17 seers per rupee. Supply of fodder and water abundant.
	31	Sonthal Parganas „ 18, '93 Deoghur ... Godda ... Jamtara ... Pakur ... Rajmahal ...	0·85 0·50 0·47 0·62 1·04 0 69	Weather—very cold and cloudy. Prospects of all standing winter crops good. Rain has done a little injury to mango and *mahua* blossoms. Fodder and water-supply sufficient.
Patna Division.	32	Patna „ 18, '93 Barh ... Bihar ... Dinapore ...	0·52 0·42 0·43 0·28	Weather—cold and cloudy. The rain will do some damage to the matured mustard, gram, and peas, but will benefit sugarcane, *china* and the late sowing of barley and *khesari*. No damage has been done to poppy, and both *rabi* and poppy crops doing well, and general prospects good. Harvesting of *rabi* and extraction of opium going on. Prices of common rice :— Srs. Sadar ... ... 17 } Barh ... ... 12½ } Bihar ... ... 17 } per rupee. Dinapore ... ... 14 to 15 }
	33	Gaya „ 18, '93 Nawada ... Jahanabad ...	0·44 0·47 0·58	Weather—cloudy and very cold in the beginning and clear at the end of the week. Harvesting of peas and mustard commenced. Other standing crops doing well. Prospect of poppy good. Opium extraction and collection commenced. Common rice sells at 14½ seers per rupee at Sadar. Supply of fodder and water for cattle sufficient.
	34	Shahabad „ 18, '93 Buxar ... Sasaram ... Bhabhua ...	1·37 0·38 0·23 0·19	Weather—at present clear and bright; very variable in early part of week. Prospect of *rabi* still favourable, though probably damage has been done by the rain and hailstorm of the night before last. Poppy in flower and thriving. Sugarcane pressing in progress. Harvesting of pea begun in parts of Sasaram. No cattle-disease. Fodder and water sufficient. Prices stationary.
	35	Darbhanga „ 18, '93 Madhubani .. Samastipur ...	0 38 0·41 0·32	Weather—cloudy at intervals. Prospects of *rabi* continue favourable, but slight damage is reported to have been done to *rahar* and peas by the rain. Oil-seeds being gathered. Poppy doing well. *Mung* being sown. Prices remain stationary. Condition of cattle good.
	36	Muzaffarpur „ 18, '93 Sitamarhi ... Hajipur ...	0·92 0·79 0·49	Weather—cold and cloudy with occasional showers. *Rabi* crops, specially *rahar*, peas and *masur* in blossom, and tobacco injured by the rainfall to a certain extent. Fodder and water-supply ample. No cattle-disease.
	37	Saran „ 18, '93 Siwan ... Gopalganj ...	0·47 0·55 0·76	Weather—cloudy and rainy throughout the week. Fine to-day (18th) only. The rain has done some harm to peas, wheat, *arhar*, and poppy in Sadar and Siwan subdivisions. Other crops doing well. Fodder and water abundant. Agricultural operations stopped owing to rain and damp weather. Prices of common rice :— Srs. c. Chapra ... ... 14 0 } Siwan ... ... 13 2 } per rupee. Gopalganj ... ... 14 3 }
	38	Champaran „ 18, '93	0·95	Weather—very cold. Standing crops in full flower. The rain of the week has damaged to a great extent the *rabi* crops. At Sadar the poppy crop is in a very good condition; at Bettiah plants damaged by recent hail are looking up, and the rain has been favourable to plants, which are looking healthy and strong. Fields being prepared for indigo. Cattle in good condition with sufficient fodder and water.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
ORISSA.				
Orissa Divn.	39	Cuttack Feb. 18, '93	Not reported.	Weather—cloudy. Harvesting of *biri* and *mug* and other *rabi* crops nearly over; outturn fair from 12 and 13 annas to 16 annas at places. *Dalua* rice progressing well. Supply of fodder and water sufficient. Average prices of common rice:— Srs. c. Srs. c. Sadar ... ... 10 8 to 15 1 per rupee. Jajpur ... ... 18 6 to 21 0 per rupee. Kendrapara ... ... 15 0 to 20 0 per rupee. Banki ... ... 17 0 per rupee.
Orissa Divn.	40	Puri „ 16, '93 Khurda ...	2·29 1·03	Weather—cloudy. Harvesting of *sarad* over. Lands being ploughed for next *sarad* crop. *Dalua* paddy growing well. Miscellaneous crops thriving. Prices of common rice stationary.
Orissa Divn.	41	Balasore „ 18, '93	1·09	Weather—cool and stormy. Ploughing is going on in all parts of the district. Prices stationary. Fodder and water sufficient.
CHOTA NAGPUR.				
South-West Frontier Agency.				
Chota Nagpur Divn.	42	Hazaribagh Feb. 18, '93 Giridi ...	0·87 0·46	Weather—cloudy and damp, now clearing. Prospects good, but fine weather required now. Lands being ploughed. Common rice 13 to 15 seers per rupee.
Chota Nagpur Divn.	43	Lohardaga „ 18, '93	1·80	Weather—seasonable. Prospects of *rabi* continue good. Harvesting of *rahar* commenced. Common rice selling at 14 seers per rupee. Fodder and water sufficient.
Chota Nagpur Divn.	44	Palamau „ 17, '93	0·27	Weather—cold and cloudy. There has been rain in good many parts of the district. The rainfall is not favourable to the *rabi* crops. Prices stationary. Fodder sufficient. Cattle-disease in some parts.
Chota Nagpur Divn.	45	Singhbhum „ 18, '93	2·25	Weather—rainy and cloudy during the week, clear to-day (18th). Condition of crops good. Price of rice stationary.
Chota Nagpur Divn.	46	Manbhum „ 18, '93 Gobindpur ...	1·65 1·05	Weather—cloudy with rain at intervals. Harvesting of *rabi* crops almost over. Rice selling at from 10 to 14 seers per rupee. Fodder and water-supply sufficient.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 21*st February*, 1893.

C. E. BUCKLAND,
Secy. to the Govt. of Bengal.

PRICES-CURRENT (*retail*) of Food-grains, Firewood, and Salt in the

QUANTITIES PER RUPEE IN

Division	Number	Districts.	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum. (*Sorghum Vulgare.*) Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
BENGAL.			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Burdwan Division.	1	Burdwan ..	12 0	12 0	11 8	...	...	...	10 8	11 4	11 10	12 0	13 6	13 14	.	...	...
	2	Bankura ..	11 14	12 0	11 8	...	...	...	10 0	10 0	12 8	11 4	11 4	16 0		...	...
	3	Birbhum ...	10 4	10 4	12 8	9 0	9 0	...	11 0	11 0	13 0	14 4	14 4	15 0	...	...	...
	4	Midnapore ...	10 4	10 4	11 0	...	...	...	10 0	10 0	12 0	12 8	12 12	14 0	...	...	...
	5	Hooghly ...	11 0	11 0	13 0	...	...	...	9 0	9 0	8 0	10 0	10 0	13 0	...	...	...
	6	Howrah ...	...	...	...	...	...	...	9 2	9 2	10 0	11 7	11 7	13 0	...	...	...
Presidency Division.		Calcutta ..	10 8	10 8	11 13	16 7	16 7	17 3	7 4	7 4	8 3	10 0	10 0	11 14	18 0	18 0	15 5
	7	24-Parganas ...	11 4	11 4	10 0	16 0	16 0	18 0	8 0	8 0	8 0	12 0	12 0	13 8	18 0	18 0	...
	8	Nadia .	15 10	14 14	12 3	...	...	...	10 0	10 8	10 13½	12 8	12 8	12 13	..	.	...
	9	Khulna ...	...	...	...	...	...	...	11 8	11 8	12 3	12 8	13 0	14 8	.	...	...
	10	Jessore .	10 0	10 0	10 0	...	..	..	10 8	8 8	13 0	13 8	14 0	15 0	..	...	...
	11	Murshidabad ...	13 0	13 0	12 0	..	...		10 0	10 0	10 0	13 0	13 0	14 0	...	...	...
Chittagong Division.	12	Chittagong ...	9 4	9 4	10 0	...	...	..	11 0	11 0	10 0	12 0	12 8	13 0	..	...	...
	13	Noakhali ...	...	...	...	...	...	...	11 0	11 8	12 0	12 0	13 0	13 0	...	...	...
	14	Tippera ...	11 0	11 0	10 0	...	...	...	8 12½	8 12½	10 0	12 8	13 0	13 5½		.	...
	15	Chittagong Hill Tracts.	...	...	...	...	...	...	...	...	...	10 0	10 0	11 6½	...	...	...
Dacca Division.	16	Dacca .	...	...	...	...	...	...	10 8	11 0	12 0	11 8	12 0	13 0	...	...	...
	17	Faridpur ...	11 0	11 0	12 0	20 0	20 0	18 0	8 0	8 0	10 0	12 8	12 0	14 0	...	...	...
	18	Backergunge ...	...	..	...	...	...	...	11 2	11 0 / Old 7 12	11 4	12 12	13 0	12 12	...	...	...
	19	Mymensingh ..	9 8	9 8	9 0	...	...	...	10 0	10 0	11 0	11 0	11 0	14 2	...	...	...
Rajshahi Division.	20	Dinajpur ...	10 8	13 0	10 8	15 12	15 12	17 8	8 0	8 0	9 9	14 8	15 0	13 3	...	..	...
	21	Rajshahi ...	13 8	12 12	9 12	19 8	19 8	26 4	11 4	11 4	11 4	13 2	13 12	12 0	...	...	...
	22	Rangpur	10 10	11 8	9 0	...	...	...	10 0	9 6	9 0	12 15	10 10	10 10	...	...	-

A In the subdivisional marts the retail prices of salt per rupee are :—Kalna 10 seers, Katwa 11½ seers, and Raniganj 11 seers.
B At Vishnupur the retail price of salt is 11 seers per rupee
C At Rampore Hát the retail price of salt is 11 seers per rupee.
D In the subdivisional marts the retail prices of salt per rupee are :—Contai 10 seers, Tamluk 11½ seers, and Ghatal 10 seers 11 chitaks.
E In the subdivisional marts the retail prices of salt per rupee are :—Bhaddreswar 10½ seers and Jahanabad 10 seers 10 chitaks.
F At Ulubaria the retail price of salt is 10½ seers per rupee.
G In the mufassal marts the retail prices of salt per rupee are :—Chetla Hát 11 seers 7 chitaks, Baraset 10 seers 10 chitaks, Magrahat 10 seers 10 chitaks, and Baduria 10 seers 11 chitaks.
H In the subdivisional marts the retail prices of salt per rupee are :—Bahadurkhali 10½ seers, Chuadanga 10 seers, Meherpur 10½ seers, and Ranaghat 10½ seers.
I In the subdivisional marts the retail prices of salt per rupee are :—Bagerhat 8 seers and Satkhira 11 seers 10½ chitaks.
J In the subdivisional marts the retail prices of salt per rupee are :—Jhenida 9 seers 9 chitaks, Magura 10 seers, and Narail 9 seers 10 chitaks.

Head-quarters Station Bazars of the Districts of Bengal on the 15*th February*, 1893.

Indian-corn or Maize. (*Zea Mays.*) Present return.	Next preceding return.	Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus Indicus.*) Present return.	Next preceding return.	Corresponding return of last year.	Firewood. Present return.	Next preceding return.	Corresponding return of last year.	Salt. Present return.	Next preceding return.	Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt. Present return.	Next preceding return.	Corresponding return of last year.	Districts.	Number.	
															BENGAL.		
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.			
...	...	...	22 8	19 0	17 0	100 0	100 0	100 0	A 11 12	11 12	11 4	3 6 6	3 6 6	3 6 8	Burdwan	1	Burdwan Division.
...	...	...	12 0	12 0	17 8	320 0	320 0	240 0	B 11 0	11 0	11 2	3 10 0	3 10 0	3 9 6	Bankura.	2	
22 0	22 0	...	11 0	11 0	12 0	200 0	200 0	200 0	C 10 12	10 12	10 8	3 12 6	3 12 6	3 10 0	Birbhum.	3	
...	...	...	19 0	18 0	10 0	240 0	280 0	120 0	D 11 7	11 7	11 8	3 7 0	3 8 0	3 8 0	Midnapore.	4	
...	...	...	12 12	12 12	11 0	160 0	160 0	120 0	E 11 0	11 0	10 0	3 6 0	3 6 0	3 12 0	Hooghly.	5	
...	...	...	10 10	10 10	11 4	100 0	100 0	100 0	F 10 10⅜	10 10⅜	10 8	3 8 0	3 8 0	3 6 0	Howrah.	6	
19 0	19 0	16 8	12 5	12 5	14 11	85 0	85 0	95 0	9 8	9 8	11 6	4 0 0	4 0 0	3 4 0	Calcutta.		
20 0	20 0	...	18 0	17 0	17 0	100 0	100 0	100 0	G 11 0	11 0	11 0	3 4 6	3 4 6	3 4 6	24-Parganas.	7	Presidency Division.
...	...	...	22 1	22 0	17 12½	128 0	128 0	...	H 10 0	10 0	10 10½	3 8 0	3 8 0	3 9 0	Nadia.	8	
...	...	...	10 0	10 0	...	160 0	160 0	160 0	I 9 0	9 0	10 0	3 12 0	3 12 0	3 12 0	Khulna.	9	
...	...	...	13 0	13 0	20 0	120 0	120 0	160 0	J 9 14	9 14	9 2	3 10 0	3 10 0	3 10 0	Jessore.	10	
...	...	...	17 0	17 0	16 0	200 0	200 0	200 0	K 10 8	10 8	10 8	3 7 0	3 7 0	3 12 0	Murshidabad.	11	
...	...	...	...	...	...	100 0	100 0	110 0	L 10 0	10 8	11 0	3 8 0	3 7 0	3 8 0	Chittagong.	12	Chittagong Division.
...	...	...	...	...	...	...	...	...	M 10 0	9 0	10 0	3 12 0	4 0 0	3 12 0	Noakhali.	13	
...	...	...	11 0	7 8	8 0	...	...	...	N 10 13½	10 13½	10 0	3 12 0	3 12 0	3 12 0	Tippera.	14	
...	No. in cobs. 300	...	...	...	...	240 0	240 0	240 0	8 0	8 0	8 0	4 8 0	4 8 0	4 8 0	Chittagong Hill Tracts.	15	
...	...	...	...	...	...	120 0	120 0	120 0	O 10 0	10 0	10 0	3 10 0	10 0	3 8 0	Dacca.	16	Dacca Division.
...	...	...	...	...	...	...	...	...	P 10 12	10 0	10 8	3 12 0	3 14 0	3 12 0	Faridpur.	17	
7 0	Musuri 7 0	...	10 0	Mug. 10 0	...	82 0	82 0	80 0	Q 10 8	10 8	10 0	3 10 0	3 10 0	3 10 0	Backergunge.	18	
...	...	...	13 0	13 0	9 8	120 0	120 0	...	R 10 0	10 0	10 8	4 0 0	4 0 0	3 10 0	Mymensingh.	19	
...	...	...	13 8	13 0	19 3	160 0	160 0	160 0	10 8	10 0	10 4	3 12 0	3 14 0	3 14 0	Dinajpur.	20	Rajshahi Division.
...	...	...	18 8	17 10	19 8	240 0	240 0	240 0	S 9 9	9 9	9 9	3 10 8	3 10 8	3 10 8	Rajshahi.	21	
...	...	...	11 8	9 8	9 0	80 0	80 0	100 0	T 10 0	9 12	9 0	4 0 0	4 4 0	4 7 1	Rangpur.	22	

K In the subdivisional marts the retail prices of salt per rupee are :—Kandi 11 seers, Jangipur 10½ seers.
L At Cox's Bazar the retail price of salt is 8 seers per rupee.
M At Fenny Hát the retail price of salt is 9 seers per rupee.
N In the subdivisional marts the retail prices of salt per rupee are :—Chandpur 9 seers and Brahmanbaria 9 seers 13½ chitaks.
O In the mufassal marts the retail prices of salt per rupee are:—Madanganj 10 seers, Manikganj 9 seers 13 chitaks, Mirkadim 10 seers, and Munshirhat 10 seers.
P At Madaripur and Goalundo the retail price of salt is 10 seers per rupee.
Q In the subdivisional marts the retail prices of salt per rupee are :—Patuakhali 9 seers, Pirojpur 10½ seers, and Bhola 9 seers.
R In the subdivisional marts the retail prices of salt per rupee are :—Jamalpur 10 seers, Kishorganj 10 seers, Netrakona 10 seers.
S In the subdivisional marts the retail prices of salt per rupee are :—Nator 9 seers and Naugaon 9 seers 9 chitaks.
T In the subdivisional marts the retail prices of salt per rupee are :—Gaibanda 10 seers, Kurigram 8 seers, and Nilphamari 10 seers.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the Head-quarters

QUANTITIES PER RUPEE IN

Division	Number.	DISTRICTS.	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum (Sorghum Vulgare). Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
BENGAL—continued.			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Rajshahi Division—concld.	23	Bogra ...	12 9	12 0	8 10	...	...	...	9 12	9 12	10 2	13 8	13 8	13 2	...	...	...
	24	Pabna	13 14	14 4	12 0	21 0	...	...	6 4	6 4	7 2	13 2	14 4	13 8	...		...
	25	Darjeeling	8 0	8 0	8 0	10 0	10 0	9 0	5 0	5 0	5 0	11 0	11 0	10 0	...	...	...
	26	Jalpaiguri	11 8	11 0	10 0	13 0	13 0	14 0	10 0	9 0	7 0	13 0	14 0	11 8			..
BIHAR.																	
Bhagalpur Division.	27	Monghyr ..	12 0	13 6	13 10	...	8 5½	21 0	10 8	10 8	9 7	14 0	13 10½	12 9	...	19 15	17 13
	28	Bhágalpur ...	12 10	13 14	12 10	12 10	12 10	20 3	12 10	12 10	11 6	15 2	15 2	12 10	.	...	...
	29	Purnea (Kasba)	11 0	10 0	11 0	...	...	...	13 0	13 0	10 0	15 0	15 0	11 0	.	.	...
	30	Malda ...	12 0	12 0	11 8	...	...	...	9 0	9 8	10 0	14 0	14 0	12 0	...	..	...
	31	Sonthal Parganas.	10 0	10 8	10 0	...	...	...	11 8	11 8	12 0	14 8	14 8	13 8	...	.	...
Patna Division.	32	Patna ...	15 0 (Red.) / 14 0 (White)	15 0 (Red.) / 14 0 (White)	13 8 (Red.) / 12 8 (White)	20 0	20 0	24 0	10 8	10 8	10 8	17 0	17 0	14 0	21 0	21 0	20 0
	33	Gaya ...	12 0	12 4	12 8	18 4	18 8	22 8	10 0	10 0	10 8	14 8	14 8	13 0	19 8	20 4	...
	34	Shahabad ...	14 0	15 0	12 8	12 0	16 0	22 0	8 0	9 0	8 0	15 0	13 0	13 0	...	...	...
	35	Darbhanga ...	12 1	13 3	13 3	12 0	11 8	22 0	11 0	11 0	11 0	15 8	15 6	13 0	...	...	...
	36	Muzaffarpur	12 0	12 8	12 0	18 0	17 0	22 8	8 0	9 0	11 0	15 0	15 0	12 0	...	...	...
	37	Saran ...	13 8	14 0	12 4	19 0	19 0	25 8	11 0	11 8	8 8	14 0	14 8	12 13	23 0	25 0	...
	38	Champaran ..	11 8	11 4	10 4	14 0	14 8	20 0	8 8	8 8	8 8	15 4	15 12	13 8	...	...	...
ORISSA.																	
Orissa Division.	39	Cuttack ...	10 8	10 8	9 3	...	...	...	10 8	10 8	9 13	15 1	15 1	11 2	...	..	...
	40	Puri ..	9 6	...	8 6	...	...	...	9 3	9 3	9 6	14 6	15 12	13 8		..	...
	41	Balasore ...	11 0	11 0	11 0	10 0	10 0	10 0	10 0	10 0	13 0	16 0	17 0	17 0	...	...	...
CHOTA NAGPUR.																	
Chota Nagpur Division.	42	Hazáribágh	11 12	11 0	11 8	13 0	11 0	14 0	8 0	8 0	8 0	13 0	13 8	13 0 to 14 0	...	...	...
	43	Lohardaga ..	Red. 10 8; White. 7 8 to 9 0	Red. 11 0; White. 7 8 to 9 0	Red. 11 0; White. 7 4 to 9 0	12 0	12 0	14 0	12 0 to 13 0	12 0 to 13 0	11 0 to 11 8	Ordinary rice. 14 0; Coarse rice. 15 8	Ordinary rice. 14 8; Coarse rice. 15 8	Ordinary rice. 13 0; Coarse rice. 15 0	...	..	...
	44	Palámau ...	11 4	11 4	12 6	...	...	...	12 6	11 4	13 9	15 3	15 3	13 13	.	.	...
	45	Singhbhum ..	12 0	12 0	14 0	...	...	10 0	10 0	10 0	12 0	14 0	14 0	16 0	...	..	...
	46	Manbhum	11 8	11 0	11 0	...	...	...	10 0	9 8	13 8	13 0 to 14 0	12 8 to 14 0	17 8	...	...	...

U At Sirajganj the retail price of salt is 11½ seers per rupee.
V At Alipur the retail price of salt is 8 seers per rupee.
W At Jamui and Begusarai the retail price of salt is 10 seers per rupee.
X At Banka, Madhipura and Supaul the retail price of salt is 10 seers per rupee.
Y At Kisnanganj and Araria the retail price of salt is 10 seers per rupee.
Z In the subdivisional marts the retail prices of salt per rupee are :—Deoghur 10½ seers, Godda 9¼ seers, Jamtara 9 seers, Pakur 10½ seers, and Rajmahal 10 seers.
a In the subdivisional marts the retail prices of salt per rupee are :—Barh 11 seers 6 chitaks, Bihar 10¼ seers, and Dinajpur 10 seers.
b In the subdivisional marts the retail prices of salt per rupee are :—Nawada 9 seers, Aurangabad 10¼ seers, and Jahanabad 10 seers.

CALCUTTA,
The 21st February, 1893.

Station Bazars of the Districts of Bengal on the 15th February 1893—(concluded).

Indian-corn or Maize (*Zea Mays.*) — Present return.	Indian-corn — Next preceding return.	Indian-corn — Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus indicus.*) — Present return.	Arhar — Next preceding return.	Arhar — Corresponding return of last year.	Firewood — Present return.	Firewood — Next preceding return.	Firewood — Corresponding return of last year.	Salt — Present return.	Salt — Next preceding return.	Salt — Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt — Present return.	Wholesale Salt — Next preceding return.	Wholesale Salt — Corresponding return of last year.	Districts.	Number.	
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.	BENGAL—*continued.*		
...	...	...	...	...	...	90 0	90 0	90 0	9 9	10 0	9 12	3 13 4	3 13 4	3 13 4	Bogra.	23	Rajshahi Division—*concld.*
...	...	...	22 8	22 8	17 4	200 0	200 0	200 0	[U] 9 12	9 12	9 12	3 10 0	3 10 0	3 12 0	Pabna.	24	
11 0	11 8	13 12	8 0	10 0	8 0	120 0	120 0	120 0	8 0	8 0	8 0	4 10 0	4 10 0	5 0 0	Darjeeling	25	
...	...	...	10 0	10 0	8 0	200 0	180 0	200 0	[V] 10 0	10 0	10 0	3 12 0	3 12 0	4 0 0	Jalpaiguri.	26	
															BIHAR.		
24 0	23 1½	21 0	16 0	16 13	16 4	160 0	170 0	168 0	[W] 10 8	10 8	10 8	3 13 0	3 13 0	3 11 0	Monghyr.	27	Bhagalpur Division.
25 4	25 4	18 15	16 14	16 6	15 2	176 0	176 0	176 12	[X] 10 11	10 11	10 11	3 12 0	3 12 0	3 12 0	Bhagalpur.	28	
26 0	25 0	17 0	16 0	16 0	13 0	320 0	320 0	...	[Y] 10 0	10 0	10 0	3 10 2	3 10 2	4 0 0	Purnea.	29	
...	...	...	12 0	12 0	...	160 0	160 0	120 0	10 0	10 0	10 0	4 0 0	4 0 0	3 12 0	Malda	30	
23 8	23 8	18 0	21 0	21 0	17 0	200 0	200 0	200 0	[Z] 10 8	10 8	9 0	3 9 3	3 10 3	4 0 0	Sonthal Parganas	31	
23 0	23 12	21 0	20 0	20 0	20 0	130 0	130 0	120 0	[a] 11 8	11 8	11 8	3 8 0	3 8 0	3 8 0	Patna.	32	Patna Division.
18 8	20 4	...	20 8	19 0	17 8	140 0	200 0	140 0	[b] 10 0	10 0	10 0	3 13 0	3 13 0	3 14 0	Gaya.	33	
22 0	21 0	20 0	18 0	16 0	16 0	160 0	160 0	160 0	[c] 11 0	11 0	10 0	3 10 0	3 10 0	4 0 0	Shahabad.	34	
24 3	25 5	21 0	17 10	17 9	16 8	176 0	176 0	160 0	[d] 10 4	10 4	11 0	3 12 0	3 14 0	3 6 0	Darbhanga.	35	
24 0	24 0	20 0	16 0	17 0	15 0	160 0	160 0	160 0	[e] 11 0	11 0	11 0	3 10 0	3 11 0	3 10 0	Muzaffarpur.	36	
21 8	22 8	21 12	18 0	18 8	17 4	200 0	200 0	160 0	[f] 10 12	10 12	10 12	3 11 0	3 11 0	3 11 0	Saran.	37	
23 12	24 4	20 4	15 4	15 4	14 8	160 0	160 0	160 0	[g] 10 8	10 8	10 8	3 12 0	3 13 0	3 12 0	Champaran.	38	
															ORISSA.		
...	...	...	18 6	17 1	15 12	80 0	80 0	80 0	[h] 10 12	10 12	11 0	3 6 0	3 6 0	3 12 0	Cuttack.	39	Orissa Division.
...	...	...	15 8	...	12 0	80 0	...	80 0	11 8	11 13	11 13	3 6 0	3 4 0	3 5 0	Puri.	40	
...	...	...	10 12	10 12	...	160 0	160 0	140 0	[i] 11 0	11 0	10 8	3 10 0	3 10 0	3 14 0	Balasore.	41	
															CHOTA NAGPUR.		
20 0	20 0	18 0	16 0	15 0	16 0	240 0	240 0	240 0	[j] 9 0	9 0	10 0	3 14 0	4 0 0	3 12 0	Hazáribágh.	42	Chota Nagpur Division.
21 0	20 0	18 0	Big. 14 0; Small. 16 0	Big. 15 0; Small. 16 0	14 0 and 15 0; 18 0 and 19 0	160 0	160 0	140 0 to 160 0	9 8	10 0	9 12	4 0 0	4 0 0	4 0 0	Lohardaga.	43	
27 0	27 0	20 4	19 8	19 8	16 14	...	...	...	9 0	9 0	9 1	...	...	...	Palámau.	44	
...	...	20 0	14 0	12 0	18 0	100 0	100 0	160 0	9 0	9 0	9 0	4 6 0	4 6 0	4 4 0	Singhbhum.	45	
20 0	20 0	...	19 0	18 0	18 0	...	...	...	[k] 10 10	10 10	10 10	3 10 0	3 10 0	3 12 0	Manbhum.	46	

c In the subdivisional marts the retail prices of salt per rupee are :—Buxar 10½ seers, Sasaram 10¾ seers, and Bhabhua 10 seers.
d In the subdivisional marts the retail prices of salt per rupee are :—Madhubani 11 seers and Somastipur 10 seers.
e In the subdivisional marts the retail prices of salt per rupee are :—Hajipur 10½ seers and Sitamarhi 11 seers.
f In the subdivisional marts the retail prices of salt per rupee are :—Siwan 11 seers and Gopalganj (Mirganj) 11 seers 15 chitaks.
g At Bettiah the retail price of salt is 10 seers per rupee.
h In the subdivisional marts the retail prices of salt per rupee are :—Jajpur 9 seers, Kendrapara 9 seers, and Banki 12 seers.
i At Bhadrak the retail price of salt is 9 seers per rupee.
j At Giridih the retail price of salt is 11 seers per rupee.
k At Gobindpur the retail price of salt is 10½ seers per rupee.

Published for general information.

C. E. BUCKLAND,
Secretary to the Govt. of Bengal.

PRICES-CURRENT (*wholesale*) *of Food-grains, Firewood, and Salt*

Number.	MARTS.	Wheat.			Barley.			Rice, best sort.			Rice common.		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
1	Calcutta ..	3 8 0	3 8 0	3 4 11	2 6 0	2 5 0	2 1 2	5 9 0	5 9 0	4 6 3	4 0 0	4 0 0	3 1 6
2	Sirajganj ...	3 4 0	3 10 0	3 8 0	...	...	...	6 0 0	5 12 0	5 3 0	3 5 0	3 6 0	3 2 0
3	Dacca ...	...	...	...	...	...	...	3 10 0	3 8 0	3 4 0	3 6 0	3 4 0	3 1 0
4	Narayanganj	...	...	...	...	...	...	3 8 0	3 4 0	2 14 0	3 4 0	3 0 0	2 10 0
5	Chittagong	4 2 0	4 2 0	4 0 0	...	...	...	3 8 0	3 8 0	4 0 0	3 4 0	3 1 0	3 0 0
6	Patna ..	2 10 6 / 2 13 6	Red. 2 10 6 / White. 2 13 6	2 15 3 / 3 3 3	2 0 0	2 0 0	1 10 0	3 13 0	3 13 0	3 12 9	2 5 6	2 5 6	2 13 8
7	Balasore ...	3 8 0	3 8 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 0 0	2 8 0	2 6 0	2 6 0
8	Puri ..	4 4 0	...	4 12 0	...	...	...	4 5 0	4 5 0	4 9 0	2 12 0	2 8 0	2 15 0
9	Cuttack ...	3 10 0	3 10 0	4 4 0	...	...	...	3 10 0	3 10 0	4 2 0	2 10 0	2 10 0	3 8 0

CALCUTTA,
The 21*st February*, 1893.

in the undermentioned Marts of Bengal on the 15*th February* 1893.

Gram, Chana, Chhola, Kadalay or Sunaga. (*Cicer Arietinum.*)			Indian-corn or Maize. (*Zea Mays.*)			Arhar or Thur, Cadjan Pea. (*Cajanus indicus.*)			Firewood.			Salt.			Marts.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
2 12 0	2 12 0	2 6 3	1 13 0	1 13 0	2 2 10	3 4 0	3 4 0	2 6 5	0 7 0	0 7 0	0 5 9	4 0 0	4 0 0	3 4 0	Calcutta.
3 8 0	3 0 0	2 15 0	...	...	...	...	...	...	0 6 6	0 6 6	0 6 6	3 8 0	3 8 0	3 5 0	Sirajganj.
...	...	...	...	...	...	...	...	...	0 5 0	0 5 0	0 5 0	3 10 0	3 10 0	3 8 0	Dacca.
...	3 12 0	3 8 0	...	...	...	...	3 4 0	3 8 0	0 6 0	0 8 0	0 8 0	3 10 0	3 8 0	3 8 0	Narayanganj.
3 12 0	3 8 0	3 8 0	...	...	...	...	...	...	0 6 0	0 6 0	0 5 0	3 8 0	3 7 0	3 8 0	Chittagong.
2 5 9	2 1 3	1 14 5	1 12 3	1 11 3	1 14 5	2 0 0	2 0 0	2 0 0	0 5 0	0 5 0	0 5 4	3 8 0	3 8 0	3 8 0	Patna.
2 14 0	2 14 0	2 12 0	...	...	...	3 10 0	3 10 0	...	...	...	...	3 10 0	3 10 0	3 14 0	Balasore.
2 8 0	...	3 4 0	...	...	...	2 8 0	...	3 5 0	0 8 0	...	0 8 0	3 6 0	3 4 0	3 5 0	Puri.
1 9 0	(Kalai.) 2 4 0	2 8 0	...	...	...	2 4 0	2 6 0	2 8 0	0 8 0	0 8 0	0 8 0	3 6 0	3 6 0	3 12 0	Cuttack.

Published for general information.

C. E. BUCKLAND,
Secretary to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS. Air pressure. Mean barometric height, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. Prevailing direction.	Mean wind velocity.	Temperature. Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri ...	29·990	29·939	—	Variable	237	85·2	15th Feb.	64·6	12th Feb.	80·5	70·2	75·4
		Gopalpore ...	29·990	29·951	—·006	NE	360	83·2	15, 18 ,,	66·9	12th ,,	81·6	70·2	75·9
		False Point ...	30·006	29·969	0	Variable	216	82·4	18th ,,	61·0	12th ,,	78·2	67·0	72·7
	Cuttack	Cuttack ...	29·935	29·960	—·003	ENE	73*	87·1	18th ,,	61·8	12th ,,	82·5	67·8	75·1
	Balasore	Balasore ...	29·977	29·981	+·009	NE	97	84·4	18th ,,	55·5	12th ,,	77·6	61·6	69·6
South-West Bengal.	Midnapore	Midnapore ..	29·881	29·983	0	N	186	85·3	18th ,,	57·2	12, 14 ,,	77·8	60·3	69·1
	24-Parganas	Calcutta ...	30·014	29·982	+·005	NNE	41	80·7	18th ,,	54·7	12th ,,	75·4	59·3	67·4
		Saugor Island	30·004	29·974	+·007	NEly	190	79·2	14th ,,	55·3	12th ,,	76·6	62·4	69·5
	Howrah													
	Hooghly													
	Nadia	Krishnagar ...	29·987	29·985	+·029	Variable	95	81·0	13th ,,	52·1	16th ,,	74·4	56·8	65·6
	Khulna													
	Jessore	Jessore ...	29·998	29·979	+·006	Ely	58	78·7	18th ,,	54·0	12th ,,	74·7	57·7	66·2
	Burdwan ...	Burdwan ...	29·940	29·991	+·011	Calm	19	81·5	13th ,,	56·1	15th ,,	74·5	59·4	67·0
		Raniganj ...	29·697	30·012	+·005	NEly	52	81·7	13th ,,	53·0	15th ,,	72·2	56·5	64·4
	Bankura	Bankura ...	29·696	29·961	—·005	Variable	50	83·1	18th ,,	54·3	12th ,,	74·5	58·6	66·6
	Birbhum													
	Murshidabad	Berhampore...	29·971	29·990	+·010	Variable	46	78·6	13th ,,	53·0	12th ,,	72·1	57·0	64·6
North Bengal.	Pabna	Sirajganj ..	29·988	29·986	+·018	Variable	24	77·7	13th ,,	48·1	12th ,,	70·9	52·3	61·7
	Bogra	Bogra ..	29·972	29·989	+·038	Variable	46	79·3	13th ,,	49·2	12th ,,	71·9	52·7	62·3
	Rajshahi	Rampur Boalia.	29·968	29·991	+·038	Variable	72	78·6	13th ,,	48·7	12th ,,	70·8	53·5	62·2
	Malda	Malda ...	29·952	29·989	—	SW	81	78·3	13th ,,	46·5	12, 16 ,,	71·2	52·3	61·8
	Dinajpur	Dinajpur ...	29·918	29·997	+·010	Variable	59	78·6	13th ,,	47·5	16th ,,	71·7	52·9	62·4
	Rangpur	Rangpur ...	29·921	30·006	+·027	Variable	36	77·0	13th ,,	45·6	16th ,,	71·4	50·7	61·1
	Jalpaiguri	Jalpaiguri	29·757	30·012	+·033	Calm	37	76·4	13th ,,	47·6	16th ,,	69·4	50·8	60·1
	Kuch Bihar													
	Darjeeling	Darjeeling ...	22·923	—	—·013	Variable	177	45·9	13th ,,	29·9	15th ,,	41·6	31·4	36·5
	Sikkim	Gnatong ...	19·092	—	—	NNW	146	31·2	16th ,,	3·1	15th ,,	28·7	8·3	18·5
East Bengal.	Chittagong	Chittagong ...	29·949	29·987	+·006	NEly	48*	83·7	14th ,,	52·6	12th ,,	80·7	57·8	69·3
	Chittagong Hill Tracts	Demagiri ...	Observations not received.											
	Backergunge	Barisal ..	30·017	29·976	+·022	Calm	58	79·8	14th Feb.	52·1	12th ,,	76·8	58·7	67·7
	Noakhali	Noakhali ...	30·007	29·999	+·020	NEly	114	80·6	14th ,,	50·4	12th ,,	76·2	55·7	66·0
	Faridpur	Faridpur ...	30·005	30·001	+·017	Calm	56	73·5	12, 13, 17, 18th Feb.	53·0	12, 16 ,,	71·8	56·4	64·2
	Dacca	Dacca ...	30·010	29·981	+·006	Calm	80	78·6	13th ,,	53·3	12th ,,	74·8	56·5	65·7
	Tippera	Comilla ...	29·907	29·981	+·012	Calm & N.	43	79·4	13, 18 ,,	50·6	12th ,,	77·2	55·3	66·3
	Mymensingh	Mymensingh	29·976	29·994	+·004	Variable	63	76·7	13th ,,	50·1	16th ,,	71·6	54·2	62·9
North Bihar.	Purnea	Purnea ...	29·913	30·000	+·021	Calm	33	77·2	13th ,,	45·3	16th ,,	71·1	49·2	60·2
	Bhagalpur	Bhagalpur ..	29·875	29·996	+·035	Calm	14	78·3	13th ,,	48·5	16th ,,	70·5	52·8	61·7
	Darbhanga	Darbhanga ...	29·879	30·009	+·026	Variable	80	74·3	13th ,,	49·1	12th ,,	70·0	50·9	60·5
	Muzaffarpur	Muzaffarpur...	29·866	30·010	—	WSW	94	73·7	13th ,,	46·3	12th ,,	68·8	50·4	59·7
	Champaran	Motihari ...	29·795	29·993	+·028	Variable	120	74·2	13, 18 ,,	41·9	12th ,,	69·5	49·2	59·4
	Saran	Chapra ...	29·860	30·0.6	+·039	Variable	91	73·8	13th ,,	47·1	12th ,,	69·2	51·7	60·5
South Bihar.	Shahabad	Dehri ...	29·668	29·995	+·005	SE	61	76·3	12th ,,	50·0	12th ,,	73·2	53·5	63·4
		Buxar ...	29·796	30·006	+·009	E	104	72·6	13th ,,	49·4	16th ,,	68·9	52·2	60·6
		Arrah ..	29·844	29·999	+·035	Variable	58	74·2	18th ,,	47·9	12th ,,	70·4	51·8	61·1
	Gaya	Gaya ...	29·653	30·006	+·021	SEly	146	76·5	18th ,,	47·3	14th ,,	73·6	50·8?	62·2?
	Patna	Bankipore ...	29·865	30·011	+·017	Variable	103	84·0	13th ,,	48·6	16th ,,	71·4	52·1	61·7
	Monghyr													
	Sonthal Parganas ...	Naya Dumka	29·536	30·014	+·018	Variable	53	79·6	13th ,,	49·1	12th ,,	71·1	54·1	62·6
Chota Nagpur.	Hazaribagh	Hazaribagh ...	27·953	29·995	—·009	Variable	201	80·7	18th ,,	49·0	15th ,,	70·8	52·0	61·4
	Lohardaga	Ranchi ...	27·823	29·980	—·008	Calm	159	77·5	18th ,,	48·9	15th ,,	69·3	52·3	60·8
	Palamau													
	Singhbhum	Chaibassa ...	29·230	29·968	+·007	Calm & NE.	35	82·9	18th ,,	55·3	12th ,,	75·8	60·0	67·9
	Manbhum													

* Mean of 6 days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period
The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01
rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station
district, *i.e.* from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one or

for the week ending Saturday, the 18th of February 1893.

Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.
—	73.5	84	2.9	2.29
+1.3	73.6	84	2.7	Nil
—0.9	71.1	89	6.3	0.04
—1.4	71.1	76	6.0	0.02
—0.8	66.2	87	4.4	1.18
+0.9	64.9	84	4.6	1.31
—3.1	63.4	88	4.9	1.31
—3.4	65.8	92	8.3	0.64
—1.1	61.8	83	6.0	1.96
—2.6	62.8	88	7.0	1.00
—3.1	61.5	81	8.0	1.77
—3.5	60.0	84	2.1	1.25
—2.1	62.9	81	5.9	1.22
—3.7	58.2	92	5.7	0.76
+2.1	55.2	95	6.3	0.99
—2.3	58.2	90	5.7	0.95
—2.2	60.0	86	5.7	0.95
—	56.0	74	4.1	1.58
—0.7	56.6	89	5.4	0.40
—0.8	55.7	93	2.0	0.42
—1.8	55.7	88	5.9	0.44
—2.7	35.1	92	6.3	0.18
—	23.5	65	1.9	0.82
—0.5	62.7	91	4.6	0.32
—0.8	63.4	87	7.4	2.19
—0.6	62.9	84	3.0	0.29
—2.1	61.0	89	5.4	0.50
—3.4	60.3	86	5.0	0.29
—0.4	61.6	83	5.1	0.33
—1.4	58.7	89	5.4	0.93
—3.9	53.7	94	3.9	0.55
—1.8	58.4	85	5.3	1.56
—3.0	56.0	87	4.9	0.38
—	53.9	94	6.1	0.92
—1.2	53.7	94	6.0	0.95
+2.8	55.1	92	6.9	0.47
—1.6	58.9	77	3.4	0.03
—3.8	56.2	83	6.3	0.57
—2.3	56.5	88	5.3	1.37
—5.8	55.6	70	7.0	0.44
—2.7	57.2	84	7.1	0.52
—3.8	58.0	86	4.1	0.85
—3.6	56.1	83	7.7	0.47
—3.4	57.0	88	5.4	1.80
—1.1	63.6	86	7.6	2.25

DISTRICT OBSERVATIONS.

District.	Of week. Mean for district.	Of week. Normal mean.	Of week. Average number of rainy days.	Of week. Normal number of rainy days.	Rainfall. Since 1st of month. Mean for district.	Rainfall. Since 1st of month. Normal mean.	Rainfall. Since 1st of month. Variation.	Rainfall. Since 16th October 1892. Mean for district.	Rainfall. Since 16th October 1892. Normal mean.	Rainfall. Since 16th October 1892. Variation.
Puri.	0.74	0.18	0.50	0.34	1.13	0.61	+0.52	10.41	7.16	+3.25
Cuttack.	0.27	0.13	0.60	0.25	0.52	0.54	—0.02	8.38	4.93	+3.45
Balasore.		0.21		0.31		0.63			3.93	
Midnapore.	1.08	0.11	1.50	0.25	1.49	0.54	+0.95	9.85	3.88	+5.97
24-Parganas.	1.86	0.13	1.43	0.31	2.73	0.72	+2.01	10.60	3.97	+6.63
Howrah.	1.67	0.11	1.50	0.30	2.06	0.75	+1.31	5.89	3.18	+2.71
Hooghly.	2.34	0.08	1.31	0.25	3.08	0.63	+2.45	10.84	3.12	+7.71
Nadia.	1.19	0.06	1.80	0.20	2.44	0.65	+1.79	7.04	2.81	+4.23
Khulna.	3.04	0.12	2.00	0.36	3.66	0.69	+2.97	10.73	3.77	+6.96
Jessore.	1.02	0.17	2.00	0.27	2.02	0.70	+1.32	11.54	3.31	+8.23
Burdwan.	1.40	0.08	2.75	0.15	1.69	0.68	+1.01	6.71	2.77	+3.94
Bankura.	1.39	0.12	2.25	0.33	1.54	0.51	+1.03	6.88	2.55	+4.33
Birbhum.	1.13	0.07	2.00	0.21	2.22	0.63	+1.59	6.23	2.25	+3.98
Murshidabad.	0.94	0.06	1.67	0.20	1.46	0.50	+0.96	3.96	2.03	+1.93
Pabna.	0.90	0.07	2.50	0.16	2.21	0.76	+1.45	3.93	2.84	+1.09
Bogra.	0.85	0.09	2.00	0.22	0.99	0.59	+0.40	2.24	2.16	+0.08
Rajshahi.	1.22	0.09	2.33	0.25	1.56	0.45	+1.11	2.55	2.24	+0.31
Malda.	1.24	0.07	4.00	0.20	1.37	0.40	+0.97	2.42	2.21	+0.21
Dinajpur.	0.66	0.05	2.40	0.26	0.71	0.38	+0.33	1.62	1.70	—0.08
Rangpur.	0.28	0.06	1.00	0.14	0.28	0.36	—0.08	1.97	2.02	—0.05
Jalpaiguri.	0.50	0.03	2.00	0.16	0.50	0.21	+0.29	2.18	3.14	—0.96
Kuch Bihar.	0.37	0.13	1.25	0.23	0.42	0.37	+0.05	1.98	1.92	+0.06
Darjeeling.	0.32	0.19	1.50	0.61	0.34	0.49	—0.15	5.70	3.71	+1.99
Sikkim.										
Chittagong.	0.16	0.10	0.50	0.26	0.16	0.51	—0.35	13.02	6.18	+6.84
Chittagong Hill Tracts.	0.36	0.05	2.00	0.25	0.57	0.71	—0.14	9.18	5.68	+3.50
Backergunge.	1.63	0.12	2.25	0.32	1.69	0.66	+1.03	9.89	4.96	+4.93
Noakhali.	1.16	0.10	3.00	0.14	1.19	0.64	+0.55	16.85	6.20	+10.65
Faridpur.	0.67	0.20	1.67	0.31	1.88	0.74	+1.14	9.31	2.96	+6.35
Dacca.		0.17		0.25		0.74			3.65	
Tippera.	0.50	0.14	1.75	0.36	0.79	0.72	+0.07	9.69	3.76	+5.93
Mymensingh.		0.09		0.12		0.62			3.00	
Purnea.	0.48	0.04	1.67	0.11	0.54	0.39	+0.15	1.35	2.24	—0.89
Bhagalpur.	0.75	0.05	2.75	0.22	0.88	0.37	+0.51	2.23	1.97	+0.26
Darbhanga.	0.58	0.01	2.00	0.16	0.86	0.31	+0.55	2.36	1.89	+0.47
Muzaffarpur.	0.62	0.03	2.33	0.19	0.91	0.31	+0.60	2.12	1.97	+0.15
Champaran.	0.69	0.07	2.50	0.17	0.85	0.30	+0.55	1.60	1.56	+0.04
Saran.	0.71	0.06	2.33	0.18	0.91	0.37	+0.54	2.11	2.06	+0.05
Shahabad.	0.47	0.03	1.40	0.12	0.54	0.29	+0.25	1.67	2.42	—0.75
Gaya.	0.53	0.04	2.50	0.20	0.63	0.27	+0.36	1.71	2.11	—0.40
Patna.	0.52	0.03	2.00	0.18	0.78	0.31	+0.47	1.60	2.17	—0.57
Monghyr.	1.41	0.08	3.33	0.31	1.57	0.38	+1.19	3.32	2.35	+0.97
Sonthal Parganas.	1.03	0.05	2.83	0.23	1.35	0.25	+1.10	3.56	1.94	+1.62
Hazaribagh.		0.05		0.10		0.45			2.31	
Lohardaga.	1.50	0.24	2.50	0.40	1.75	0.56	+1.19	8.90	3.13	+5.77
Palamau.		0.04		0.16		0.30			2.65	
Singhbhum.	2.25	0.04	2.00	0.25	2.63	0.50	+2.13	9.16	3.29	+5.87
Manbhum.	1.17	0.04	2.50	0.29	1.65	0.56	+1.09	5.99	2.61	+3.38

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 18th of February 1893.

Meteorological Division.	District.	Station.	Rainfall.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th October 1892.	Average rainfall from 16th October to date.
			Sunday, 12th.	Monday, 13th.	Tuesday, 14th.	Wednesday, 15th.	Thursday, 16th.	Friday, 17th.	Saturday, 18th.							
ORISSA	Puri ...	Puri ...	...	...	...	2·29	...	...	...	1	2·29	0·14	2·58	0·61	14·81	7·91
		Khurda ...	...	...	...	0·01						0·14		0·44		5·41
		Banpur ...	...	...	...	0·60	...	...	...	1	0·60	0·35	0·73	0·87	8·09	6·86
		False Point ...	...	...	...	0·04	...	...	...	Nil	0·04	0·10	0·17	0·52	11·97	8·43
		Gop ...	...	...	...	0·60	...	...	...	1	0·60	?	1·30	?	10·09	?
		Satpara ..										?		?		?
		Pipli ...	...	...	...	0·23	...	...	...	1	0·23	?	0·80	?	7·41	?
	Cuttack ...	Jagatsingpore	...	...	...	0·73	...	0·12	...	2	0·85	0·17	1·15	0·58	12·15	4·72
		Banki ..										0·19		0·43		4·82
		Cuttack ...	...	...	...	...	...	...	...	Nil	Nil	0·08	0·41	0·46	10·66	5·02
		Kendrapara ...	...	...	...	...	...	...	...	Nil	Nil	0·07	0·14	0·60	8·08	5·25
		Jajpur ...	...	...	...	...	...	0·50	...	1	0·50	0·14	0·63	0·62	5·47	4·72
		Dharmsala ...	...	...	...	0·50	...	...	...	1	0·50	?	1·00	?	6·18	?
		Salipore	...	...	..	0·23	...	...	...	1	0·28	?	0·48	?	6·62	?
		Pal Lahara ...										?		?		?
	Balasore ...	*Akhyapada* ...	...	...	...	...	...	0·09	...	Nil	0·09	?	0·39	?	4·72	?
		Chandbali ...	...	...	...	0·45	...	0·08	...	1	0·53	0·19	0·71	0·67	6·46	5·22
		Bhadrak ...	...	...	0·20	...	...	2·75	...	2	2·95	0·34	3·00	0·73	10·48	4·42
		Soro ...	...	...	...	...	...	...	...	Nil	Nil	0·18	0·80	0·48	8·58	3·62
		Balasore ..	...	0·02	0·41	...	...	0·10	...	2	0·53	0·19	1·98	0·85	12·82	5·05
		Jellasore ...										0·17		0·47		2·73
		Baripodah .	...	0·09	0·40	0·04	...	1·50	0·05	2	2·08	0·20	2·08	0·61	10·25	2·70
SOUTH-WEST BENGAL.	Midnapore	Contai ...	...	...	0·25	0·03	...	...	0·19	2	0·47	0·15	1·20	0·53	11·88	6·08
		Tamluk ...	...	...	0·32	...	...	...	0·30	2	0·62	0·08	1·02	0·50	6·82	3·81
		Midnapore ...	..	...	1·35	...	...	...	...	1	1·35	0·09	1·57	0·64	9·75	3·61
		Ghatal ...	...	0·01	1·86	...	...	...	0·02	1	1·89	0·12	2·17	0·49	10·94	1·91
		Kukrahaty ...	...	...	0·14	...	...	...	0·05	1	0·19	?	1·04	?	5·95	?
		Garhbeta ...	...	...	1·50	...	...	...	...	1	1·50	?	1·72	?	5·73	?
	24-Parganas ..	Sangor Island	...	...	0·16	...	...	...	0·48	2	0·64	0·05	1·31	0·57	16·85	6·26
		Diamond Harbour ..	...	...	0·15	...	...	...	...	1	0·15	0·15	1·48	0·82	8·78	4·33
		Canning Town	...	...	0·76	...	...	...	...	1	0·76	?	1·46	?	11·38	?
		Alipore Observatory ...	...	...	1·20	...	...	...	0·11	2	1·31	0·35	1·78	1·00	7·33	4·15
		Barrackpore ...	...	...	3·45	...	...	...	0·16	2	3·61	0·12	4·01	0·68	13·11	3·25
		Dum-Dum ...	...	...	1·69	...	...	...	...	1	1·69	0·05	2·93	0·62	7·54	3·25
		Barasat .	...	...	2·36	...	...	...	...	1	2·36	0·14	3·29	0·72	10·09	3·54
		Basirhat ...	...	...	2·21	...	...	...	1·05	2	3·26	0·08	3·69	0·62	10·36	3·07
	Howrah ...	Howrah	...	...	1·04	0·19	...	...	...	2	1·23	0·17	1·71	0·67	5·09	3·50
		Mohesreka ...	...	...	2·10	...	...	...	...	1	2·10	0·03	2·39	0·84	6·65	2·84
		Uluberia ...	...	...	1·12	...	...	...	0·25	2	1·37	?	1·65	?	5·81	?
	Hooghly ...	Serampore ...	...	...	3·45	...	...	...	0·08	1	3·53	0·09	4·39	0·57	13·85	3·12
		Hooghly ...	...	...	1·15	...	...	...	1·20	2	2·35	0·08	3·40	0·55	11·77	3·22
		Jahanabad ..	...	...	1·09	...	...	...	0·06	1	1·15	0·07	1·47	0·78	6·89	3·06
	Nadia ...	Ranaghat ..	...	...	0·47	...	...	...	1·68	2	2·15	0·06	2·47	0·63	8·72	3·02
		Krishnagar ...	...	0·06	0·34	...	...	...	1·56	2	1·96	0·07	2·26	0·63	8·54	2·37
		Chuadanga ..	...	...	...	...	...	...	0·33	1	0·33	0·04	1·76	0·67	?	3·06
		Meherpore ...	...	0·18	0·50	0·04	...	...	0·10	3	0·82	0·07	3·57	0·66	5·96	2·63
		Kushtia	...	0·02	0·67	...	...	...	...	1	0·69	0·06	2·14	0·68	5·61	2·95
	Khulna ...	Satkhira .	...	...	3·38	...	...	...	0·23	2	3·61	0·11	4·05	0·57	9·29	3·38
		Bazerhat ..	...	...	1·80	...	..	...	0·25	2	2·05	0·10	2·74	0·87	11·39	3·98
		Khulna ...	...	...	2·01	...	...	...	1·44	2	3·45	0·16	4·18	0·62	1·152	3·90
		Nakipur ...	...	...	0·53							?		?		?
		Rampal ...	...	...	1·20							?		?		?
	Jessore ...	Narail .	...	...	0·42	...	...	...	0·23	2	0·65	0·35	1·26	0·82	10·74	3·97
		Jessore ...	...	...	0·33	...	...	...	0·67	2	1·00	0·11	1·72	0·62	15·96	3·66
		Jhenidah .	...	...	0·22	...	...	...	0·65	2	0·87	0·10	1·89	0·78	10·70	3·15
		Magura ...	...	...	0·10	...	...	...	0·70	2	0·80	0·16	2·06	0·65	9·36	2·72
		Bangaon ..	...	...	0·80	...	...	...	1·00	2	1·80	0·11	3·20	0·59	10·97	3·16
	Burdwan ...	Kalna ...	...	0·08	0·70	...	...	...	0·62	2	1·40	0·20	1·70	0·60	9·47	2·86
		Burdwan ...	...	0·30	0·97	...	...	...	0·50	3	1·77	0·06	1·91	0·52	7·78	2·68
		Katwa ..	...	0·14	0·68	0·02	...	...	0·33	3	1·17	0·02	1·67	0·71	5·94	2·95
		Raniganj ..	...	0·31	0·57	0·01	...	...	0·36	3	1·25	0·03	1·48	0·87	3·62	2·57
		Mankur ...	...	...	0·79	...	...	...	0·35	2	1·14	?	1·26	?	3·38	?
	Bankura ..	Bankura ...	...	...	1·00	0·01	...	...	0·21	2	1·22	0·07	1·30	0·48	6·97	2·71
		Vishnupur ...	...	0·32	0·84	...	...	...	0·32	3	1·48	0·16	1·69	0·66	8·20	2·51
		Maliara ...	...	0·55	0·33	...	...	...	0·58	3	1·46	0·07	1·46	0·35	3·28	1·95
		Khatra ...	...	...	1·34	...	...	...	0·06	1	1·40	0·20	1·71	0·35	9·06	3·03
		Indas ...	...	0·38	1·07	...	...	...	...	2	1·45	?	1·49	?	7·40	?
		Kotalpur ...	...	...	1·28	...	...	...	...	1	1·28	?	1·28	?	5·40	?
		Onda ...	...	0·50	0·30	...	...	...	0·40	3	1·20	?	1·20	?	6·53	?
		Gangajalghati	...	...	0·80	...	...	...	...	1	0·80	?	0·80	?	3·17	?
		Raipur ..	...	0·36	1·87	...	...	...	...	2	2·23	?	2·40	?	11·24	?
		Sonamukhi ...	...	...	1·97	...	...	...	0·18	2	2·15	?	2·15	?	8·36	?
	Birbhum ...	Suri ..	...	0·78	0·14	...	...	0·02	0·53	3	1·47	0·06	3·22	0·51	5·73	2·56
		Hetampore ...	...	0·11	1·13	...	...	0·01	0·09	2	1·34	0·03	2·38	0·77	7·76	1·97
		Rampur Hat ...	...	0·06	0·51	0·02	...	...	...	1	0·59	0·11	1·07	0·59	5·25	2·22
		Bolpur ...	...	0·61	0·60	...	...	...	0·31	3	1·52	?	2·54	?	5·20	?
		Murari ...	...	...	0·94	...	...	...	0·35	2	1·29	?	1·46	?	3·00	?
	Murshidabad	Kandi ...	...	...	1·25	...	...	...	...	1	1·25	0·19	2·71	0·70	6·11	2·31
		Berhampore ...	...	0·11	0·65	...	...	...	...	2	0·76	0·10	1·42	0·64	3·73	2·39
		Lalbagh ...	...	...	0·52	...	...	...	...	1	0·52	0·03	1·02	0·50	4·74	1·68
		Azimganj ...	...	...	0·83	...	...	...	...	1	0·83	0·04	1·17	0·39	3·06	2·12
		Jangipur ..	...	0·45	0·66	...	...	0·30	0·12	4	1·53	0·03	1·67	0·36	3·64	1·79
		Lalgola ...	...	...	0·75	...	...	0·20	...	2	0·95	0·03	0·95	0·43	2·65	1·88
		Akhriganj ...	...	...	0·70	...	...	0·11	0·07	2	0·88	?	1·10	?	2·44	?
		Patkabari ...	...	0·10	0·70	...	...	...	...	2	0·80	?	3·40	?	6·20	?
NORTH BENGAL.	Pabna ...	Pabna ...	...	...	0·71	...	...	...	0·10	2	0·81	0·11	2·79	0·72	5·50	2·59
		Sirajganj ...	...	...	0·65	...	...	0·12	0·22	3	0·99	0·02	1·62	0·79	2·34	3·05
	Bogra ...	Sherepore ...	...	...	0·70	...	...	...	0·39	2	1·09	0·09	1·33	0·82	2·69	2·52
		Nowkhilla ...	...	...	0·78	...	...	...	0·15	2	0·93	0·16	1·02	0·73	2·47	2·28
		Bogra ...	...	0·02	0·71	...	...	0·02	0·20	2	0·95	0·09	1·03	0·44	2·18	2·48
		Panchbibi ...	...	...	0·35	...	...	...	0·10	2	0·45	0·01	0·61	0·36	1·63	1·31
	Rajshahi ...	Boalia ...	...	...	0·47	...	...	0·36	0·09	2	0·92	0·01	1·30	0·41	2·83	2·18
		Nator ...	...	...	0·52	...	...	0·80	0·04	2	1·36	0·08	1·91	0·60	2·92	2·74
		Naugaon ...	...	...	0·80	...	...	0·15	0·42	3	1·37	0·18	1·47	0·34	1·95	1·78
		Lalpore ...	...	...	0·57	...	...	0·40	0·08	2	1·05	?	1·84	?	2·82	?
		Manda ...	...	...	0·17	...	...	0·25	...	2	0·42	?	0·42	?	0·86	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 18th of February 1893—contd.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 12th.	Monday, 13th.	Tuesday, 14th.	Wednesday, 15th.	Thursday, 16th.	Friday, 17th.	Saturday, 18th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BENGAL—concld.	Malda	Malda	...	0·16	0·67	0·01	...	0·31	0·43	4	1·58	0·08	1·75	0·37	3·22	2·43
		Chanchal	...	0·20	0·41	...	...	0·18	0·10	4	0·89	0·05	0·94	0·41	1·69	1·93
		Gajol	...	...	0·61	...	...	0·20	0·13	3	0·94	?	0·98	?	1·36	?
		Sibganj	...	0·10	1·15	...	...	0·07	0·08	3	2·30	?	2·50	?	3·86	?
	Dinajpur	Mohadebpore	...	...	0·60	...	...	0·18	0·34	3	1·12	0·03	1·24	0·46	1·85	1·48
		Churaman	...	0·12	0·42	...	...	0·13	0·02	3	0·69	0·09	0·73	0·44	1·42	1·47
		Raiganj	...	...	0·42	...	...	0·10	0·03	2	0·55	0·06	0.55	0·51	2·11	1·44
		Dinajpur	...	0·12	0·22	...	...	0·04	...	2	0·38	0·05	0·38	0·35	1·26	2·82
		Balurghat	...	0·11	0·42	...	...	0·07	...	2	0·60	0·03	0·68	1·14	1·30	1·33
		Thakurgaon	...	...	0·35	...	...	...	...	1	0·35	?	0·35	?	0·91	?
	Rangpur	Bhawanigunge (*Gyabanda*)	...	0·02	0·20	...	...	...	...	1	0·22	0·13	0·22	0·44	0·80	2·14
		Rangpur	...	0·18	0·24	...	...	...	...	2	0·42	0·02	0·42	0·27	4·45	2·51
		Kurigaon	...	0·08	...	...	...	...	0·02	Nil	0·10	0·02	0·10	0·28	0·76	1·76
		Jagugra (*Nilphamari*)	...	0·02	0·35	0·01	...	...	...	1	0·38	0·06	0·38	0·42	1·77	1·66
		Ulipore	...	...	0·23	...	...	...	...	1	0·23	?	0·23	?	0·65	?
	Jalpaiguri	Jalpaiguri	...	0·18	0·32	...	...	...	...	2	0·50	0·03	0·50	0·21	2·18	3·14
		Alipore Dooar	...	0·44	...	...	...	...	...	1	0·44	?	0·44	?	2·64	?
		Fallacotta	...	0·35	...	...	...	...	...	1	0·35	?	0·35	?	2·00	?
		Debiganj										?		?		?
		Bhagatpore (*Naurakatta*)	...	...	0·27	...	...	...	...	1	0·27	?	0·27	•	8·47	?
	Kuch Bihar	Dinhatta	...	...	0·22	...	...	...	...	1	0·22	0·08	0·22	0·40	1·50	1·99
		Kuch Bihar	...	...	0·32	...	...	...	...	1	0·32	0·03	0·54	0·22	2·26	1·90
		Mickliganj	...	0·14	0·37	...	...	...	...	2	0·51	0·25	0·51	0·48	2·11	2·03
		Mathabhanga	...	0·03	0·40	...	...	...	...	1	0·43	0·18	0·43	0·42	2·00	1·68
	Darjeeling	Buxa	...	...	0·38	0·03	...	...	...	1	0·41	0·24	0·41	0·65	15·04	5·33
		Siliguri	...	0·22	0·23	...	...	...	...	2	0·44	0·17	0·44	0·23	3·35	1·83
		Darjeeling	...	0·08	0·10	...	...	...	...	1	0·18	0·14	0·26	0·57	1·82	5·02
		Kalimpong	...	0·14	0·11	...	...	...	...	2	0·25	0·20	0·25	0·48	2·08	2·62
		Kurseong	...	0·30	0·21	...	0·07	...	...	2	0·58	?	0·65	?	3·83	?
EAST BENGAL.	Chittagong	Cox's Bazar	...	...	...	0·04	...	...	...	Nil	0·04	0·09	0·04	0·43	13·19	7·19
		Chittagong	...	...	...	0·28	...	...	0·02	1	0·30	0·10	0·30	0·58	12·85	5·09
		Kutubdia	...									?		?		?
		Satkanya	...									?		?		?
		Kodala	...	...	...	0·23	...	...	...	1	0·23	?	0·33	?	?	?
		Fenoa	...									?		?		?
		Mirsarai	...	...	0·25	0·21	...	...	...	2	0·51	?	0·51	?	?	?
	Chittagong Hill Tracts.	Rangamati	...	...	0·07	0·15	...	...	0·14	3	0·36	0·05	0·57	0·71	9·18	5·66
		Bundarban										?		?	5·70	?
	Backergunge	Patuakhali	...	...	...	1·25	...	...	...	1	1·25	0·07	1·25	0·64	10·23	5·46
		Pirojpur	...	...	0·80	0·65	...	...	0·85	3	2·30	0·21	2·46	0·79	10·51	4·85
		Barisal	...	...	0·81	...	...	...	0·22	2	1·03	0·12	1·03	0·66	8·42	4·95
		Gournaddi	...	...	0·82	0·08	...	...	0·25	2	1·15	?	0·31	?	7·14	?
		Bhola	...	...	1·32	0·43	...	...	0·18	3	1·93	0·06	2·00	0·50	10·53	4·47
		Daulatkhan	...	...	1·48	...	...	...	0·09	1	1·57	?	1·57	?	13·17	?
		Bauphal	...	...	...	0·54	...	...	...	1	0·54	?	0·54	?	9·45	?
	Noakhali	Noakhali	...	...	0·67	0·22	...	...	0·29	3	1·18	0·11	1·18	0·52	17·52	5·33
		Fenny	...	...	0·48	0·30	...	...	0·35	3	1·13	0·08	1·19	0·74	16·17	7·01
		Harishpore	...	...	0·35	0·05	...	...	...			?		?		?
		Ramganj	...	...	1·93	0·24	...	...	0·08	2	2·25	?	2·25	?	12.98	?
	Faridpur	Madaripur	...	...	0·83	...	...	...	0·25	3	1·08	0·29	1·41	0·62	7·52	2·94
		Faridpur	...	...	0·20	...	...	...	0·30	2	0·50	0·20	1·00	0·88	12·79	3·02
		Goalundo	...	...	0·44	...	...	...	...	1	0·44	0·12	2·35	0·72	7·67	2·02
	Dacca	Munshiganj	...	...	0·16	0·09	...	...	0·23	3	0·48	0·22	0·91	0·83	8·17	4·07
		Dacca	...	...	0·20							0·13		0·70		2·83
		Narayanganj	...	...	0·12	0·04	...	...	0·14	2	0·30	0·12	0·80	0·61	10·93	4·08
		Manikganj	...	...	0·21	0·05	...	...	0·08	1	0·34	0·21	2·79	0·81	9·72	2·86
		Joydebpore	...	...	0·27	0·06	...	...	0·17	2	0·50	?	1·59	?	5·73	?
	Hill Tippera	Agartola	...	...	0·11	...	...	...	...	1	0·11	0·10	0·54	0·76	7·95	4·21
	Tippera	Comilla	...	...	0·13	0·19	...	...	0·02	2	0·34	0·18	0·44	0·62	9·66	3·83
		Chandpore	...	...	0·64	...	...	...	0·50	2	1·14	0·16	0·32	0·55	9·33	3·06
		Brahmanbaria	...	...	0·15	0·05	...	...	0·20	2	0·40	0·12	0·85	0·92	11·79	3·94
		Ramchandrapore	...	...	...	...	...	...	...	Nil	Nil	?	0·40	?	8·53	?
		Nasirnagar	...	...	0·50	...	...	...	...	1	0·50	?	0·90	?	11·96	?
		Daudkandi										?		?		?
		Kasba										?		?		?
		Laksham	...	...	0·32	0·22	...	...	...	2	0·54	?	0·54	?	9·71	?
	Mymensingh	Kishorganj	...	...	0·29	...	...	...	...	1	0·29	0·04	0·37	0·57	6·92	2·97
		Atia (*Tangail*)	...	...	0·51	...	...	...	0·31	2	0·82	0·19	1·78	0·83	5·02	2·87
		Mymensingh	...	...	0·77	0·03	...	...	0·13	2	0·93	0·09	1·17	0·62	2·35	3·10
		Jamalpur										0·12		0·76		3·00
		Netrakona	...	...	0·98	...	...	...	0·12	2	1·10	0·01	1·10	0·30	5·18	2·98
		Subornakhally	...	...	0·46	...	...	...	0·24	2	0·70	?	1·19	?	1·88	?
		Durgapore	...	...	0·44							?		?		?
		Sherepore Town	...	...	0·32	...	...	...	0·08	1	0·60	?	0·78	?	4·29	?
		Dewanganj	...	...	0·39							?		?		?
NORTH BIHAR	Purnea	Kishanganj	...	...	0·49	...	...	...	...	1	0·49	0·02	0·64	0·36	1·40	2·20
		Araria	...	0·10	0·27	...	...	0·02	...	2	0·39	0·04	0·35	0·39	1·59	1·92
		Purnea	...	0·04	0·34	...	...	0·17	...	2	0·55	0·05	0·57	0·41	2·01	2·53
		Gondwara (*Korah*)	...	...	0·38	...	...	0·21	0·08	2	0·67	?	0·67	?	0·67	?
		Barsoe	...	...	0·40	...	...	0·10	...	2	0·50	?	0·50	?	1·20	?
		Forbesganj	...	0·26	0·22	...	...	...	...	2	0·48	?	0·60	?	1·18	?
		Kattaganj	...	0·11	0·20	...	...	...	...	2	0·31	?	0·31	?	0·66	?
	Bhágalpur	Madhipura	...	...	0·28	...	...	...	0·22	2	0·50	0·05	0·50	0·45	1·45	1·94
		Bongaon (*Syfabad*).	...	...	0·26	...	...	...	...	1	0·26	?	0·26	?	1·56	?
		Supaul	...	0·12	0·15	...	...	0·12	...	3	0·39	0·01	0·57	0·34	2·04	1·73
		Protabganj	...	0·40	...	...	...	...	...	1	0·40	?	0·68	?	1·35	?
		Bhagalpur	...	0·27	0·24	...	...	0·58	0·47	4	1·56	0·09	1·81	0·36	2·59	2·04
		Banka	...	0·09	0·24	...	...	0·22	...	2	0·55	0·04	0·62	0·32	2·79	2·15
		Colgong	...	0·20	0·28	...	...	0·50	0·39	4	1·37	?	1·53	?	3·72	?
	Darbhanga	Tajpur	...	...	0·32	...	...	1·30	...	3	0·62	0·03	0·62	0·34	1·46	1·82
		Darbhanga	...	0·04	0·16	0·02	...	0·16	...	2	0·38	0·01	0·43	0·33	2·41	[illegible]
		Madhubani	...	0·41	...	...	...	0·34	...	2	0·75	Nil	1·56	0·29	3·23	2·02
		Bahera	...	...	0·19	...	...	0·13	...	2	0·32	?	0·32	?	2·09	?
		Roshera	...	...	0·25	...	...	0·22	...	2	0·47	?	0·47	?	1·11	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 18th of February 1893—concld.

Meteorological Division.	District.	Station.	Rainfall.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
			Sunday, 12th.	Monday, 13th.	Tuesday, 14th.	Wednesday, 15th.	Thursday, 16th.	Friday, 17th.	Saturday, 18th.							
NORTH BIHAR—*concluded.*	Muzaffarpur...	Sitamarhi ...	...	0·59	0·20	...	...	0·04	...	2	0·83	0·03	1·15	0·22	2·60	1·44
		Muzaffarpur	..	0·15	0·12	...	...	0·23	0·03	3	0·53	0·03	0·53	0·36	1·86	2·58
		Hajipur	..	0·03	0·22	...	...	0·24	...	2	0·49	0·02	1·03	0·34	1·89	1·84
		Paru		0·25	0·25	...	...	0·26	...	3	0·76	?	0·76	?	1·43	?
		Mahwa (Chilwarra.)	...	0·38	...	...	...	0·62	...	2	1·00	?	1·10	?	1·95	?
		Siuhar .	...	0·06	0·03							?		?		?
		Pupri .										?		?		?
	Champaran	Motihari .	...	0·37	0·39	...	...	0·19	...	3	0·95	0·01	1·07	0·27	1·75	1·50
		Bettiah .	...	0·18	0·18	...	...	0·07	...	2	0·48	0·12	0·63	0·30	1·43	1·57
		Bagaha ...	..	0·10	0·12	...	...	0·06	...	2	0·28	?	0·52	?	1·93	?
		Burhurwa	...	0·45	0·26	...	...	0·11	...	3	0·82	?	0·92	?	1·38	?
	Saran ..	Gopalganj ...	..	0·08	0·08	...	...	0·12	...	2	0·88	0·10	1·02	0·48	1·86	1·72
		Siwan	..	0·23	0·24	0·02	...	0·24	...	3	0·79	0·06	0·94	0·40	2·24	2·40
		Chapra ...	...	0·08	0·19	...	...	0·20	...	2	0·47	0·02	0·83	0·25	2·20	2·10
SOUTH BIHAR	Shahabad ...	Buxar ...	...	0·09	0·29	...	...	0·19	...	2	0·57	0·02	0·60	0·23	2·08	2·33
		Dehri ...	...	0·03	..	...	...	...	...	Nil	0·03	0·01	0·03	0·17	1·37	2·31
		Bhabhua ..	..	0·11	0·08	...	...	...	...	1	0·19	0·04	0·25	0·42	1·16	2·74
		Sasaram ...	..	0·11	0·12	...	...	...	...	2	0·23	0·04	0·23	0·23	1·19	2·47
		Arrah ..	...	0·35	...	...	...	0·97	...	2	1·32	0·06	1·50	0·32	2·38	2·14
		Mohanea	...	0·03	...	...	...	...	...	Nil	0·03	?	0·03	?	0·12	?
		Khiri ...	..	0·14	0·30	...	...	...	...	2	0·44	?	0·67	?	1·17	?
		Ageaon ...	...	...	...	...	0·70	...	...	1	0·70	?	0·86	?	1·20	?
		Ramagar ...	0·11	..	0·31	...	...	0·19	...	3	0·61	?	0·81	?	2·31	?
		Koath ...	...	0·06	0·25	...	..	..	...	1	0·31	?	0·46	?	1·80	?
		Sikroul ...	...	0·40	...	...	...	...	...	1	0·40	?	0·60	?	1·20	?
		Bassowan ...	..	0·15	0·15	...	..	...	...	2	0·30	?	0·31	?	1·74	?
		Monaharpur	...									?		?		?
	Gaya ...	Aurangabad ...	..	0·18	0·12	...	...	...	...	2	0·30	0·07	0·31	0·24	2·05	1·83
		Gaya ...	0·32	0·12	...	...	...	..	...	2	0·44	0·04	0·46	0·29	1·33	2·28
		Nawadah ...	..	0·29	0·18	...	...	0·32	...	3	0·79	Nil	0·83	0·22	2·14	2·17
		Jahanabad ...	...	0·14	0·34	...	...	0·10	...	3	0·58	0·05	0·82	0·32	1·25	2·03
		Arwal	...	..	0·40	...	...	0·10	...	2	0·50	?	0·63	?	1·06	?
		Daudnagar ...	...	0·10	0·15	...	...	...	...	2	0·25	?	0·25	?	0·60	?
		Sherghati	...	0·20	0·07	...	...	...	...	1	0·27	?	0·27	?	2·30	?
		Rajauli ...	...	0·25	0·09	...	..	..	...	1	0·34	?	0·34	?	3·78	?
		Pakri Barawan	...	0·38	0·11	...	...	0·43	...	3	0·92	?	1·02	.	1·64	?
	Patna ...	Patna	...	0·05	0·23	...	...	0·24	...	2	0·52	0·01	0·69	0·27	1·66	2·12
		Dinapore ...	...	0·09	0·19	...	...	0·13	...	2	0·41	0·01	0·57	0·28	1·39	1·99
		Bihar ...	...	0·21	0·22	...	...	0·09	...	2	0·52	0·08	0·88	0·38	1·43	2·44
		Barh ...	...	0·09	0·30	0·03	...	0·22	...	2	0·64	0·03	1·00	0·31	1·80	2·14
		Bikram ..	..	...	0·44	...	...	0·69	...	2	1·13	?	1·30	?	2·06	?
		Hilsa	...	0·09	0·30	...	...	0·86	...	2	1·25	?	1·44	?	2·18	?
	Monghyr ..	Begusarai ...	...	0·11	0·35	...	...	0·65	...	3	1·11	0·02	1·34	0·34	4·09	2·58
		Monghyr ...	...	0·18	0·39	...	...	1·07	0·50	4	2·14	0·10	2·34	0·41	3·57	2·33
		Jamui ...	...	0·13	0·25	...	...	0·60	...	3	0·98	0·13	1·04	0·40	2·32	2·17
		Goori ..	...	0·34	1·87	...	...	3·47	3·13	4	8·81	?	8·81	?	9·70	?
		Shaikpura ...	...	0·27	0·97	...	...	...	.	2	1·24	?	1·24	?	2·89	?
		Chahai Bamda	...	0·23	0·54	...	..	0·22	0·10	4	1·09	?	1·21	?	3·21	?
	Sonthal Parganas.	Rajmahal ...	.	0·14	0·55	...	...	0·41	0·32	4	1·42	0·03	1·72	0·23	2·38	1·52
		Godda .	...	0·10	0·37	...	...	0·41	...	3	0·88	0·06	1·02	0·34	2·16	1·69
		Pakour ...	...	0·08	0·96	...	..	0·29	0·13	3	1·46	0·01	1·52	0·16	6·01	1·37
		Naya Dumka	...	0·32	0·32	0·01	...	...	...	2	0·85	0·10	1·21	0·42	3·46	2·48
		Deoghur	...	0·20	0·50	...	...	0·20	...	3	0·70	0·04	1·19	0·22	2·36	2·55
		Jamtara ...	...	...	0·28	...	..	...	0·61	2	0·89	0·04	1·46	0·20	4·77	2·00
		Belbodda ...	...	...	0·80	...	...	0·85	0·45	3	2·10	?	2·10	?	2·24	?
		Nanihat ...	...	0·10	0·62	...	...	...	...	2	0·72	?	1·00	?	1·62	?
CHOTA NAGPUR	Hazaribagh ...	Pachamba (*Giridih*). ...	...	0·34	0·10	0·02	...	...	0·84	3	1·30	Nil	1·65	0·30	5·30	2·21
		Hazaribagh	...	0·20	0·27	...	...	...	...	2	0·47	0·03	1·33	0·15	5·38	2·53
		Semtaguran										0·09		0·50		1·98
		Mahudi Hills										0·08		0·52		2·31
		Jhumra Hill										0·07		0·41		2·44
		Barhi ..	...	0·31	...	...	...	...	...	1	0·31	?	0·84	?	2·67	?
		Chatra ...	...	0·28	0·04	...	...	...	...	1	0·32	?	0·33	?	2·84	?
		K[illegible]agacha	...	0·12	0·13	0·02	...	...	...	2	0·27	?	0·60	?	2·37	?
		Ramgar ...	...	0·85	0·24	...	.	...	0·22	3	1·31	?	1·61	?	5·66	?
	Lohardaga .	Lohardaga ...	...	0·51	0·63	...	...	...	0·10	3	1·23	0·26	1·41	0·48	8·52	3·08
		Ranchi ...	...	0·95	0·79	0·02	..	...	...	2	1·76	0·21	2·08	0·74	9·24	3·16
		Silli ...	...	...	0·90	...	...	...	...			?		-		?
	Palamau ...	Palamau (Daltonganj).	...	0·17	0·10	...	...	...	...	2	0·27	0·04	0·33	0·30	1·97	2·65
		Palamath	...	1·20	0·10	0·01	...	...	...	2	1·31	?	2·26	?	6·88	?
		Husainabad										?		?		?
		Garhwa	...	0·23	0·07	...	..	...	...	1	0·29	?	0·49	?	2·68	?
	Singhbhum ..	Chaibassa	...	...	2·15	...		0·10	...	2	2·25	0·04	2·63	0·50	9·16	3·29
		Chakardharpur.	...	...	1·69	...	..	...	...	1	1·69	?	2·54	?	8·88	?
		Ghatsila	...	1·28	1·90	...	...	...	...	2	3·18	?	3·63	?	8·63	?
		Baharagura										?		?		?
	Manbhum	Purulia ...	...	...	1·25	...	..	...	0·40	2	1·65	0·05	1·98	0·64	7·68	2·
		Gobindpur	...	0·31	0·19	...	..	...	0·18	3	0·68	0·04	1·30	0·44	4·28	2·
		Raghunathpore	..	...	0·59	...		...	...	1	0·59	?	0·66	?	3·30	.
		Barahabhum	...		0·80	...	..	...	...	1	0·80	?	0·80	?	6·51	?
		Jhalda	...	0·74	0·40	...	...	...	0·22	3	1·36	?	1·51	.	3·99	?
		Chas .	...	0·22	0·20	...	...	.	0·23	3	0·65	?	0·87	?	4·39	?
		Pandra ...	...	0·37	0·36	...	.	0·02	0·55	3	1·30	?	1·78	?	3·90	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the 21st February* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 18TH OF FEBRUARY 1893.

IN the middle and close of the previous week a barometric depression had passed through the province and had given general rain, while following in the rear of the depression a wave of cold air had swept over the province, and hence the cold weather conditions had again became rather strongly developed, and the mean temperature on the 11th was in defect of the normal by from 5° to 7°. On the 12th a moderate to rather rapid decrease of pressure took place, while temperature was increasing rapidly, the increase varying from about 2° to 4°. Winds also became a little unsteady and were more or less southerly in many cases, so that there was a rather rapid increase in humidity, but weather still remained fine in Bengal with lightly clouded skies. On the other hand, on this day a barometric depression had appeared over North-Western and Western India, and this was travelling rather rapidly in an easterly direction, and on the 13th a shallow low pressure area existed over the Central Provinces and the west of Bengal, while a secondary depression had appeared in the Punjab. The depression which was affecting Bengal gave a moderate to rather rapid fall of pressure over the province, while the usual rapid increase of temperature took place, the increase equalling about 3° to 4°. Moist south-easterly winds set in over practically the whole province, the sky had clouded over, and a few rain showers were reported in the west and south of the province. On the 14th the depression had reached Orissa and the north-west of the Bay, where there was a distinct tendency to cyclonic circulation of winds, pressure had become below the normal by amounts ranging up to 0·08" at Gopalpur, while temperature began to fall at many stations owing to the fairly general rain which was reported in all districts except Orissa. On the 15th the depression had apparently filled up or passed away in an easterly direction, pressure was rising moderately rapidly, and temperature was falling, while fairly dry westerly and north-westerly winds were generally setting in. Weather therefore commenced to clear, and on this day the showers were comparatively few in number. On the 16th weather had become fine over practically the whole of Bengal, pressure was increasing moderately to rapidly, while the temperature changes were irregular and winds were a little less steady than on the 15th. Over the central parts of India, however, another shallow depression had formed on the 16th, and was passing in an easterly or south-easterly direction and it affected Bengal from the 17th, when an extremely rapid fall of pressure took place, the fall at some of the western stations exceeding a fifth of an inch, and pressure again became moderately in defect of the normal, while the mean temperature also remained from one to two degrees lower than usual. Winds had, however, again become south-easterly in connection with the depression at almost all stations, and fairly general rain was reported on this date from Bihar and parts of North Bengal. On the 18th, or the last day of the week, the fall of pressure continued over the eastern half of Bengal and over Orissa, while an increase had set in over the western districts, and hence the depression had again moved in an easterly and south-easterly direction, temperature had generally slowly risen and was in excess of the normal in the southern and south-western districts, while westerly winds were blowing over the western half of the province and south-easterly winds over the eastern half. The area of rainfall had also advanced in an easterly direction, and fairly general rain was received in South-West Bengal and parts of North and East Bengal and Chota Nagpur. Hence conditions at the close of the week were decidedly unsettled, and good general rain has again been received in nearly all divisions of the province.

Pressure.—The variations of pressure during the week have again been very large, but of more or less opposite character, so that the variation of the mean is small. The mean pressure for the week has been in excess of the normal in all except some of the western and south-western districts. Slightly defective pressures are thus shown in Orissa and in parts of Chota Nagpur, but elsewhere slight excess pressures are recorded, but the general excess is not larger than about 0·02", the largest excess being shown at the north-eastern stations.

Temperature.—The mean temperature for the whole province for the week has been in defect of the normal by 1·8°, but the defect has been mainly confined to South-West Bengal, South Bihar and Chota Nagpur, where it has averaged nearly three degrees. This defect has, however, been almost entirely in the day or maximum temperature, which at many stations have been from 5° to 7° below the normal, while the night or minimum temperatures have been nearly normal.

The distribution of temperature for the week and its variation from the normal value are best seen in the table below, where the average maximum, minimum, and mean temperatures for the week at nine typical stations in different districts of the province are compared with the normal values for the week:—

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 18th February 1893.

	Normal mean maximum temperature for the week ending 18th February.	Actual mean maximum temperature for the week ending 18th February 1893.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 18th February.	Actual mean minimum temperature for the week ending 18th February 1893.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 18th February.	Actual mean daily temperature for the week ending 18th February 1893.	Variation of actual mean from the normal.
Cuttack	80·2	82·5	—6·7	65·8	67·8	+2·0	77·5	75·1	—2·4
Calcutta	81·0	75·4	—5·6	59·8	59·3	—0·5	70·4	67·4	—3·0
Dacca	80·9	74·8	—6·1	57·2	56·5	—0·7	69·1	65·7	—3·4
Burdwan	82·0	74·5	—7·5	57·9	59·4	+1·5	70·0	67·0	—3·0
Patna	76·8	71·4	—5·4	51·9	52·1	+0·2	64·4	61·7	—2·7
Gaya	80·7	73·6	—7·1	55·8	50·8	—5·0	68·3	62·2	—6·1
Purnea	77·4	71·1	—6·3	50·5	49·2	—1·3	64·0	60·2	—3·8
Hazaribagh	76·4	70·8	—5·6	53·7	52·0	—1·7	65·1	61·4	—3·7
Darjeeling	45·2	41·6	—3·6	33·0	31·4	—1·6	39·2	36·5	—2·7

Rainfall.—Rather heavy falls have again occurred in all divisions: the falls have averaged an inch and-a-half in South-West Bengal, one inch in Chota Nagpur, and about three-quarters of an inch over the remainder of the province, and these falls have hence been in all cases rather largely in excess of the normal.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 18th of February 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th Oct. 1892.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	85·2	51·0	80·1	67·4	73·7	—0·5	0·65	0·18	+0·47	0·87	0·30	+0·57	1·06	0·60	9·18	5·15
South-West Bengal ...	85·3	52·1	74·7	58·7	66·7	—2·5	1·48	0·10	+1·38	1·83	0·26	+1·57	2·18	0·63	8·28	3·06
North Bengal	79·3	45·6	71·0	52·2	61·7	—0·9	0·71	0·08	+0·63	2·04	0·22	+1·82	0·91	0·44	2·23	2·12
East Bengal	83·7	50·1	75·6	56·4	66·0	—1·3	0·72	0·13	+0·59	1·68	0·26	+1·42	1·14	0·67	9·55	4·12
North Bihar	78·3	41·9	69·9	50·7	60·3	—1·2	0·65	0·04	+0·61	2·33	0·16	+2·17	0·85	0·34	2·04	1·94
South Bihar	84·0	47·3	71·4	52·4	61·9	—3·3	0·77	0·05	+0·72	2·36	0·21	+2·15	0·97	0·30	2·39	2·15
Chota Nagpur	82·9	48·9	72·0	54·8	63·4	—2·7	1·05	0·08	+0·97	2·20	0·25	+1·95	1·48	0·49	6·49	2·60

METEOROLOGICAL OFFICE, BENGAL,
The 21st February 1893.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 12th to 18th February 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Maximum.	Range.	Minimum.	Hygrometry. Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Wind. Prevailing direction.	Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
Feb.	12th	135 5	6·1	29·987	66·3	76·4	21·6	54·8	59·5	0·422	54·2	67	SSW and calm ...	26	Nil	Partially cloudy, o.
,,	13th	119·3	0·7	·940	64·9	73·7	13·5	60·2	62·1	·523	60·2	85	SSW and ENE ...	65	0·19	Cloudy, o, g, d, t, p.
,,	14th	129·3	3·0	·939	64·7	72·7	15·0	57·7	62·2	·532	60·7	87	N and NNE ...	52	1·01	Chiefly cloudy, o, g, d, p.
,,	15th	125·4	8·7	30 044	65·9	74·0	15·3	58·7	61·4	·487	58·2	78	NNE and calm ...	38	Nil	Clear, ⌓.
,,	16th	129·3	9·5	·071	66·6	75·6	18·2	57·4	61·7	·489	58·4	76	ENE and calm ...	25	,,	Chiefly clear, ⌓.
,,	17th	139 0	4·8	29 932	69·9	80·7	19 3	61·4	67·6	·648	66·4	88	ESE and SSW ...	61	0·11	Chiefly cloudy, o, p, t, <, ⌓
,,	18th	133·1	8·9	·937	70·3	78·2	11·6	66·6	66·2	·591	63·7	80	SSW, N and calm	64	Nil	Partially cloudy, o.

	...	Inches.
The mean pressure of the seven days	... ...	29·979
The average pressure of the corresponding period for 24 years, S.-G.'s Office	...	29·949
		Hours.
The total number of hours of bright sunshine	... ...	41·7
The maximum possible number of hours of sunshine	... ...	79·5
		°
The mean temperature of the seven days ...	... ...	66·9
The average temperature of the corresponding period for 24 years, S.-G.'s Office		72·9
The extreme variation of temperature	... ...	25·9
The maximum temperature ...	... ...	80·7
		Miles.
The highest velocity of the wind in one hour	... ...	9
		lbs.
The highest pressure of wind on one square foot	... ...	?
		%
The mean relative humidity ...	... ...	80
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	... ...	67
		Inches.
The total fall of rain from 12th to 18th February 1893	... ...	1·31
The average fall of the corresponding period for 24 years, S.-G.'s Office	...	0·24
The total fall from 1st January to 18th February 1893	... ...	2·48
The average fall of the corresponding period for 24 years, S.-G.'s Office	...	1·15

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; d, drizzling rain; t, thunder; p, passing temporary showers; ⌓, dew; <, lightning.

C. Little,

For Meteorological Reporter to the Govt. of India.

Meteorological Office, Govt. of India;

Calcutta, the 20th February 1893.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 12th to 18th February 1893.

MONTH	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature. Daily mean.	Maximum.	Range.	Minimum	Hygrometry. Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	Rainfall at 10 A.M. for past 24 hours.
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
February ...	12th .	30·071	67·4	78 4	22·0	56 4	73·6	61·7	·393	52·2	47	Nil
" ...	13th ...	29 967	67 9	74 9	14·0	60 9	77·1	65·6	·472	57·3	52	"
" ...	14th .	·993	65 9	73·9	16 0	57 9	64·6	62·7	·545	61·4	90	1·26
" ...	15th ...	30 105	66 9	74·9	16·0	58 9	68·1	62 5	·493	58 5	72	Nil
" ...	16th ...	·154	67·4	76 9	19 0	57·9	69 6	61·7	·445	55 7	62	"
" ...	17th ...	29·999	71 9	81·7	19 6	62 1	72·1	68·1	·635	65·7	81	"
" ...	18th	30 002	73·7	80 9	14·5	66 4	72 6	66·6	·573	62·8	72	0·03

		Inches.
The mean 10 A.M. pressure of the seven days	... .	30·042
		°
The mean temperature of the seven days	... ...	68·7
The extreme variation of temperature	... . ..	25 3
The maximum temperature	.. ..	81·7
		%
The mean 10 A.M. relative humidity of the seven days	.	68
The total fall of rain from 12th to 18th February 1893	... ...	1·29 inch.

The daily mean temperatures are the crude means of maximum and minimum temperatures.

C. LITTLE,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 20th February 1893.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 18th February 1893, *as compared with the corresponding week of the previous year.*

NATURE OF CARGO.			WEEK ENDING SATURDAY, THE 18TH FEBRUARY 1893.			WEEK ENDING SATURDAY, THE 20TH FEBRUARY 1892.		
			Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
			No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	...	...	1 575	3.70,040	6,110	1,266	4,60,100	7,832
Jute ...	...	...	112	63.350	1,021	16	12,825	227
Firewood ...	...	...	134	86,300	1.225	122	83,650	1,255
Other articles	...	...	860	1,95,530	2,919	869	2,34,450	3,628
	Total	...	2,681	7.15,220	11,275	2,273	7,91,025	12,942

IRRIGATION DEPARTMENT, BENGAL.

IRRIGATION OPERATIONS FOR THE OFFICIAL YEAR 1892-93.

Areas leased for irrigation up to end of December 1892.

Circle.	District.	Canal.	Estimated full discharge.	Average discharge in month.	Discharge utilised.	Approximate area of land irrigated during the year up to the end of the month.	Approximate area of land under irrigation up to the same date last year.	Details of areas leased. Five years, all crops.	Five years, kharif.	Annual leases. Kharif.	Rabi.	Sugarcane.	Bhadoi.	Hot-weather.	Total.	Grand Total.	Rainfall, 1892-93. During month.	Rainfall, 1892-93. Up to end of month.	Rainfall, 1891-92. During month.	Rainfall, 1891-92. Up to end of month.	Remarks.
			C. ft.	C. ft.	C. ft.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Inches.	Inches.	Inches.	Inches.	
Orissa	Cuttack	Taldanda, 1st reach	1,342	13	......	8,732	10,537	......	8,308	472	139	29	......	......	640	8,948	......	49·65	......	76·60	
		Ditto, 2nd "	566	8													......	49·01	......	62·19	
		Machgong	766	4	2	27,439	33,404	......	25,342	2,601	125	23	......	......	2,749	28,091	......	42·52	......	51·98	
		Kendrapara	1,067	297	107	40,460	46,809	......	51,147	......	1,746	38	......	......	1,784	52,931	......	38·45	......	48·93	
		Gobri	372·82	42	10	2,610	3,063	......	3,287	......	50	......	......	......	50	3,537	......	46·41	......	73·33	
		Do. Extension	648	43	7	3,574	3,633	......	3,216	......	13	......	......	......	13	3,229	No rain gauge.				
		Pattamoondi	885	85	42	12,627	13,541	......	11,802	......	199	......	......	......	199	12,001	......	10·82	......	42·84	
		High Level, Range I	608	187·2	......	21,739	21,173	......	21,750	106	276	......	......	......	382	22,132	......	51·97	......	......	
		Ditto, ditto II	727·16	......	......	2,384	2,732	......	2,329	114	45	......	......	......	159	2,488	No rain gauge.				
		Jaipur Canal	700	...	......	791	1,366	......	449	......	......	......	......	......	...	419	......	...	......	......	
	Balasore	High Level, Range III	727·16	48·90	1·48	31,743	37,201	......	33,398	......	1	168	......	......	169	33,565	......	52·37	......	62·00	
		Total	......	......	......	161,099	173,459	......	161,020	3,293	2,594	258	......	......	6,145	167,171	......	......	......	......	
		Total of the corresponding period of last year	......	......	......	......	......	......	178,873	5	3,861	260	......	......	4,126	182,999	......	......	......	......	
South-Western.	Midnapore	Midnapore	1,411	136	......	81,501	76,673	......	81,653	13	......	......	......	......	13	81,666	......	37·76	......	54·92	Whole month discharging.
		Panchkoora	522	1	......	7,266	5,258	......	7,136	......	......	......	......	......	......	7,136	......	33·65	......	41·60	One day discharging.
	Howrah	Tidal Reaches, Ranges I & II	......	......	......	835	375	......	642	......	......	......	......	......	......	642	......	......	......	..	
		Total	......	......	......	89,602	82,306	......	89,431	13	......	......	......	......	13	89,444	......	......	......	......	
		Total of the corresponding period of last year	......	......	......	......	......	......	82,713	......	......	......	......	......	......	82,713	......	......	......	......	
Sone	Shahabad	Western Main	4,342	1,753	117	27,071	45,555	14,527	......	5,394	10,213	......	......	807	16,414	30,941	......	40·20	......	18·92	
		Buxar	1,226	414	314	100,161	111,712	60,345	......	11,021	25,606	......	54	4,094	40,774	101,119					
		Arrah	2,000	1,031	856	150,008	153,560	114,458	......	10,415	17,480	......	83	4,076	32,064	146,512	......	34·37	......	23·99	
	Patna and Gaya.	Eastern Main	1,466	400	247	2,923	2,363	2,099	......	402	326	......	3	......	731	2,830	......	47·77		34·01	
		Patna				70,902	58,823	60,408	......	6,481	3,536	......	29	......	10,046	70,454			......		
		Total	......	......	......	351,063	402,013	251,837	......	33,713	57,161	......	119	8,976	100,019	351,856	......	......	......	......	
		Total of the corresponding period of last year	......	......	......	......	......	228,957	......	46,503	104,970	1,106	520	9,973	163,072	392,029	......	......	......	......	
		Grand Total	......	......	......	601,764	657,778	251,837	250,457	37,019	59,755	258	169	8,976	106,177	608,471	......	......	......	......	
		Grand Total of the corresponding period of last year	......	......	......	......	......	228,957	261,586	46,508	108,831	1,366	520	9,973	167,198	657,741	......	......	......	......	

CALCUTTA,
The 20th February 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 11th February 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*323,848	*4,08,340 15 0	30,05,217 10	6,84,734 6 0	16,979 15 0	11,10,055 4 0	80,063½	109,283	189,346½
Or per mile of railway	......	253 8 10	......	425 2 8	10 8 8	689 4 2	......	......	......
For previous 5 weeks of half-year	1,455,281	16,64,874 10 0	1,36,25,816 30	30,63,213 15 0	87,603 11 0	48,15,692 4 0	381,297¾	549,955¾	931,253¼
Total for 6 weeks ...	1,779,129	20,73,215 9 0	1,66,31,034 0	37,47,948 5 0	1,04,583 10 0	59,25,747 8 0	461,361½	*659,238¾	1,120,6600
Comparison.									
Total for corresponding week of previous year	310,924½	3,40,357 11 7	29,77,116 10	6,70,559 13 7	19,356 3 3	10,30,273 12 5	75,057	102,911	177,968
Per mile of railway corresponding week of previous year ..	......	215 0 7	......	423 10 5	12 3 8	650 14 8	......	......	......
Total for corresponding 6¾ weeks of previous year	1,754,576	19,73,700 7 8	1,67,99,749 30	38,61,377 3 1	1,04,636 7 10	59,39,714 2 7	478,567	617,271	1,095,838

* The increase is chiefly due to running of several special trains.

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 11th February 1893, on 22¼ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ..	25,819	6,429 14 0	11,041 30	387 3 0	9 0 0	6,826 1 0	862	106	968
Or per mile of railway . .	......	288 15 9	......	17 6 5	0 6 6	306 12 8	......	......	......
For previous 5 weeks of half-year	*102,930	*25,580 8 0	†51,493 0	†1,779 8 0	‡55 0 0	27,424 0 0	4,320	592	4,912
Total for 6 weeks .	128,749	32,019 6 0	62,534 30	2,166 11 0	64 0 0	34,250 1 0	5,182	698	5,880
Comparison									
Total for corresponding week of previous year ..	25,582½	6,473 3 7	24,432 10	910 9 0	10 14 9	7,309 11 4	833	135	968
Per mile of railway corresponding week of previous year	......	291 2 6	......	40 14 10	0 7 10	232 9 2	......	......	......
Total for corresponding 6¾ weeks of previous year ...	129,815½	32,160 14 9	1,20,825 10	3,774 10 9	75 11 9	36,011 5 3	5,430	664	6,094

* Added number of passengers 368 and Rs. 156 } on account of difference between the approximate and audited figures for the week ended 7th January 1893.
† Ditto maunds 326 and „ 3
‡ Deducted „ 6

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 11th February 1893, on 161⅝ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*17,350	*11,006 9 0	63,825 0	9,201 11 0	40 0 0	20,248 4 0	5,039½	3,421½	8,461
Or per mile of railway	....	68 3 1	......	57 0 2	0 4 0	125 7 3	......	......	......
For previous 5 weeks of half-year	84,560	†56,476 5 0	‡2,56,290 30	‡39,037 3 0	§200 0 0	95,713 8 0	26,142½	16,238	42,380½
Total for 6 weeks ...	101,910	67,482 14 0	3,20,115 30	48,238 14 0	240 0 0	1,15,961 12 0	31,182	19,659½	50,841½
Comparison.									
Total for corresponding week of previous year	15,013½	9,689 15 5	42,296 10	7,338 12 0	64 6 9	17,093 2 2	5,744	1,687	7,431
Per mile of railway corresponding week of previous year ...	....	60 0 7	......	45 7 6	0 6 5	105 14 6	......	......	......
Total for corresponding 6¾ weeks of previous year	86,065	60,227 6 7	2,82,793 30	48,460 12 0	382 13 0	1,09,070 15 7	36,643	13,226	49,860

* The increase is presumably due to pilgrims proceeding to Thanesar on account of "Shiva Rattree," and partly to general development of traffic.
† Added number of passengers 64 and Rs. 1,140 } on account of difference between the approximate and audited figures for the week ended 7th January 1893.
‡ Ditto maunds 851 and deducted „ 1,419
§ Deducted „ 31

EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., DACCA, K.-D., AND ASSAM-BIHAR SECTIONS.)

Approximate Return of Traffic for the week ended 11*th February* 1893, *on* 777 *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	185,133	91,140 0 0	7,13,432 0	89,190 0 0	13,090 0 0	1,93,420 0 0	27,800	26,623	54,423
Or per mile of railway	231	117 0 0	918 0	115 0 0	*2 0 0	234 0 0	......	......	......
For previous 5 weeks of half-year	947,932	4,33,900 0 0	34,26,412 0	5,61,170 0 0	81,860 0 0	10,76,930 0 0	138,202	153,953	292,245
Total for 6 weeks ...	1,133,065	5,25,040 0 0	41,39,844 0	6,50,360 0 0	94,950 0 0	12,70,350 0 0	166,092	180,576	246,608
COMPARISON.									
Total for corresponding week of previous year	170,233	90,387 0 0	4,97,078 0	73,775 0 0	11,937 0 0	1,76,099 0 0	27,690	29,578	57,268
Per mile of railway corresponding period of previous year ...	219	116 0 0	640 0	95 0 0	*1 0 0	212 0 0	......	......	......
Total to corresponding date of previous year	1,072,542	5,29,432 0 0	34,96,395 0	5,29,058 0 0	83,935 0 0	11,42,425 0 0	171,991	183,743	355,734

* Excluding steamer earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 11*th February* 1893, *on* 125 *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	31,409	11,350 0 0	69,009 0	4,500 0 0	100 0 0	15,920 0 0	3,454	2,218	5,672
Or per mile of railway	251	91 0 0	552 0	36 0 0	1 0 0	138 0 0	......	......	......
For previous 5 weeks of half-year	152,915	57,180 0 0	2,78,764 0	17,440 0 0	900 0 0	75,520 0 0	18,512	9,848	28,360
Total for 6 weeks ...	184,324	68,530 0 0	3,47,773 0	21,940 0 0	1,000 0 0	91,470 0 0	21,966	12,066	34,032
COMPARISON.									
Total for corresponding week of previous year	30,127	11,245 0 0	71,879 0	4,761 0 0	62 8 0	16,068 0 0	3,434	2,218	5,672
Per mile of railway corresponding week of previous year ...	241	90 0 0	575 0	38 0 0	1 0 0	129 0 0	......	......	......
Total to corresponding date of previous year	183,757	68,037 0 0	402,052 0	24,664 0 0	628 0 0	93,329 0 0	22,651	13,036	35,687

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 11*th February* 1893, *on* 86 *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	18,753	5,920 0 0	11,611 0	1,030 0 0	170 0 0	7,120 0 0	2,487	737	3,224
Or per mile of railway	218	69 0 0	135 0	12 0 0	2 0 0	83 0 0	......	......	......
For previous 5 weeks of half-year	92,141	29,620 0 0	95,417 0	8,870 0 0	940 0 0	39,430 0 0	12,396	3,724	16,120
Total for 6 weeks ...	110,894	35,540 0 0	107,028 0	9,990 0 0	1,110 0 0	46,550 0 0	14,883	4,461	19,344
COMPARISON.									
Total for corresponding week of previous year	16,562	5,448 0 0	9,277 0	914 0 0	58 0 0	6,420 0 0	2,504	720	3,224
Per mile of railway corresponding week of previous year ...	193	63 0 0	108 0	11 0 0	1 0 0	75 0 0	......	.....	...
Total to corresponding date of previous year	107,066	35.904 0 0	64,722 0	6,369 0 0	757 0 0	43,030 0 0	15,617	4,529	20,146

BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

Approximate Return of Traffic for the week ending 11*th February* 1893, *on* 756 *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	89,350	40,930	3,66,280	59,000	12,810	1,12,740	9,941	15,387	25,328
Or per mile of railway	118·19	54·14	484·50	78·04	16·95	149·13	......	......	......
For previous 5 weeks of half-year	429,050	1,79,960	21,10,930	2,97,020	58,800	5,35,780	51,333	78,823	130,156
Total for 6 weeks .	518,400	2,20,890	24,77,810	3,56,020	71,610	6,48,530	61,274	94,210	155,484
COMPARISON.									
Total for corresponding week of previous year on 751 miles open	90,708	37,986	3,68,566	50,378	8,265	96,629	11,219	19,977	31,196
Per mile of corresponding week of previous year	120·78	50·58	490·77	67·08	11·01	128·67	......	......	......
Total to corresponding date of previous year	486,912	2,04,418	20,52,830	2,86,008	57,700	5,48,126	73,805	105,544	179,349

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 28th January 1893	10,252	0	0
Corresponding period of 1892	7,828	0	0
Increase	2,424	0	0
Receipts per mile for the week ending 28th January 1893	201	0	4
Corresponding period of 1892	153	7	8
Increase	47	8	8
Receipts from 1st to 28th January 1893	35,671	0	0
Corresponding period of 1892	31,300	0	0
Increase	4,371	0	0

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 4th February 1893	8,543	0	0
Corresponding period of 1892	9,163	0	0
Decrease	620	0	0
Receipts per mile for the week ending 4th February 1893	167	8	2
Corresponding period of 1892	179	10	9
Decrease	12	2	7
Receipts from 1st January to 4th February 1893	44,214	0	0
Corresponding period of 1892	40,463	0	0
Increase	3,751	0	0

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CONTENTS.

Abstract of the Proceedings of the Council of the Lieutenant-Governor of Bengal, assembled for the purpose of making Laws and Regulations under the provisions of the Act of Parliament, 24 and 25 Vic., Cap. 67.

THE Council met at the Council Chamber on Saturday, the 18th February, 1893.

Present:

The HON'BLE SIR CHARLES ALFRED ELLIOTT, K.C.S.I., Lieutenant-Governor of Bengal, *presiding*.
The HON'BLE J. T. WOODROFFE, *Offg. Advocate-General.*
The HON'BLE T. T. ALLEN.
The HON'BLE H. J. S. COTTON, C.S.I.
The HON'BLE H. H. RISLEY, C.I.E.
The HON'BLE J. LAMBERT, C.I.E.
The HON'BLE H. LEE.
The HON'BLE DR. MAHENDRA LAL SIRCAR, C.I.E.
The HON'BLE A. H. WALLIS.
The HON'BLE GONESH CHUNDER CHUNDER.
The HON'BLE P. PLAYFAIR.
The HON'BLE MAULVI SYED FAZL IMAM, KHAN BAHADUR.

LICENSED WAREHOUSE AND FIRE-BRIGADE BILL.

THE HON'BLE MR. COTTON said:—"At the last meeting of the Council I presented the report of the Select Committee on the Bill for the regulation of Warehouses and the maintenance of a Fire-brigade, and explained at some length, for the information of this Council and of the public, the principles which had guided the majority of the Select Committee in the preparation of the Bill which had been laid on the table. I have now the honour to move that, the report of the Committee be taken into consideration in order to the settlement of the clauses of the Bill."

THE HON'BLE MR. WOODROFFE said:—"Sir, the motion which I have the honour to move embodies the general principle enunciated in the dissent to the report of the Select Committee signed by the minority of that Committee. In presenting the report of the Committee to the Council at its last meeting, the hon'ble member in charge of the Bill, although there was before the Council no motion for the consideration of that report, took occasion to explain the principles upon which the majority of the Committee had proceeded, and upon which the view taken by the majority of the Committee would be maintained. I listened with considerable attention and great interest to the speech of the hon'ble member. I was naturally anxious to hear what might be said in support of the view of the majority, and as the hon'ble member's speech proceeded, I felt myself growing more and more interested, because, though it may be that I was in error in so thinking, I arrived at the conclusion that most of the observations which fell from the hon'ble member, tended rather to weaken than to support his contention.

"The principle, Sir, which is involved in the Resolution which I now move is, that the taxation of commercial interests for matters affecting the public good and the public convenience is opposed to all sound principles of political economy, and of those rules which govern the incidence of taxation in civilised countries. 'The general community are undoubtedly protected by the existence of a fire-brigade.' Those are words which I take from the HON'BLE MR. COTTON's speech; and the hon'ble gentleman in defending the principle of imposing a tax on the general community, which should be of light incidence, went on to say that, 'in recognition of the immunity which the fire-brigade affords to the general public, we have considered it fair that a low rate should be levied.' There can be no question, it seems to me, Sir, but that the community generally, and as such, is protected by the existence of a fire-brigade, and that it does afford such immunity to the community as the hon'ble member maintained. The hon'ble member's words are but an echo of a statement made on this subject by the then Lieutenent-Governor of Bengal in a letter dated the 15th of February, 1878, in which His Honour stated:—'The maintenance of the fire-brigade is an object in which all classes of the community are interested, and to which all ought to contribute.' This position is so clear that, it seems unnecessary to adduce arguments in support of it. It is a fact admitted by the hon'ble member in the speech to which I have referred. It is admitted in the Bill even as now framed that, there is immunity provided to the general public as such by the existence of the fire-brigade. It is sought, however, to distinguish and to show that that general rule is not to be applied to Calcutta. In other words, that to Calcutta the principle of taxation of commercial interests for the public benefit, for the public safety and for the public convenience is to be applied.

"I know of but two instances in which this principle has been accepted. One of them was in Egypt, but, under the administration of the noble Lord who is now at the head of affairs in Egypt, it no longer exists; the other is still in force in Calcutta. Some years ago, I read that when in Egypt it was desired for some reason to throw a bridge over a canal, the persons who were made to pay for that work were the boat-owners who passed under it. They did not particularly want the bridge, but the bridge compelled the boats to lower their masts and take down their sails; and it was accordingly considered but fair and natural they should be made to pay the tax. Calcutta

still retains, in the present system of taxation for the maintenance of the fire-brigade, this truly Egyptian policy. It taxes the commercial interest for the benefit of the public, and it is sought to maintain this untenable position upon the ground that, the commercial interest to a greater or a less extent shares in the benefit.

"The principle, Sir, for which I am contending has been recognised by the Legislature with growing distinctness both in England and in this country. In England, under the Act of 14 Geo. 3 C., 78, S. 75, it was provided that, fire-engines shall be kept up by the several parishes in and around the metropolis, and so until 1865 the law continued, when there was established the Metropolitan Fire-brigade Act, 28 and 29 Vic., C. 90. Between the Act of Geo. 3 and the Act of Her present Majesty, to which I have referred, it was found that the parishes were remiss in the discharge of the public duty which had been laid on them. Accordingly in or about the year 1833, the Fire Insurance Offices in London banded themselves together for the purpose of making proper and better provision for the extinction of fires than was then in existence. The Association was a purely voluntary one, and was, in the first instance, established for the purpose of extinguishing and preventing the spread of fires in or to buildings which were covered by insurances. The establishment was maintained at a large cost by the Insurance Companies, and shortly before the passing of the Metropolitan Fire-brigade Act in 1865, an arrangement was made with the Metropolitan Board of Works, by which the establishment which had been provided and maintained by the Fire-brigade Association was handed over to the Metropolitan Board of Works, and the value of the material so handed over was then estimated at about £30,000.

"On the passing of the Act, the funds necessary to be raised for the purposes of the Metropolitan Fire-brigade Act were obtained by a contribution, I think, of £35 per million from Insurance Companies, by the grant of £10,000 a year from the Government, in consideration of the services rendered or likely to be rendered by the fire-brigade for preventing fires in and the spread of fires to public offices, and by a general tax of a half-penny in the pound. Here there is a clear recognition of the general liability of the public to maintain a fire-brigade. Intermediately there had been passed an Act known as the Police Clauses Act of 1847, and many other public general Acts which authorised the maintenance out of rates to be levied thereunder, of the cost of firemen, fire-engines and other requisites for the extinction of fires and for preventing the spread of fires. And I may say that at the present moment, with, I believe, the exception of the boroughs of Salford and Liverpool, where under two local Acts the costs attending the extinction of fires are chargeable in the case of insured property upon the Insurance Companies, all the large cities in Great Britain and Ireland maintain their fire-brigades out of public rates. It is so in two cities in which there is a great deal of work carried on involving the use of inflammable materials. I allude particularly to the case of Belfast, in which there is a large ship-building industry, and to the case of Dundee, where there is a very large jute industry. So far as I have been able to ascertain, there is no city on the continent of Europe in which the inhabitants do not pay for the cost and maintenance of the fire-brigade. In many of these cities there are not the same strict rules, so far as I have been able to ascertain, as prevail in London and the large cities of Great Britain and Ireland in respect of the building of houses—rules which minimise to the utmost extent the risk of fires in those cities, yet in almost every instance in which I have been able to inquire into, the fire-brigade is maintained out of general rates.

"This principle has also received recognition in this country. In 1872, when a fire-brigade was first established, it was provided by the Act II of 1872 of this Council, section 29, that, the full amount of the charges of the fire-brigade, over and above the monies which might accrue to the Fire-brigade Fund under sections 25 and 26 of the Act, which are the fees and fines in respect of licenses and the contribution by insurance companies, should be contributed by the Justices of Calcutta and the Commissioners of the Suburbs in the proportion of $\frac{7}{10}$ths and $\frac{3}{10}$ths. By Act III of 1884 of this Council, section 69, the Commissioners at a meeting were empowered, so far as the municipal fund permits, to apply that

Fund to any works within the municipality of public utility calculated to promote the health, comfort or convenience of the inhabitants, and amongst other objects stated in that Act, and which fall within this description, I find the maintenance of a fire-brigade along with the establishment and maintenance of schools and the maintenance of hospitals. Probably the clearest and widest enunciation of this principle is to be found in the Act which at the present moment regulates the Municipality of Calcutta. By section 35 of that Act, all the properties vested in the Commissioners, and all funds received or raised by the Commissioners in accordance with the provisions of that Act, shall be applicable to the purposes expressly authorized by that Act. What are the purposes expressly authorised by this Act? Section 36, the following section, answers the question. It runs as follows:—'The purposes expressly authorised by this Act shall be held to include the objects connected with the public safety, health and convenience hereinafter specified, that is to say, No. 1—the payment of all or any portion of the cost of the fire-brigade for the extinction of fires in Calcutta.' Then follow a number of objects, and the section concludes with the words 'and generally all objects connected with the public safety, health or convenience.' That the Legislature in this country has therefore in unmistakeable terms given in its adhesion to the principle of the maintenance of the fire-brigade as a matter of public utility, as a matter which affects the public safety, health and convenience of the inhabitants, is beyond all doubt.

"Why, then, has Calcutta been singled out for exceptional treatment? In 1871, several fires occurred in jute stores situated in the central part of this city. The Chamber of Commerce, the Trades Association, the British Indian Association and several other public bodies presented petitions to the Government to take this matter into its consideration and to adopt measures calculated to promote the public safety, and to protect the public from the occurrence of fires. On the presentation of memorials to this effect to the Government, a Bill was introduced into this Council, which was afterwards passed into law as Act II of 1875, and I shall have presently to point out the entirely different state and condition of jute warehouses and places for storing jute as they were then known to exist, and as they exist now. Suffice it to say for the present that, they were then in a totally different state and condition from those in which they are now found. They were, as I shall show from the observations of the HON'BLE MR. BERNARD in introducing that Bill, in an absolutely different state from what they are now as shown in the very able report of my hon'ble friend, Mr. Lambert, in his capacity as Commissioner of Police.

"Even then when jute warehouses were in such a state as they were when this Act was passed, it was not then the intention of the Legislature to impose the whole liability for the maintenance of the fire-brigade on the jute industry. That is manifest from the fact that, that Act provides for the meeting of the deficit, if any, from the funds of the municipalities of Calcutta and the Suburbs. It imposed a scale of fees on jute warehouses, which ranged, I think, from Rs. 100 to Rs. 1,000 a year, and fees on insurance companies. For whatever reason it was, whether for want of adequate information as to the number of places for the storing of jute or from other causes I know not, but it is manifest that the scale of fees imposed on jute warehouses was excessive—grossly excessive; and from the income derived therefrom, for practically it is with that alone we need concern ourselves, the whole cost of the fire-brigade was maintained. That, with but minor alterations not bearing on the present question, is the state of the law as it exists at present. The rates were so excessive that between the month of August, 1875 and the month of April, 1881, there was paid away out of the Fire-brigade Fund a sum of Rs. 1,26,552. Who received the benefit of that sum? The Municipality of Calcutta—Calcutta in that wider sense in which it is now dealt with under Act II of 1888 of this Council. It received in August, 1875, a sum of Rs. 35,000 towards the widening of a lane near the Municipal Office, and a subsequent grant of Rs. 5,000 for the same purpose in January, 1876. In November, 1875, Rs. 16,275 was given to the Alipore Lock-hospital; in January, 1876, a grant of Rs. 10,000 was made to the Suburban Municipality, and in 1881, Rs. 60,000 was given for widening Chitpore Road. That the Act of 1879 when passed into law tended but ineffectually to

reduce the incidence of this taxation on commercial interests, is manifest from the fact that, in 1881 there was surplus money to the extent of Rs. 60,000 to be paid away.

"The law stood so until 1883, when it was found that, owing to the limitation of $\frac{7}{10}$ths as against $\frac{3}{10}$ths, and to the further limitation as to the amount to which the $\frac{3}{10}$ths should run up to, the jute industry had, in a great measure removed from Calcutta to the outlying Suburbs. In 1883, there was passed Act IV of that year, which is the existing law. It did away with the proportion of $\frac{7}{10}$ths and $\frac{3}{10}$ths. The insurance companies had been relieved by the intermediate Act, but it still made the Fire-brigade Fund pay $1\frac{1}{4}$ times the cost of the fire-brigade. Eighty per cent. of the collections under the head of fees were paid to the Commissioner of Police for the up-keep of the fire-brigade; twenty per cent. went to the Municipality of Calcutta for the collection of those fees. There can be but little doubt that, during all these years, the Municipality has made a very good business of it in respect of that 20 per cent. in addition to the sums of money which I have shown it has received.

"Speaking of this state of affairs, the late hon'ble member of this Council, Sir Henry Harrison, in introducing the present Bill into Council, observed that, 'the jute legislation had reached that position rather by the process of drift than by any intention on the part of the Legislature.' I would recall the Council from this policy of drift, and ask that the matter be put on the fair, proper and reasonable footing by the incidence of taxation being thrown on the community at large. Why, I ask again, is it that Calcutta has been singled out? This retrospect in the history of the legislation in respect of the jute industry shows that the municipality had, like spoilt children, been educated into the belief that, they had a right to be exempted from the obligations which naturally and justly fall upon them. They ask, why should the previous state of things be altered? Why, to use the concurrent language of the Indian Association and the Municipality, who seem to be entirely in accord in the present matter—why should there be at one bound this relief to the jute industry? Is it the contention of hon'ble members who support the Bill that, continuance in wrong-doing is ground for its maintenance in perpetuity? Surely not; what are other reasons, then, can be suggested? That which I have just mentioned seems to me to be the one which ranks first in the minds of all those who have expressed an opinion on this subject in accord with the majority of the Select Committee. As this Bill has been introduced into Council for the purpose of relieving the jute and other cognate industries from the unjust and oppressive incidence of taxation, I ask why should not the matter be fully considered, and if justice demands it, let justice be done?

"But it is said, Sir, that there are other reasons. It is suggested that there is a radical difference between Calcutta and cities elsewhere throughout the civilised world. I deny this radical difference. It is said that, it has been found impossible in those other cities to make a fair apportionment between the amount of rate to be levied from ordinary ratepayers and from those engaged in commercial enterprises; in other words that, Calcutta is different from every other city in respect of the fire brigade, and it has successfully attempted and overcome difficulties which have been found insurmountable in other countries. If others failed, I think we shall fail too. But I deny that it has been found impossible in other countries to make a fair apportionment between the amount of rate to be levied from ordinary rates and those engaged in commercial enterprises, because there has never been made any such attempt. The principle involved in this endeavour does not commend itself to those who understand the principles of political economy. As soon as one makes this attempt, he finds himself beset by the most enormous difficulties. The hon'ble member, with a courage worthy of a better cause, has not shrunk from the abyssnal depths of differential taxation, and has succeeded in producing a Bill which commends itself to nobody. The Calcutta Municipality does not like it; the Chamber of Commerce object to it, the Trades Association, have intimated their dissent from some details of the Bill; the Bengal National Chamber of Commerce is not satisfied with it, and the last contribution from the Indian Association, also falls foul of it and challenges it on the ground that, it contravenes the principles of Local Self-Government. I do not see that it interferes with the principles of Local Self-Government in the least. The first principle of Local Self-Government is, that

all classes should bear the burden necessarily incident upon them, and that individual selfishness should give place to public interests.

"What is the difference between the houses in other cities and the houses in Calcutta? It is said that in the residential quarters of Calcutta, houses are built of uninflammable materials. But what about the residences of the citizens of Calcutta, whose lives and property are just as dear to them as the people who live in the residential quarters? Go up to the top of the tower in the Telegraph Office, or any other place of height in Calcutta, and look down upon what is spread before you. What will you see? With the very small exception of the quarter which is known as Chowringhee and some quarters in the north of the town, you will find a large mass of residences of the poor which are distinctly of an inflammable character, and those you will find fringed round by streets and lanes of pucka-built houses. In every one of these houses fire may break out, and in this city fires do frequently break out in such dwellings.

"In Bombay, the cost of the fire-brigade is borne by a three-fourth per cent. rate; in Rangoon, it is paid for out of the general rates; in Madras, so far as there are any appliances for extinguishing fires, they are paid for by the Municipality. Calcutta seems to stand alone. The houses in the residential quarters of Calcutta are no less substantially built than those in England. The sole difference, so far as I am aware, between the building of pucka houses in Calcutta and the building of every house in every street in London, is, that there are almost universally wooden floors in London houses, whereas they are to be found in but few houses here. On the other hand, in the Metropolitan district, there is a far more extensive, and a far more careful application of the rules relating to buildings by which the risk of fire is minimised to the utmost.

"Further, it is said that the cost of the fire-brigade should continue to be borne, though not in whole, yet at least to the extent of a moiety by the jute industry and other cognate industries, because, first, of the state of things which existed in 1871, and which led to the establishment of the fire-brigade. In the proceedings of this Council of December, 1871, the HON'BLE MR. BERNARD, in moving for leave to bring in a Bill to amend the law for the registration of jute warehouses and to provide for the establishment of an efficient fire-brigade in Calcutta and the Suburbs, spoke as follows:—'In January last, there were 247 jute warehouses in Calcutta alone, besides those in the Suburbs.' I believe, if my information be correct, that the number of jute warehouses in Calcutta now is less than half of that number. The hon'ble member went on to say:—

'As hon'ble members of Council well know, the custom at many warehouses and pressing places was to leave the jute drums and loose jute out in open yards, and to spread jute clippings over the courtyard when a press might be at work. These jute yards were generally in the heart of the most populous parts of the city; some of them were in the midst of the mercantile quarter on the river-bank. It would be in the recollection of most of us that a few weeks back a fire broke out in a jute screw-house in the quay, and that fire, if there had been any wind, must have reached an adjoining jute store, it might have destroyed the quarter of Calcutta which contained all the chief warehouses of foreign goods, and it would probably have spread to the shipping.'

The hon'ble member further said:—

'A few days ago two Calcutta firms which had their offices and godowns on the quay, complained to the Magistrate against a jute warehouse next door to them. In the enclosure of their store, there were some 200 square yards of ground covered with jute clippings; the stack of clippings was 12 feet high and topped the wall of the yard. On one side of this yard, was a steam-engine and its fire; on the other, was a large forge constantly at work. If a spark had fallen from either of these fires on the jute clippings, and there had been any wind, a most disastrous fire must have been the result.'

"It was, Sir, to meet cases of this kind, and with reference to circumstances of this nature, that that Bill was brought in. But that is not now the condition of the jute warehouses and jute presses—far from it. Secondly, because it is stated that by far the largest number of fires of an important character occur in jute warehouses. The meaning of the phrase is wrapped in obscurity from the use of the word 'important.' What is an 'important fire?' Is it a fire in which the largest amount of property belonging to any one person is consumed? Surely not! Regarded by the community at large, the burning of a jute warehouse in which there may be thousands of bales of jute, disastrous though it may be to the individual, is less disastrous than a fire occurring in a basti, in which all the property of the inhabitants may be utterly destroyed,

and even their very lives may be at risk. Such fires spread with a rapidity wholly unknown to the conflagration in a jute warehouse. But turning from the question of injury to the individual, the risk arising from fires in bastis and tiled huts is far more dangerous, because more widely spread and less under control. That appears to me to be the real test of importance. In a letter from this Government to the Government of India, dated the 3rd of February, 1892, the HON'BLE MR. RISLEY wrote:—'The measure of liability to contribute is the risk of fire incurred, not the value of the property or the amount of possible damage.'.

"But how does the matter stand as regards the question of fires? The HON'BLE MR. LEE, then untrammelled by the weight of legislative responsibility, and speaking in his character of Chairman of the Municipal Corporation of Calcutta—took up the position that 'ninety per cent. of the property destroyed by fire during the four years, 1886 to 1889, belonged to the jute and cotton interest.' [The HON'BLE MR. LEE said:—'I did not use those words. Those words are not to be found in any letter or statement of mine.'] If I misrepresent the hon'ble member, I sin in excellent company. In a letter from the Government of India, dated the 18th of February, 1891, (Municipal) I find it stated, over the signature of the hon'ble member opposite (Mr. Cotton), as Secretary to the Government of Bengal, that in a letter from the Chairman of the Corporation of Calcutta it was stated that, the Commissioners of Calcutta also object to any portion of the cost of the fire-brigade being defrayed by the general rate-payers; they consider, on the contrary, that the fire-brigade should still be maintained by the jute industry, 'and they adduce the following arguments in support of their opinion that, 90 per cent. of the property destroyed by fire during the four years, 1886-89, belong to the jute or cotton interest.' That objection was made on behalf of the Municipality by the HON'BLE MR. LEE. Mr. Cotton writes:—

'The letter from the Chairman to the Corporation of Calcutta was forwarded by Government to the Commissioner of Police for an expression of his opinion. Mr. Lambert's reply, dated the 26th December, 1890, takes exception to the argument put forward by the Municipal Commissioners. It is argued that, of the fires which took place during the four years (1886-89), only 15 occurred in places licensed under the Jute Warehouse Act, against 123 fires in other places, and that the value of property destroyed by other fires almost equalled that destroyed by fires in licensed warehouses, the damage caused in jute fires being estimated at Rs 8,70,810, against Rs. 7,64,265 in other fires. Mr. Lambert shows that the strength of the brigade is in a great measure fixed with reference to the prevention of the spread of a conflagration not from jute warehouses which are surrounded by high walls, which confine the flames and minimise the danger of the fire spreading, but from bastis, woodyards, straw stacks, &c., when the risk of the conflagration extending to adjacent buildings is very great. The supply of water, he admits, is a benefit to the brigade; but he observes that, as a fact, out of the 138 fires which occurred during the four years, pipe-water was used in 37 only. The Commissioner of Police also observes that a contribution from municipal funds to the fire-brigade would not do greater violence to the principles of Local Self-Government than the contribution now made by the Corporation to public hospitals or to the cost of surveying the town of Calcutta.'

"Dealing with this matter, the Fire-brigade Committee in their report to this Government stated in their tenth paragraph that, the statement of fires furnished by the Commissioner of Police for the four years, 1886-89, though it showed heavy losses in jute warehouses, showed clearly that 'the numerical majority of fires break out in other places, and that it is impossible to deny that the general public derive much protection from the fire-brigade.' The reports of the Commissioner of Police as Chief of the Fire-brigade showed that, for the four years ending in 1892, that is from 1888 to 1892, out of 139 fires, only 10, that is to say 7 per cent. of the whole, occurred in warehouses licensed under Act IV of 1883, and that the property which was destroyed in those fires only came up to 23 per cent. of the total value of the property destroyed in the 139 fires which occurred during those four years. This dispels at once the statement as to the number of fires occurring in jute and cotton warehouses, and the value of the property destroyed in them Extending the statistics so as to cover the period of seven years from 1886 to 1892, it would appear, from a representation made by the Bengal Chamber of Commerce to the Secretary of this Government during the time that this Bill was going through the Select Committee, that there were during

that period 247 fires; that of these, there were 17 fires in buildings registered or licensed under Act IV of 1883; six fires of jute in unlicensed places, and 11 fires on board vessels in the river; and that the fires in other places not falling within the above category amounted to 213, that is to say, 86 per cent. of the fires which took place in Calcutta in the seven years from 1886 to 1892, both inclusive, were in places other than in licensed jute warehouses, or in jute stored in unlicensed places or on board vessels, and it further appears that the total value of the property destroyed in all these fires amounted to Rs. 28,42,000, of which only Rs. 8,37,500, or 29 per cent. worth of property, was stored in licensed warehouses. It cannot therefore be contended that, the fires in Calcutta were solely or even to the extent of one-half contributed or occasioned by fires in jute warehouses.

"That argument therefore fails. But it is said that, the legislation which was necessary in 1872 is necessary to be maintained now in a modified form. That also I question; and I question it on the same most undoubted authority, namely that of the Commissioner of Police, who is specially charged with the working of the fire-brigade, and to whose services and that of the fire-brigade staff Calcutta owes so much. The Commissioner of Police, after dealing with the assertion of the Municipality, that 90 per cent. of the fires in Calcutta are due to the jute industry, thus deals with the HON'BLE MR. COTTON's argument that, if it had not been for the jute industry, a fire-brigade would not be required in the efficient state that it is. The Commissioner of Police says in the letter already quoted:—'The strength of the fire-brigade is in a great measure fixed by the reference to the prevention of the spread of a conflagration, not from jute warehouses which are surrounded by high walls, which confine flames and minimise the danger of the fire spreading, but from bastis, woodyards, straw stacks, &c., where the risk of the conflagration extending to adjacent buildings is very great.'

"There is the source of danger indicated in clear and unmistakeable terms, and it is pointed out by the Commissioner of Police that, these buildings are now of a substantial character; that the measures taken to prevent the spread of fire from them are effectual, and that, when a fire breaks out in a jute warehouse, it is often beyond the power of any fire-brigade, however well manned and however effective, to put out the fire. But there is a thing it can do and which it does do. It prevents the spread of fire from the place or building in which it occurs to the adjoining buildings, by pouring water on it and in preventing the rise of sparks by making a free passage and isolating the fire, or by so keeping it under in the place in which it occurs that the danger is entirely removed or most materially reduced.

"In more than one of the objections put forward by the Municipality there is involved this patent fallacy, that the cost of the maintenance of an institution required for municipal purposes generally affecting the public health, safety and convenience is to be borne only or mainly by certain persons deriving a certain special benefit. That is not the principle of civic life. The principle of civic life is, that every citizen shall, in accordance with his means and property, bear the burden or cost of those matters and things which subserve the public benefit, health, convenience and safety, though he may derive no benefit from them at all. As well, may we have blind men protesting that they ought not to be bound to pay a lighting-rate because they cannot see and do not require light. A doctor will tell you that, there are men who are particularly susceptible to malarial influences. Shall a heavier sewage-tax be imposed upon them as being more likely to be affected from want of proper sewerage? Why impose a tax on the unmarried for education? You might ring the changes from one end to the other of the system of taxation and find yourself confronted with matters of this kind. In each case, the individual must contribute to the public good. It may be asked—And what is the benefit which jute warehouses receive if a fire is not capable of being put out? The goods therein must burn, and the private individual suffers loss, but the benefit to the public remains. The fire does not spread.

"Now a few words more as to the difference in the state between jute warehouses in 1871 and 1872, and the present time. I quote again from the HON'BLE MR. LAMBERT's report. He says:—

'The jute industry was, it would appear, required in the first instance to contribute to the expense of maintaining an efficient fire-brigade, because jute warehouses and yards were situated in the heart of the most populous parts of the city, and because loose jute was spread out and stacked in open yards often in close proximity to steam engines.'

"The hon'ble member no doubt had the speech of the HON'BLE MR. BERNARD in his mind. He went on to say:—

'Open yards for the storage of jute were to be found in the wealthiest quarters of the town, and the danger arising from this condition of the trade laid upon that industry the burden of contributing to the support, and eventually of solely supporting the fire-brigade. But this state of affairs has entirely changed during the past 18 years. The largest jute warehouses now lie outside the mercantile quarter of the city; loose jute is no longer stored in open yards, and jute presses and warehouses are now substantial masonry buildings, well adapted to stop the spread of fire. At the present time, there is infinitely less risk of the spreading of a fire in a jute warehouse than of a fire in a basti or the centres of the mercantile community in the native quarters of the town.'

"That is the deliberate opinion of a gentleman who knows what is the state of things. Before I pass on, allow me to supplement what I have said with respect to fires. Mr. Lee, in his report No. 33J., dated 1st July, 1891, on the working of the Licensed Warehouses and Fire-brigade Act in Calcutta during the year 1890-91, states in paragraph 8:—'No case of fire in any jute godown has occurred in the year under report.' In that year' there were 104 licensed warehouses on the register, and not one single fire occurred. Mr. Lee was succeeded by Mr. Ritchie, and he, in his report for 1891-92, paragraph 7, states:—'There was no case of fire in any jute warehouse during the year' That brings the matter down to last year. It cannot then be said that, jute warehouses are in themselves such a source of danger to the community at large as to justify any special taxation upon them. The large and vast majority of fires occur elsewhere.

"And now I proceed to show, in addition to what I have pointed out to the Council, basing myself on the authority of the letter of the Commissioner of Police, that the danger of fire from jute warehouses is minimised by the use of every possible appliance to check the spread of fire. I believe it will not be denied that, there is no instance of fire spreading from jute warehouses to any other buildings. Their own brigade and the manner in which the jute warehouses are constructed, obviate the possibility of this. Not only are these buildings now constructed of a substantial character, and the storing of loose jute in open spaces entirely superseded, but most important steps have been taken towards safeguarding them from the risk of fire. Everybody knows that a prudent man insures his place of business, and in order to secure favourable rates from Fire Insurance Offices, jute warehouses have been provided with various means and appliances for preventing and extinguishing and circumscribing fires. At Messrs. Ralli Brothers' press at Golabari there is a Merryweather's portable steam-engine kept standing ready for use at all times, and there is a special staff of firemen always on duty at night to work the fire-service. The suction-pipe from that engine is let into the water-supply tank, and delivery hoses are attached to the two discharge branch pipes ready for immediate work. Besides that, there are two portable manual pumps which can be worked by about 20 men each at all times ready for immediate action. In addition to these, there are 39 hydrants distributed all over the premises and connected with the main engine. Each hydrant has a hose box adjoining it, containing the delivery hoses, nozzles, &c. There is an aggregate supply of 10,000 gallons, and the tank belonging to this Press is supplied from the river.

"To such a state of efficiency has this Press come that they are not only absolutely independent of any fire-brigade, but they were in March, 1890, and 1892 able to give the greatest assistance, at the fires which took place at the Bengal Hydraulic Press and at Baliaghatta. In the latter instance, at a time when the resources of the fire-brigade were taxed to the uttermost in consequence of there being at the same time a fire at Howrah, at the Sibpur Jute Mills. The Strand Bank Press is another well-equiped press, and so is the Canal Press, which possesses a Tangye's duplex pump with piping laid throughout the works. In these two presses, the pumps are supplied with water from the river.

"I mention these among others which could be mentioned. In the largest and which, according to the HON'BLE MR. COTTON, are the most important fires which are likely to occur, the persons concerned are practically independent of the fire-brigade. Not only is the condition of fires in 1872 not in existence now, but the jute industry has practically rendered itself almost secure from danger from fires, and is almost entirely independent of the fire-brigade itself.

"But there are other reasons why this principle, supposing it were a fair and just principle, should not be applied to Calcutta. I have dealt with one of them, namely, that the state of things is such as to show that there is no obvious reason for applying this most extraordinary principle in the most extraordinary manner to this most extraordinary town. And it is this. At the present moment, money is contributed by the jute industry towards the funds of the town, amounting to Rs. 6,327 per annum. There were transferred to the Municipality various sums standing to the credit of the Fire-brigade Fund, amounting to Rs. 1,66,752, and those monies have been spent in making substantial improvements, and it must be assumed that, those sums would not have been transferred by the Government without a necessity for such improvements. Those sums taken at a moderate rate of interest have made the municipal fund better than it would otherwise have been by Rs. 6,327 per annum. The Corporation has laid out those sums in making permanent improvements, and it is but fair and reasonable to suppose that otherwise they would have had to raise money to effect those improvements and pay interest thereon, and that, by reason of those improvements, they have received increased rates and taxes.

"There is but little more I need trouble the Council with, and I apologise for the length at which I have dwelt on the subject. The principle at stake is of the greatest importance, in that the interests of Calcutta centre in its commerce. But for its situation at the bottom of the Gangetic valley, Calcutta would have no importance whatever among the cites of India. It is to this port that the principal wealth of this country in the shape of produce comes, and by the establishment of railways and river communications, goods imported from foreign countries find their readiest market, and are most easily distributed.

"Mr. Lee, in dealing with this point as a Port Commissioner, justly observed that, this port was the most heavily taxed in the world, and that for his part, he would most gladly shift from the port to the municipality anything which could be so shifted. If we proceed further in the way of legislation by imposing taxation on commercial interests, we may arrive at a time when Calcutta will be but little better than a first class municipality. A gentleman, now deceased, who was on the Committee of the fire-brigade, objected to the system of general taxation on the ground that, the tax would fall on land which is not inflammable. I do not believe that Calcutta mud is one bit more inflammable than London clay. But what makes the mud so valuable? It is that thereon there are built houses in which the commerce of Calcutta is carried on. Remove that commerce. You may do so by improper legislation, as the Legislature of Great Britain demolished the ship-building trade, the linen trade and the woollen trade of Ireland. This Government may by legislation in like manner bring about a state of things in which there may be left Calcutta land and nought but Calcutta land, and it would not need the services of a fire-brigade.

"For these reasons, I contend first that, there are no grounds for imposing this tax on any special industries, such as jute and cotton, oil or other materials dealt with by this Bill, but also that there are good and abundant reasons why they should not be so dealt with. As far as I can find out, the rateable value of Calcutta and the Suburbs, which come within the provisions of the Bill, amounts to about 210 lakhs. The hon'ble member the other day produced a statement containing, as he himself admitted, some considerable inaccuracies. That statement was not before the Select Committee, and could not be considered there. Taking 210 lakhs as the basis of the rateable value of property, it is perfectly clear that a ¼ per cent. rate, that is one-third of what is imposed in Bombay, would meet all the expenses of the fire-brigade. As to how that may be done, if the resolution which I am putting to the Council meet with its assent, is a matter for future determination It may be, for the reasons adduced by the HON'BLE MR. COTTON, that the incidence of this rate should fall

more on occupiers than upon owners, upon the ground that the property in houses is more likely to be destroyed than the house itself. The Council should not attempt the impossible, as the HON'BLE MR. COTTON has attempted to do. The chorus of disapprobation which has arisen against the differential taxation is proof positive that, the hon'ble member has not been able to answer the demands of every one, and whether this motion receive the assent of the Council or not, of one thing I am confident, that in a time to come, the principles for which I am now contending will meet with acceptance. They are the only sound principles which can be applied; they are simple in their application; they are equitable in their distribution; they adopt the broad principle that, in a community all members must alike contribute towards the public good, though they may not enjoy equal advantages.

"For these reasons, I have the honour to move that the resolution which stands in my name be accepted."

THE HON'BLE MR. LEE said:—"The amendment which stands in the name of the HON'BLE MR. WOODROFFE is moved by him chiefly in the interests of commerce, and it is mainly in the true interests of commerce, which are identical with the best interests of this city, that I oppose the motion. The learned Advocate-General began by referring to the present Municipal Act II of 1888 of this Council, and read the whole of section 35 and the beginning of section 36. Section 35 states that 'all property vested in the Commissioners and all funds received or raised by the Commissioners in accordance with the provisions of this Act, shall be applicable to the purposes expressly authorized by this Act', and section 36 mentions what those purposes are and enumerates them all; whereas the learned Advocate-General stopped short at the first of those purposes, viz., 'the payment of the whole or any portion of the cost of the fire-brigade for the extinction of fires in Calcutta.' (Section 36 was here read by the speaker in full).

"The learned Advocate-General did not read or refer to the section of real importance in this case, (section 37), which lays down what the duties of the Commissioners are. These duties are there categorically stated, and the maintenance of a fire-brigade is not included among them. The Commissioners have to provide for the payment of interest on the municipal debt, to complete and extend throughout Calcutta drainage-works, and open out and improve bastis (expending for these purposes annually a sum of not less than two lakhs of rupees), to maintain a water-supply, to make adequate and suitable provision for the cleaning and conservancy of Calcutta, the maintenance and cleaning of drains and drainage-works, the construction and maintenance of public latrines and urinals and a number of other sanitary objects which I need not enumerate; and finally they have to devote a sum of three lakhs a year to the improvement of the newly-added area. In referring to the maintenance of a fire-brigade as being the first of the objects mentioned under section 36, it escaped the attention of the learned Advocate-General that this proviso represents merely a 'paper transaction.' The whole of the cost of the fire-brigade is paid to the Municipal Commissioners under another Act, and it was therefore necessary that in this Municipal Act an enabling clause should be added, so that the Commissioners might transfer their receipts under the Fire-brigade Act to the furtherance of the object for which those receipts are collected. The proposal, then, that is now moved is, in effect, to add another to the list of duties drawn up by this Council and enumerated by section 37. Now it is not open to me to question the legality of this course, since it has the approval of the learned Advocate-General, nor will I contend that it is not in the present circumstances necessary. But it is, I think, most unfortunate that an amendment of section 37 of the Municipal Act should be brought forward in this way, because we are precluded from going into the details of the receipts and expenditure of the Municipal Commissioners. None of the sections of the Act, except, perhaps, those regarding the assessment of the taxes of Calcutta, received more careful consideration in this Council than those two sections—37 and 36—and that was so short a time as four years ago.

"The learned Advocate-General has observed that it is incumbent on the community to provide for the cost of education. Now that, I think, is certainly

an object for which the Commissioners might as fairly be allowed to contribute something as that they should be asked to pay the greater part of the cost of the fire-brigade. But what happened when that very proposal on the subject of education was before this Council? The Director of Public Instruction brought forward a motion that, the Commissioners of Calcutta should be empowered to spend money on other than primary and technical education. He even did not ask that the Commissioners of Calcutta should be compelled to spend a certain amount of money on other than primary and technical education. His speech was an extremely powerful one; he adduced arguments that seemed very hard to meet as to the desirability of the Commissioners contributing towards the cost of higher education. But how did the Council regard the matter, and how did they decide? I will ask the attention of the Council to the following words which Sir Henry Harrison delivered at the time. He said:—'I am bound to admit that, so far as the precedents and practice of Bombay and other municipalities are concerned, they are all against me. * * * * '

"My hon'ble friend referred to two arguments which might bear specially against his proposal. One is, that the proposal is against the weight of practice or precedent elsewhere. That argument cannot be met because he proved successfully that both practice and precedent are against us. He also referred to the argument that, heavy expenditure is required for the sanitation of Calcutta and the Suburbs, and that is the only argument I feel bound to press upon the consideration of the Council. The first point to recollect is, that Municipalities in India are essentially poor bodies; the Municipalities of Calcutta and Bombay are by far the richest in India, but yet their means cannot compare with the means at the disposal of civilized municipalities elsewhere. Calcutta has to levy its taxation almost entirely by rates on property, and the assessable value of property in Calcutta does not exceed £1,200,000 a year. It is considerably less than one-twentieth of the rateable value of London, and the population of that city is only seven times larger. It is less than one-tenth of New York with a population twice as large. It is less than one-fourth of Philadelphia with a population only slightly larger; so that the Calcutta Municipality cannot command anything like the funds of other large cities. But when we come to the question of expenditure, then we find that sanitation in Calcutta attains such importance that, so far from the expenditure being less, expenditure quite on the same scale as in English cities becomes obligatory. We are to have a large area in the most insanitary condition added immediately to the town. Nobody would say that the town itself is in anything like a satisfactory sanitary condition. The difficulty in adding the suburban area has been simply and solely this, that no one could suggest the sources from which the funds should come. The Amalgamation Committee was distinctly of opinion that about six lakhs ought to be added to the funds of the Municipality from some source. I myself formed a more sanguine estimate, and leaned to the opinion that, probably four lakhs might suffice. I took a more sanguine estimate than any other member of the Committee. Can anyone in this Council doubt that, as soon as the suburban area is added to the town, we shall have the fullest possible use for all the funds at the disposal of the Municipality?

"And here, I will interpolate that the latest estimate I have received for the drainage of the suburban area, prepared under Mr. Baldwin Latham's advice by the Engineer of the Corporation, amounts to Rs. 1,70,69,570, which may or may not be capable of reduction; and we have spent quite lately 15 lakhs for giving a water-supply to the Suburbs, and other large sums on sanitary works.

'I admit,' continued Sir Henry Harrison, 'that education is a legitimate subject of municipal expenditure, but I also maintain that it is a secondary object. It is not to be put on the same plane as the primary objects, such as the repair of roads, the removal of refuse, cleansing, sewering, supplying water, and in one general word *sanitation*. If education is to supplant any of these objects, would it be right? I put it to the Council whether, if Rs. 50,000 be taken from the purposes of sanitation and given to education, it would not be a mistake. That is a point on which I am so satisfied that, I must press this view on the attention of the Council.'

"On that occasion the learned Advocate-General, Sir Charles Paul, observed that he could not vote for the inclusion of assistance to higher education among the purposes on which municipal funds could be legitimately spent. He said:—

'If I could approach the subject of this discussion with the fact that the municipal funds of this town were unencumbered and in a flourishing condition, and with the assurance that the money which would be raised would be more than sufficient to supply all the wants of the town in respect of its sanitation, I would consider the present a proper time for discussing the question raised. Unless we are satisfied that the requirements of the Municipality can be met in this respect, we are not in a position to introduce another subject of expenditure. Therefore, I do not intend to consider or discuss the question whether, strictly speaking, municipal institutions are concerned in education or not, nor even the merits of the smaller proposition put forward by the Hon'ble Dr. Gooroo Das Banerjee in reference to the larger measure advocated by the Hon'ble Sir Alfred Croft. I wish to impress upon the Council that, the time has not arrived for these amendments. If I were perfectly satisfied that the funds now in hand were not all required for sanitary purposes in particular parts of the town of Calcutta, then, as I said before, the question would arise. So long as the municipal funds are urgently required for sanitary and other purposes, I would protest against enlarging the area of the subject to which they might be applied. I would not enlarge it beyond the purposes stated in section 39 of the Bill.'

"And how did the representatives of commerce vote? They and the Hon'ble the Advocate-General voted against the proposal. There were in the minority, Sir Alfred Croft, Mr. Macaulay, Mr. Reynolds and His Honour the Lieutenant-Governor—four votes against nine. The commercial members, Mr. Moore and Mr. Irving, voted in the majority. Mr. Allen, the Advocate-General, Sir Henry Harrison, Dr. Gooroo Das Banerjee, Dr. Mahendra Lal Sircar, Babu Kali Nath Mitter and Maulvi Abdul Jubbar completing the nine.

"A matter of the supremest importance to the interests of this city is, the rigid maintenance of the principle that its sanitary funds should not be whittled away. It is said that a special rate will be added to the rates that we have already in Calcutta on general property, and therefore there will be nothing taken from the receipts that now come in. I reply, Sir, that in fact it will not be so. For the last four years Sir Henry Harrison, and each year subsequently I, as Chairman of the Corporation, have asked the Commissioners, when the budget has been before them to consider whether, they ought not to raise the general tax above 9½ per cent. We knew that the water-rate, the lighting-rate and the sewage-rate were levied at their maxima. We were very reluctant to ask the Commissioners to raise the general tax because the four property taxes, coming as they do to an aggregate of 19½ per cent. on the yearly value of property, fall very hardly on the masses. It is with the greatest difficulty that many persons in Calcutta can meet the tax-payers' call; so that when the Commissioners were appealed to raise the taxes, they found that they could not, and they did not. It was thought that the objections to raising the taxes were greater than the benefits which could result. The taxes can only be raised to 22 per cent.: they are now, as I have said, at 19½ per cent. If the property taxes which are now so heavy in Calcutta be added to by a tax of even ⅓ per cent., it would simply mean that the collections will fall off, that the Commissioners will not be able to increase the general tax as soon as they otherwise might, or it may be that they will feel themselves compelled to even reduce the 9½ per cent. they are now levying to 9 per cent., or slightly over 9 per cent.

"The HON'BLE MR. WOODROFFE has referred to the case of Bombay, and has asked why, if a ¾ per cent. rate is levied in Bombay, a general rate should not be also raised in Calcutta? Now, Sir, I will take this opportunity of dealing the death-blow, if I can, to this pestilent comparison between Bombay and Calcutta, in the matter of municipal expenditure. In Bombay, the Commissioners received last year town duties to the amount of Rs. 8,40,222, and liquor license fees and tobacco duty fees, amounting to Rs. 3,29,900, making a total of over Rs. 11,70,000 from sources not at all available to the Commissioners of Calcutta. It is impossible for any one to ask the Commissioners of Calcutta to follow the example of the Commissioners of Bombay in their expenditure on education, police, the fire-brigade, and in their liberal policy of exempting from taxation charitable institutions, and in various other similar directions, unless and until the Government puts itself in the same position towards the Corporation of Calcutta that the Government of Bombay assumes towards the Corporation of Bombay. If it should happen that the Government of Bengal will make over to the Commissioners of Calcutta the canal dues, and a consi-

derable proportion of the license fees received from excise, then, or in like case, will it be possible for the Commissioners to incur any other expenses than those they have now to meet.

"As regards the difference between Calcutta and Bombay in this special matter of jute-licenses and the fire-brigade, I do not propose myself, Sir, to deal with that subject in detail. There are others present who can do so better and with more authority, but I will venture to call the attention of the Council to an extract from the last report on the Bombay fire-brigade. A list is there given of the fires where property to the value of Rs. 2,000 and upwards was destroyed: there were eight such cases, and only one of them was in a place where the material stored would have been taxable under our Fire-brigade Act, and there property of the value of only Rs. 2,000 was destroyed. The largest fire was in a house where Rs. 20,000 worth of property was destroyed: the next largest was of Rs. 13,500, and the next of Rs. 9,000 worth of property in houses, and actually the very lowest in the list was in the warehouse, where some loose cotton was destroyed I would ask you to compare that with the list in the last report that I have seen published in the Calcutta Gazette on the working of the Calcutta Fire-brigade, as the HON'BLE MR. WOODROFFE has referred to recent figures to show that, there have been of late few fires in jute houses in and near Calcutta. The supplement to the Calcutta Gazette of the 21st of September last contains a list of the fires during the year 1891-92 that occurred in Howrah. First, there is the fire in the Sibpur Jute Mills, where property to the value of Rs. 3,35,000 was destroyed. In all the other fires taken together, property to the extent of Rs. 760 was destroyed, such as here one tiled hut, there one stack of straw, there one boat load of straw, and the like. That is the list for Howrah only. I have said that I do not propose on this occasion, at all events, to go into the history of the fire-brigade, or the demands which the jute industry has made and still continues to make on the fire-brigade establishment; but that the jute industry should still continue to bear a considerable proportion of the cost of the brigade there can be no doubt, and that will be established by figures which will be given by my hon'ble friend, the Commissioner of Police.

"As I have been reported to have said what I never did say, and have been so reported, not only once, but twice, I endeavoured to correct the misapprehension in the Select Committee, but it escaped the attention of the Advocate-General or he would not have repeated the mistake to-day. I never used the words '90 per cent. of the property so destroyed by fire during the past four years (1886-89) belong to the jute and cotton interests.' I quite understand how the HON'BLE MR. WOODROFFE was misled, because those words appear in a letter from the Chamber of Commerce to the Government of Bengal in inverted commas. It says:—'Mr. Lee, Chairman of the Municipality, has committed himself in his letter No. 90 (J), dated 18th August, 1890, to the statement that, 90 per cent. of the property destroyed by fire during the past four years (1886-89) belong to the jute and cotton interests.' That would naturally lead any one to suppose that, I used those words. But what I wrote was this:—

'I append a statement of property destroyed by fire in the course of the last four years in the town, the suburbs and Howrah, which I have extracted from the Annual Administration Reports of the Commissioner of Police. It shows that Rs. 16,35,075 worth of property was so destroyed, and that out of this, no less than Rs. 14,45,109 was property of the jute and cotton interests. The ratio is nearly 90 per cent. No stronger confirmation could be needed of the fact that, this proportion, which holds for the last four years, is not higher than the proportion, which would be found to hold through a prolonged period, than is afforded by the insurance rates paid for different classes of goods and property. I am informed that the rate for insuring jute presses is Rs. 3½ per cent., and for jute warehouses Rs. 2 per cent.; while the rates for ordinary masonry house property and non-hazardous goods stored therein is, 1½ annas per cent. The proportion of Rs. 2-12 to 1½ annas is 88 to 3.'

"That was in the form of an argument. I appended a list of the fires that had occurred with full details. The reason that there afterwards appeared a misconception in the matter was due to the fact that, the Commissioner of Police in making out his comparative list excluded, from his list of fires that had occurred of property belonging to the jute and cotton industries, two large fires, in which a certain amount of jute gunny-bags only was destroyed with other property. One of those two fires burned Rs. 3,00,000 of property in the Port Commissioners' warehouse, containing gunny-bags and piece-goods. Simi-

larly, regarding another item of Rs. 10,000 worth of gunny-bags and tobacco destroyed by fire. These two being transferred out of the list of fires debitable to the jute and cotton interests, the percentage would be, of course, lowered; for it would make a total difference in the calculation, of twice Rs. 3,10,000, but my view is, that the only available method of taxing the jute interests at all is through the warehouses. We did try in Select Committee to find some other way of spreading the incidence of taxation on the industry, but found none possible. Finally, I would observe that even the calculation, as made by the Chamber of Commerce, showed that Rs. 8,60,100 worth of property belonging to the jute industry was destroyed in those four years as compared with other property worth Rs. 7,64,975.

"The speech of the hon'ble mover of the amendment divides itself into two parts—one to show that some alteration of the existing law is necessary, and the other to show that the alteration should be by way of imposing a general tax on property in Calcutta. As regards the first, I do not think it is necessary at this stage to enter into the details which will have to be considered when we come to decide how the taxation should be distributed. As regards the latter contention, I think that I have shown that, the Corporation of Calcutta is not in a position to accept the whole responsibility or any great portion of it, and that it would be unwise and wrong to try to put it on the general funds of the Municipalities."

THE HON'BLE MR. PLAYFAIR said:—"Twenty years ago the hon'ble member who then represented the mercantile community in this Council took exception to the original Fire-brigade Bill, as imposing 'a tax on persons for the benefit of the community;' and the merchants of Calcutta, upholding this view, have ever since expostulated against such a system of taxation, contending that as the whole community of Calcutta enjoys the protection of the brigade, the cost should be contributed by all through a municipal assessment. And while the merchants of Calcutta were pressing their views upon the Government of Bengal, it has transpired that the merchants of London, through the Association of Fire Insurance Companies, gave expression to similar views to the Metropolitan Board of Works, under date the 14th of January, 1886, and in these words:—

'The protection of life and property from fire is as much a public duty as are protection from murder and robbery, sanitary arrangements, maintenance of roads, &c., and, as such, it should in the interests of the community at large, be provided at the public expense. In cities and large towns the extinction of fires is the public duty of the municipal or governing body thereof, who are bound to make the necessary provision for the same, and to defray the cost out of the rates which they are authorized to levy for the purpose. The principle has been recognized by the Legislature, which not only on passing the Town Police Clauses Act, 1847, but in every other general public Act, authorizing the maintenance out of rates to be levied thereunder of firemen, fire-engines and other appliances and requisites for extinguishing fires, has not authorized any charge to be made for the use thereof in the case of fires occurring within the boundaries of any city or town to which such Act applies.'

"And, Sir, this representation is continued as follows:—

'Taxation of a commercial interest for matters affecting the public good and public convenience is opposed to all sound principles of political economy. It is never suggested that Life Insurance Offices should contribute towards sanitary improvements, or Marine Insurance Offices to the cost of harbours of refuge, lighthouses, &c., and yet they are no less interested in such works than are Fire Insurance Offices in arrangements for fire extinction.'

"The fire-brigade was established twenty years ago under Act II of 1872, on account of the then dreaded frequency of fires in jute godowns scattered throughout a wealthy part of the native quarter. Many of these jute press-houses and godowns were then situated in and around Clive Street and Radha Bazar, within gunshot of this Council Chamber; and owing to the lax manner in which jute was stored in inferior godowns and stacked in open yards, the trade was considered a source of danger to the community.

"The tax for the maintenance of the fire-brigade was, in consequence, mainly levied upon the jute trade. The trade has, however, remodelled itself, both as regards situation and working. Jute is now pressed for export in hydraulic press-houses, which are situated, for the most part beyond the town of Calcutta. There is no attraction to bring these back to within the limits of the town, and

the Justices who grant the licenses for warehouses will doubtless be careful to prevent their return. The press-house buildings, as they now exist, are of substantial masonry construction, mostly fireproof, and are equipped so fully with fire-extinguishing appliances and a fire-brigade staff of their own that, it has become a matter of indifference to them whether or not a public fire-brigade exists. The companies are encouraged to maintain this high state of efficiency by a liberal reduction or discount allowed in the rate of insurance, amounting to 15 per cent. according to the highest standard of efficiency, and to 10 per cent. according to a lower standard of efficiency.

"It is found that 6 of the largest hydraulic presses out of a total of 23 have become entitled to the full reduction of 15 per cent. and that the rest, with exception of 3, claim a reduction of 10 per cent. Eight of the press-houses are owned by native merchants. The conditions that carry these discounts are both practical and complete in themselves. To obtain a rebate of 15 per cent. of the premium, the establishment, according to the Insurance Schedule, must include—'A steam fire-engine, a manual fire-engine, boiler pumping-engine, fire-plugs, buckets, cans, extincteurs with, in each case, water (available from public or other sources), and with those sufficient to command the premises insured, and with a trained fire-brigade consisting of not less than 8 men.' The 10 per cent. allowance contemplates less efficient appliances, and stipulates for—'A steam fire-engine, or stationary fire-engine worked by steam or water, or fire-pump worked by steam or water, or fire-plugs with, in each case, water (available from public or other sources) and hose sufficient to command the premises insured.' These arrangements have been promoted in the interests of owners of press-houses and insurance companies, by the experience that, unless a fire in a peel of jute is discovered and extinguished when it commences, it burns itself out, and no public fire-brigade, however alert and efficient, is of the least use. Such being the case, owners of well-built, efficiently-equipped and isolated press-houses naturally not only demur, but strongly protest against being taxed for the maintenance of a fire-brigade, the head-quarters of which is situated one-and-a-half miles distant from them, and which has been chiefly of use in dealing with conflagrations in bastis and marts.

"The native jute mart is confined to Hatkhollah and to Durmahatta, situated on the river bank. The jute is for the most part stored in brick buildings. Fires are infrequent, and the owners do not insure. No instance has been reported of a conflagration having extended to neighbouring property from a fire breaking out in premises licensed under the Act. On the other hand, the whole community sleeps secure, knowing that, in the event of fire, the brigade is at call. Houses and dwellings between Chowringhee and Intally, between the Strand and Sealdah, schools, colleges, theatres, Government offices, godowns, stores, shops, are all protected by the brigade; and such being the case, I contend that the owners or occupiers are called upon to contribute generally to the cost. If the owners do not wish to do this, the brigade may be abolished. It is for the public to choose whether, they will control fires or pay higher rates of insurance premium.

"In no other country, and in no other city of this empire, is a particular industry separately assessed for the support of a fire-brigade. In Bombay, Madras and Rangoon the cost is defrayed by general taxation. In Bombay, cotton is not separately taxed, as it is with jute in Calcutta. Calcutta, therefore, stands out as the exception to a general common-sense and reasonable rule. The European and Native jute and cotton merchants naturally object to be so penalised. The practice, too, in Calcutta, is certainly not supported or justified by facts as to the occurrence of fires.

"The learned Advocate-General has pointed out that, during the past seven years only 7 per cent., that is to say, only 17 out of 247 fires, occurred in warehouses licensed under Act IV of 1883. The reports for the two years ending April, 1892, show that, no fires occurred in jute warehouses in that period. And it may be added that no fires in jute warehouses have occurred during the ten months of the current year. The owners and occupiers of licensed warehouses, therefore, protest that the history of fires in Calcutta in no way proves them liable to be assessed for the cost of a fire-brigade, when

the maintenance of that brigade is so plainly for the benefit of the whole community. The other fires include what may well be termed, the devastating conflagrations in bastis, when hundreds of houses have been destroyed, fires in wood and hay stores at the Port Commissioners' jetties, and in Government stores, including an important loss of property which lately occurred in the Government Clothing Department at Alipore, and, I believe, a fire once occurred in Government House.

"It is proposed by the present Bill that the rate of taxation on hazardous trades, for the most part represented by the jute and cotton industries, should continue at 10 per cent. of the municipal assessment, with a maximum fee of Rs. 750 for any one license, and provided that the total trade contributions shall not exceed 50 per cent. of the annual cost of the brigade. In effect, this points to taxation to the extent of 4 per cent. to 5 per cent. of the municipal assessment, or even more; whereas, if spread over the community, the incidence would not exceed ¼ per cent. In Bombay, the tax does not exceed ¾ per cent. and includes the provision of interest on a special fire-brigade loan. In other words, a godown to hold cotton assessed by the municipality at Rs. 8,000 would in Bombay pay a fire-brigade tax of Rs. 60, and in Calcutta, under the proposed Bill, will pay Rs. 750. If the cost of the brigade is spread over the community, this godown would pay about Rs. 20. Again, the Bill will operate most unfairly upon the small trader in comparison with the large. An Hydraulic Press Company at Cossipore, with an assessed valuation of Rs. 42,000, will be limited to a payment of Rs. 750, or about 1¾ per cent.; while a press-house in Calcutta, with a municipal assessment of Rs. 12,000, will also pay Rs. 750, or 6¼ per cent., and Babu Gooroogobind Shaw having godowns close by, assessed by the Municipality at Rs. 9,000, will also pay Rs. 750, or 8⅓ per cent.

"The Chamber of Commerce, at the suggestion of the Fire-brigade Committee, examined the subject very closely, with a view to arrive, if possible, at a differential rate that might be fair to all, and after careful study have had to abandon the attempt. I do not consider the efforts of the Select Committee have been more successful.

"The pressing trade has not always been a profitable industry. It continued unprofitable until a confederacy in the working of the Hydraulic Press Companies was inaugurated. This system of working is still of necessity upheld, but it yet implies that, while the companies have a combined capacity to screw forty-four lakhs of bales of jute in a season, only about sixteen lakhs of bales are screwed, because exporters find it more advantageous to screw elsewhere; and the port of Chittagong reaps the benefit. This is a matter of serious consideration to those interested in the port of Calcutta, and is of itself a warning that no unnecessary impost should be placed upon the trade of the port. The castor-oil industry, too, owing to the keen competition there now is with American mineral oil for lubricating purposes, is in no way fit to bear further special taxation, as is suggested by the Bill.

"The late Sir Henry Harrison considered that, the interest of the mercantile community of the town was of the first importance, and Mr. Harry Lee, Port Commissioner, lately delivered himself of the following clear opinion, which, I hope, will be echoed in this Council:—

'Nothing can be more certain than that the prosperity of the town is involved in the prosperity of the port, and that this is already an expensive port. These truths are so obvious that, we and the Municipal Commissioners and the Local Government must be alike alive to them; and any burdens that the Municipal Commissioners or the Local Government can with fairness remove from the shoulders of the port to the public, must undoubtedly be shifted.'

"There is still a further reason in support of the tax becoming a general rate. The history of the Calcutta fire-brigade is unique. The jute and cotton industries have not only paid for the up-keep of the fire-brigade; they have not only paid for establishments to collect the funds and towards pension funds, but they have also paid for the cost of establishing the brigade and, in addition, have been taxed to such an extent as to yield a very large surplus amounting to over a lakh and a quarter of rupees. This sum has neither been used to perfect the brigade nor to provide pension and depreciation funds; but it has been appropriated by the Municipality to widen streets and enlarge the lock-

hospital, I may add, to the utter astonishment of the whole mercantile community. If an account were now taken between the Fire-brigade Fund and the Municipality, these sums would, at 6 per cent. interest, represent a capital of Rs. 2,40,000 due by the Municipality. I take this rate on the authority of the hon'ble member, the Chairman of the Corporation, who elsewhere has remarked:—

'In fixing the rate of assessment for the Municipal Consolidation Act, it was considered, after the fullest argument, that no sane person would invest money in property in Calcutta, except in the hopes of securing considerably over 5 per cent. on his capital. Allowance was made for occasional disappointments, and an all-round rate of 5 per cent. was deemed fair.'

"If, therefore, the Municipality has been presented with these contributions and with a ready-made fire-brigade also, it will have obtained a gift from a single branch of trade that is without precedent. In Bombay, a loan of five lakhs of rupees was raised by the municipality to establish a brigade; and in London, the Metropolitan Board of Works paid £30,000 sterling to the Fire Insurance Association when taking over their brigade. It is clear that the jute and cotton industries have already done a very great deal for the general public good, and the commercial community consider that the time has come when, in common justice, they should be afforded the relief prayed for, and the justice of such has been admitted by Government since 1878, and declared, moreover, in the last Municipal Act for Calcutta passed by this Council, Act II of 1888. The mercantile community cannot be expected to rest satisfied until this is granted.

"In conclusion, I would venture to say that the Bengal Chamber of Commerce will never approach the Government of Bengal as a suppliant for legislative favours on behalf of any particular industry; but it will come, asking that just remedies may be applied to redress a grievance and remove a wrong which, in the present instance, the Chamber does."

THE HON'BLE MR. COTTON said:—"I only wish to trouble the Council with a very few words in reply to some of the arguments brought forward by the mover of this proposal and by the hon'ble member who has just sat down. At the last meeting of this Council, I referred to the principle maintained by the HON'BLE MR. WOODROFFE that, taxation in this matter of the fire-brigade should be evenly spread among all branches of the community. There is much to be said in favour of that principle, and the Advocate-General has supported it with conspicuous ability. But he certainly appears to me to have failed to recognise the peculiar circumstances of this metropolis. He has described Calcutta as an 'extraordinary' city. This is the language, as I understand it, of sarcasm; but if he had as thorough a knowledge of the town as I have, he would have used the word seriously. The position of Calcutta is not comparable to that of any large city in Europe. If there were no other difference, it would be this, that Calcutta is situated in the tropics or very near the border of the tropics. In a cold country fires break out repeatedly in residential houses and in shops, and they are due mainly to accidents occurring from the fires which are daily lighted in those houses. Fires at certain seasons of the year are burned in every room of each house. They are also due to the inflammable character of the houses themselves; to the large amount of wood used in the furniture, and in the wooden flooring.

"These are the circumstances which establish a radical distinction between European capitals and this city; and if there were no other reasons which justify a distinction being drawn in the source for the realization of funds fo the maintenance of a fire-brigade, this one would be sufficient. The fire-brigade maintained in European cities would have to be maintained in all of them, whether there were large commercial warehouses in those cities or not. But, as I observed at the last meeting of the Council, it can admit of no dispute that, were it not for the existence of commercial warehouses, principally jute warehouses, in Calcutta, the brigade of this city would never have been maintained at its existing strength. In London, the majority of fires that break out are in residential houses, and the greater portion of the time of the fire-brigade is taken up in extinguishing those fires. I shall be succeeded to-day by the HON'BLE MR. LAMBERT, who will be able to state to you, with more authority than I can, the proportion

of time taken up by the present fire-brigade in extinguishing fires in jute warehouses, and in other dwellings including bastis. He will tell you that there is no comparison between the amount of work done by the fire-brigade for warehouses and the amount done in bastis and private residences. And this is what I meant when I said that, the majority of important fires occurred in warehouses. By the word 'important' I mean important in the point of view of the fire-brigade. If a fire takes the brigade a week to extinguish, it is immeasurably more important than a fire which takes one hour to extinguish. Therefore it is that I said that, the majority of important fires occurred in warehouses, and that it was mainly on account of these warehouses that the brigade had to be maintained at its present strength.

"Now I shall recur to the observations of the HON'BLE MR. PLAYFAIR. He observed, and observed justly, that great improvements have been effected in warehouses where jute is stored—improvements which no doubt greatly reduce the risk of fire. But notwithstanding these improvements, Sir, it is still the case that jute warehouses pay a rate of insurance far and away above the rate paid by other buildings in this city. I attach great weight to this consideration. If it is a fact, and I am credibly assured that it is so, it is in itself sufficient to justify the special treatment of these warehouses by this Council. I hold in my hand a statement of the rates paid to one of the largest fire insurance companies in this city, and it is there stated that jute presses and jute warehouses pay a premium of 3½ per cent. That, in comparison with rates paid by other buildings, is absolutely a penal rate. Were it not that the jute contained in these buildings is an eminently inflammable material; were it not that there is great risk of this jute taking fire, such a high rate would certainly not be levied; and so long as the rate levied on jute warehouses is out of all proportion higher than the rates of insurance levied on other buildings in this city, so long will it be justifiable to levy a special fee from these warehouses on account of the maintenance of the fire-brigade. This is a further reason why, in the opinion of the majority of the Select Committee, it was considered fair and reasonable that jute should still continue to pay special rates for this purpose.

"I entirely agree that it is exceedingly unfair that, the jute industry should continue to pay the whole cost of the fire-brigade. I recognise that the general community is undoubtedly benefited by the maintenance of the brigade, and that they should pay some share of the cost; and this principle we have endeavoured to give effect to in the Bill before you. But it was also recognised by the majority of the Select Committee that, considering the inflammable nature of jute, it was reasonable that it should still continue to pay a large proportion of the cost. The Hon'ble the Advocate-General observed that the differential rates of tax contemplated by the Bill must be bad because they were condemned on all sides. Now, Sir, it is my experience that every measure of taxation will be opposed by people who are called upon to pay the tax, and I would indeed have been surprised if the Municipality, represented in this Council by my hon'ble friend, the Chairman of the Corporation, and other hon'ble members, who are also members of the Corporation, should have accepted with equanimity those additional charges upon the public which the Bill contemplates. I should have been surprised if the hon'ble gentleman who represents the Chamber of Commerce should not have protested on behalf of the jute interest. It is natural also that, those who represent the other particular interests affected should protest against any new form of taxation imposed upon them. But when I observe that the Bill is opposed to the bitter end on both sides, that on one side, it is argued that the whole rate should continue to be borne by the jute interest, and that on the other hand, my hon'ble friend, the Advocate-General, says:—'No, there should be no special rate on any commodity or any interest; let there be an equal rate on all alike.' When I see these extreme views taken up, I am disposed to think that we have adopted the only fair and equitable course, which I have been told more than once is impossible, when we have tried, as we have done, to steer a middle channel avoiding either extreme, and to impose a differential rate in proportion to the inflammability of the commodities affected and the degree of protection afforded and benefit derived."

THE HON'BLE MR. LAMBERT said:—"I desire to say briefly why I am unable to support the amendment brought forward by the learned Advocate-General.

If the question now before the Council was the establishment in Calcutta of a fire-brigade for the first time, no doubt the case made out by the Advocate-General would be a very strong one; but the matter now under consideration is not, whether a fire-brigade is to be maintained, but who is to maintain it, whether, in fact, any change is to be made. Therefore, before those principles which were accepted twenty years ago regarding the impost of taxation are set aside, we should not lose sight of the causes which rendered it necessary to establish and maintain an efficient fire-brigade. Up to 1872, Calcutta had no brigade worthy of the name; but in 1871, serious fires had broken out, endangering the safety of the town, and these fires were caused by the laxity with which the jute trade was conducted. Therefore, several bodies—the Chamber of Commerce at their head—pressed on the Government the necessity of bringing the jute trade under better supervision and of organising an efficient brigade; and so in 1872, a fire-brigade was formed—not so large or costly as that now maintained, but that was the beginning of it. At first, steam fire-engines were stationed only at the head police office. Then the jute industry spread to the suburbs of Chitpore and Cossipore, and the cry was, that better protection against fire was needed there. So in 1887, an out-station was established at Chitpore at an outlay of about Rs. 40,000. Meanwhile the Act had included Howrah, and it was soon urged on the Commissioner of Police that the fire-brigade arrangements, which had been sufficient for the general community at Howrah, were altogether insufficient for the protection of the jute industry there. So in 1889 at Howrah, too, an out-station was established at a further cost of about Rs. 40,000. It will be noticed that these large outlays have been incurred in recent years. Now it seems that having got its fire-brigade, the jute industry want some one else to maintain it.

"It has indeed been suggested that, at the large mills and presses the appliances for extinguishing fires are now so complete that the fire-brigade is not wanted. But this statement has yet to find general acceptance. So far as I am aware, at only one press is the equipment on such a scale that a large fire could be dealt with. At several others, something has been done to provide fire-appliances, but more, I think, to satisfy the insurance offices than to be prepared to extinguish a serious fire. Certainly the owners of the smaller warehouses, numbering about 160, have no fire-appliances at all. My experience is, that when a fire breaks out in a jute press, all who are interested—owners, managers and fire insurance agents—are on the look-out for the arrival of the brigade; and generally those interested in the fire, detain the brigade on the spot long after in the opinion of those responsible for the working of the brigade think that it could be removed without risk. Certainly, these jute fires tax the resources of the brigade more severely than any other fires. How great is the strain is shown by the average period at which the brigade is employed at such fires. The records for 1888 to 1892 show this. During this period, 15 fires occurred in licensed buildings; and the average duration of the employment of the brigade at each fire, was a little over three days. During this same period, 141 large fires occurred in other places, and among these was the fire at Baliaghata, which lasted seven days. Yet the average period of attendance at these 141 fires was only five hours—five hours against three days!

"Taking into consideration, therefore, the fact that, in Calcutta the strength and cost of the fire-brigade has been fixed chiefly to meet requirements arising from the jute trade, I see no reason why that industry should now be relieved entirely of its liability to maintain the brigade. But there are good reasons why the burden should be lightened. Among these reasons I may name two: one, that the conditions under which the trade is now carried on are widely different from those which existed twenty years ago, and that the risk of a fire spreading to contiguous buildings is thereby very greatly diminished—I cannot say with the learned Advocate-General entirely removed, for it is not the case that fires in press houses never spread outside of the press premises. I can quote one serious instance. On the 20th December, 1888, the Canal Jute Press caught fire, and the damage sustained amounted to Rs. 4,00,000. Sparks flew from this press, and ignited a large flat lying on the river laden with 17,890 maunds of jute, valued at Rs. 1,19,490, and the whole of this cargo was destroyed. My second reason is, that experience has shown that the general community benefits

largely by the maintenance of the fire-brigade, which is now wholly supported by the jute industry. During the last ten years, the brigade has attended at only twenty-five fires in licensed warehouses, against 219 fires in bastis and 107 other fires. Therefore the jute industry is, in my opinion, entitled to very substantial relief. What that relief should be, will be best considered when the clauses of the Bill come under discussion."

THE HON'BLE MR. WALLIS said:—"It would scarcely have been necessary for me to have addressed the Council on this occasion but for a remark which had fallen from the learned Advocate-General in the course of his speech to the effect that, the Calcutta Trades Association had expressed its dissent to some of the provisions of the Bill, although in accord with its general principles. As Master of that Association, I deem it expedient to point out that, I am yet to learn in what way the Committee of the Association dissent from the provisions of the Bill. The Bill, as amended, has been considered by the Committee, and they are in complete accord with the principles of taxation recommended. The suggestions put forward by the learned Advocate-General and supported by the HON'BLE MR. PLAYFAIR are not such as are likely to commend themselves to the approval of this Council, as they fail to adduce any grounds for the imposition of a general rate, which have not already been duly considered and rejected. It will be within the recollection of hon'ble members that, throughout the discussions which have taken place in connection with the raising of funds for the up-keep of the fire-brigade, this question of an all-round rate to be levied on the general tax-payer by the municipalities has from time to time been advanced, has often to be put on one side as wholly unsuited to a place like Calcutta, where the risk of fire in the majority of buildings is so remote, and where the danger from warehouses for the storage of goods of a highly inflammable nature and in bastis presents the opposite extreme. Owing to the continued representations made to Government by those concerned, a Resolution, dated the 18th of February, 1891, was issued by this Government, appointing a most influential and representative Committee for the consideration of the question in all its bearings.

"This Committee held its first meeting on the 7th of April, 1891, at which those present were unanimous in the opinion that, it was manifestly unfair that any one industry should be saddled with the entire cost, as it was impossible to deny that the general public derived much benefit from the brigade. At this meeting it was admitted that, the jute industry should be taxed to the extent of one-half of the total cost of the brigade. At the second meeting, held on the 14th of April, this question of a general rate was freely discussed, but the majority of those present decided against its imposition; and at each of the five meetings held by this Committee, the question was brought forward, but was as often vetoed, the Committee being of opinion that it was not desirable to place all buildings on an equal footing, and finally recommended that the cost should be met by several industries of a more or less hazardous nature, and partly by the general tax-payer. These lines have been followed in the Bill as amended.

"In like manner, when the Bill (as originally drafted) was referred to the Select Committee of this Council, this point of a general rate was discussed at great length, but the majority were against its adoption, accepting the principles set forth by the Committee of 1891. It may, therefore, be accepted that, the consensus of opinion of those most competent to judge is, that a differential rate is more suited to Calcutta than a general one. The Bill as now amended recognizes the claim to relief put forward on behalf of the jute industry; it provides that, goods of a less hazardous class shall pay a lighter rate than that imposed on highly inflammable goods; that bastis shall contribute a half per cent. rate, and it affirms the principle that, the general public should, in a still lesser degree, (*i.e.*, ⅛ per cent. on the value of property as assessed for municipal taxation), help in maintaining an institution, having for its objects the protection of life and property from fire.

"It, therefore, seems to me, Sir, that the recommendations made in the Bill must meet with the approval of the majority of the members of this Council, as being perfectly equitable in all the provisions referring to the raising of funds to meet the cost of the fire-brigade."

THE HON'BLE MR. RISLEY said:—"I wish to say a very few words in support of the arguments in favour of the general principle advocated by the learned Advocate-General. He has laid stress very justly on the impolicy of imposing a special tax on a special branch of industry. Whilst his speech was going on, I was reminded of the analogy between this and the special rates charged on special crops of land. I venture to say that if we were now discussing a Rent Bill, no words would be too bad, which for the rapacious landlord who should impose special high rátes of assessments on specially valuable crops. This case is just the same. It deals with an industry which is specially valuable and profitable—an industry which has brought prosperity to Calcutta by drawing trade to it—and you set to work and discourage the trade generally by imposing a special property tax on those who are engaged in the industry. Under similar circumstances, a Continental Government would give the trade a bounty, as France and Prussia actually do in the case of beetroot sugar.

"Moreover, it is difficult to say, when you come to consider it, where this principle is to stop. It admits of almost unlimited application. You may tax horses and carriages and apply the proceeds to keeping up the roads, you may tax unwholesome trades for sanitation, and the dealers in indigestible articles of food for the support of the hospitals. Certainly, if you carry the principle to its logical consequence, so far from taxing the jute trade for the support of a lock-hospital, you would be bound to impose a poll-tax on the *demi-monde* of Calcutta. In that case, at any rate, there would be no question about the persons taxed getting their money's worth, which is more than can be said in the case of the jute warehouses. These, indeed, derive comparatively little benefit from the tax, because, as I understand, jute warehouses and presses have been much improved in their construction, and any fire which may break out will be pretty well circumscribed, as each building is surrounded by a high wall, and most of them are provided with fire and manual engines and extincteurs for the extinguishing of fire, so that the fire can hardly spread further.

"There is, moreover, another reason why persons connected with the jute trade do not benefit by the maintenance of a fire-brigade, because it is absolutely out of the question for the fire-brigade to think of putting out a fire which has once broken out in a jute warehouse; and further, the general public are probably less injured by jute fires than by fires in other cases. The premises are carefully guarded, and the fire has a less tendency to damage the property of the general public than a fire which occurs in a basti. On the other hand, a fire occurring in a basti has a greater tendency to spread.

"Then there is the question, of the value of the property destroyed with reference to the proportion of the cost of maintaining the brigade. We ought to look to the interest of the general public. The general public do not know what may be the value of the property destroyed. What concerns them is, whether a fire is liable to spread. In the case of fires in jute warehouses, we are told that the fire is not liable to spread. In the case of a basti fire, it spreads so rapidly that the whole basti is on fire before the brigade can arrive at the spot.

"Then there is a minor point as to the advantage of uniformity in legislation. If we are to legislate on any particular subject, it is no doubt a good thing to be guided by the experience of the rest of the world. We have had reference made to English experience, and to the practice at Bombay and Madras and Rangoon. I have also looked up the question, and find, as far as I have been able to ascertain from the authorities to which I have had access show, that the obligation of maintaining a fire-brigade is regarded on the Continents of Europe as strictly a municipal obligation. Endeavour is made to restrict fires as much as possible by having very strict building regulations expressly with the object of preventing the occurrence of fires, and I know that houses on the Continent are very much more carefully built, so as to prevent the occurrence of fires, than are houses in England."

THE HON'BLE BABU GONESH CHUNDER CHUNDER said:—"I should have had no hesitation in supporting the recommendation of the Select Committee if I found

that it was proposed to distribute the incidence of taxation on account of the fire-brigade on all those who derive benefit directly from it; but as I find that it proposes to levy a rate not only on basti lands but on pucka houses and other lands, I do not agree with the Committee. The Bill, as amended by the Select Committee, enables the Commissioners to levy a rate of eight annas per cent. on all basti lands, and a rate not exceeding two annas per cent. on all pucka houses and other lands. The amendment of the learned Advocate-General, if carried, will have the effect of reducing the rate from eight annas to four annas per cent. on basti lands, and of increasing the two annas rate on houses and lands to four annas. We all know that bastis are occupied by poor people, and any measure which will tend to lighten the burden of these people, should have our support. I entertain a very strong view that pucka houses in this city ought not to bear any share of the cost of maintaining the fire-brigade, and as I find that the learned Advocate General's proposal of this all-round tax of four annas per cent. on occupiers of premises will lessen the burden on bastis, I think I cannot do better than support his amendment."

(*To be continued in the next Gazette.*)

C. H. REILY,

Assistant Secretary to the Government of Bengal,
Legislative Department.

CALCUTTA;
The 28th February, 1893.

RESOLUTION ON THE REPORT ON THE ADMINISTRATION OF THE OPIUM DEPARTMENT FOR THE YEAR 1891-92.

REVENUE DEPARTMENT—OPIUM.

Calcutta, the 18th February 1893.

RESOLUTION No. 1020.

READ—

The Report on the Administration of the Opium Department for the year 1891-92 (1st September 1891 to 31st August 1892).

General.

The opium year 1891-92 is the fourth in succession with an unfavourable record—a record worse by far than of either of the two years immediately preceding. The total area engaged for in the two Agencies was 799,771 bighas. Poppy was actually sown on 787,041 bighas, but the crop failed on 45,178 bighas, or over 5½ per cent. of the area sown; the net area of cultivation was thus reduced to 741,863 bighas against an average of 770,208 bighas during the three years, and 836,358 bighas during the nine years preceding. The abandonment of the policy of extending cultivation when the outturn of the seasons has been so deficient as to diminish seriously the quantity of opium held in reserve, and the disappointment of the cultivators during several years consecutively, are the principal causes of the diminished area of poppy cultivation. In the four years preceding 1888-89, the average gross yield of crops in a year was 55,000 maunds, and the average produce per bigha a little above 5 seers in the Bihar Agency, and 65,120 maunds and 5¾ seers respectively in the Benares Agency; but during the three years immediately preceding the year of report, namely, 1888-89 to 1890-91, the average gross yield amounted to 38,035 maunds only, and the produce per bigha to 3⅝ seers in Bihar, and in Benares to only 44,198 maunds and 4⅔ seers respectively. There is, however, another factor which is steadily gaining importance, namely, the competition with other commercial crops, chiefly tobacco, oilseeds, potato and sugarcane, which are less delicate and more remunerative in an average year than poppy. There are no data for the Bihar Agency regarding the extent to which poppy has been supplanted by other crops. The report of the Land Records Department, North-Western Provinces, of the kharif season ending with 31st December 1891 in those Provinces shows that the area sown with sugarcane during that season was in excess of the area of the preceding season by as much as 402,900 bighas. Some European firms are reported by the Benares Agent to have organized a regular system of advances to stimulate the cultivation of cereals which, for the last few years, have commanded high prices. Poppy is no longer cultivated on the best of the soil everywhere, and, as observed by the Opium Agent, Bihar, it must be satisfied with such land as it gets, while Government must trust to more efficient supervision and to the grant of more aid in the way of loans for irrigation to secure better outturn. It may also perhaps be necessary, if the rise in the price of other produce continues, to raise the Government price of opium by 8 annas per seer, in order to keep pace with that rise. It is reported by the Bihar Agent that a well-known planter of Tirhut cultivated 30 bighas of land formerly under indigo with poppy last year, and that, encouraged by the success obtained, five more planters intend to try the experiment during the current season. The land which these planters are expected to devote to poppy cultivation during the present season is 75 bighas. These figures as yet are too insignificant for any general conclusions. It may be anticipated, however, that a successful season now will do much to restore the popularity of poppy cultivation.

Outturn.

2. In spite of the decrease in the area of cultivation, and the dryness of the season (the monsoon having closed early and hardly any rain fallen during the winter), the prospects up to the end of February continued favourable and promised a good outturn. But the setting in of strong westerly winds at the time

of gathering the produce entirely upset all previous calculations, and proved to be particularly disastrous by drying up the juice which exudes from the capsules when lanced. These disadvantages were further aggravated by the occurrence of hailstorms in portions of the Benares Agency. The produce, reduced to a standard of 70 per cent. consistence, amounted only to 31,955 maunds 19 seers 2 chitaks in the Bihar Agency, and to 38,490 maunds 10 seers 13 chitaks in the Benares Agency, against 38,759 maunds 3 seers and 44,373 maunds 19 seers 2 chitaks, respectively, during the previous year. The total produce was 70,445 maunds 30 seers against 83,132 maunds 22 seers in 1890-91, and the average produce per bigha was 3 seers 6½ chitaks in the Bihar Agency and 4 seers 3 chitaks in the Benares Agency, against 3 seers 12⅝ chitaks and 4 seers 8 chitaks, respectively, in 1890-91. In the Bihar Agency the average produce per bigha was highest in Tehta, Gaya, and Shahabad, where it was 4 seers 2½ chitaks, 4 seers 2 chitaks, and 4 seers 0¾ chitaks, respectively, and lowest in Tirhut, where it was 1 seer 3½ chitaks. In the Benares Agency the highest average was in Ghazipur, 4 seers 13¾ chitaks, and the lowest in Etawa, 3 seers 8¼ chitaks. The average was higher in Gaya, Basti, Mirzapur, and Faizabad than in the previous year.

Manufacture.

3. The amount of provision opium manufactured during the season was 20,846 chests, eight cakes, in Bihar, and 12,833 chests in Benares, which was less than the quantity manufactured in the previous year by 988 chests, 12 cakes in the former, and 9,855 chests in the latter Agency. The great disparity in the outturn of the two Agencies is accounted for by the fact that more than 9,000 maunds of the Ghazipur drug, which was of too high a consistence for Benares provision opium, the standard consistence of which is 71°, were transferred to Bihar and there manufactured with the produce of that Agency for Bihar provision opium, of which the standard consistence is 75°. In consequence of abnormal climatic conditions, the consistence of opium at both the Agencies was unusually high, Bihar opium being manufactured at an average consistence of 77°, and Benares at an average of 74°, the former being two degrees above the standard and the latter three degrees. The fact of the standard consistence of the Benares provision opium having been raised from 70° to 71°, has been publicly notified.

Reserve.

4. The number of chests to be sold in 1893 has been fixed at 43,704, and the reserve on the 31st December 1893 will fall to 1,947 chests of Patna opium, with a deficit of 33 chests of Benares opium, which will have to be provided in 1893, contrary to the usual practice, from the manufacture of the produce of the cold weather of 1892-93. The prospects of the current season have been hitherto reported to be above the average, but experience has shown how delusive such forecasts may prove in the case of opium. Should the results of the outturn of the cold weather crop of 1892-93 be again unfavourable, the question of the reserve will, as the Board observe, assume a serious aspect.

Receipts and expenditure of opium.

5. The principal point in the Board's report which the Lieutenant-Governor has to criticize is the difficulty of finding out what the actual receipts and expenditure of opium were. The statement given in paragraph 4, page 1 of the Board's Report shows the quantity produced in the year, and the amount of provision opium, but does not include excise opium or opium manufactured for medical purposes. The Board are requested to devise a clear statement in maunds and seers reduced to a uniform consistence, of opium in stock, opium received in the year, opium used in different ways, and balance in stock at end of the year. The accounts give the expenditure in cakes, maunds, and chests, which is somewhat confusing.

Nepal opium.

6. The quantity of Nepal opium delivered amounted to 136 maunds only, against 157 maunds in the previous season. It is reported that the bad season was felt in Nepal also. Under the orders of Government, Nepal opium will in future be received from the Nepalese cultivators direct on the same terms as opium brought by British subjects, as the arrangement under which this opium used to be supplied through an intermediary approved by Government was found to be unsatisfactory.

Expenditure.

7. The expenditure in the Bihar Agency amounted to Rs. 73,73,691 against Rs. 88,19,349 in the preceding year, and in the Benares Agency to Rs. 88,72,927 against Rs. 1,02,28,196 in 1890-91. The combined expenditure in the two Agencies was thus Rs. 1,62,46,618, which is less than the expenditure in 1890-91 by Rs. 28,00,927. A detailed statement of the expenditure is furnished by the Benares Agent. The Bihar Agent explains that he has been unable to furnish the statement in consequence of Part IV of the Opium Manual containing all the revised forms and tables for calculation being still in the press. This explanation is accepted by the Board, but it appears to the Lieutenant-Governor that the Board need not have failed to obtain a detailed statement of the expenditure in the Bihar Agency if they had made any attempt to get it or had prescribed a form for Bihar. The Benares statement (reprinted in paragraph 41 of the Board's report) is arranged under 18 budget heads (which should have been numbered): these can be grouped under—

			Heads.
1.	Cost price of opium	... ...	3, 4, 5
2.	Establishment	... ...	1, 2, 7, 10, 11, 12
3.	Transit, weighment, and freight	... ...	6, 8
4.	Manufacturing	... ...	9
5.	Miscellaneous	... ...	13 to 18

The Bihar expenditure should be divided in the same way, and the rateable incidence of the several heads of expenditure should be divided over the quantity of opium produced so as to separate permanent establishment, which cannot vary, from the temporary or variable establishment which ought to rise and fall with the weight of the crop. The statement ought to show at a glance the cost per maund to Government divided into (1) price paid to cultivators; (2) cost of manufacturing; (3) cost of supervising establishment. Column 5 of the abstract statements for Bihar and Benares divided by column 3 shows the cost per maund to have been Rs. 231 in Bihar and Rs. 230 in Benares.

Outstanding balances.

8. In the Bihar Agency the outstanding balance of advances to cultivators is said to be Rs. 12,020, exclusive of Rs. 270 written off as irrecoverable. The Benares Agent states in paragraph 96 of his report that the balance on the 1st November 1891 on account of season 1891-92 was Rs. 1,49,735-12, the amount realised between 1st November 1891 and 1st November 1892 Rs. 1,38,017, and the net balance on the 1st November 1892 of advances for the season Rs. 11,718-12-1. These figures require explanation. The Opium Manual shows that in the Benares Agency the arrangements with cultivators are begun about the middle of August, and simultaneouly with the engagements advances are given at the prescribed rate, the first advance being about one-third of the estimated value of the return. No second advance is generally made in the Benares Agency. It is obvious that under this system the amount of advances for season 1891-92 on the 1st November 1891 would be much higher than Rs. 1,49,735-12. Statement B appended to the Benares Agent's report shows that the total amount of advances during 1891-92 for provision opium was Rs. 78,43,539, which was in excess of the value of the produce by Rs. 1,35,249. The Bihar Opium Agent considers it to be a specially unsatisfactory feature of the accounts of the year that the cultivators of Bihar should have had to refund out of the advances taken by them as much as Rs. 80,530, which sum exceeds the corresponding amount for any previous year except the year 1882-83, which is memorable for its disastrous blight. In His Honour's opinion the poor outturn fully explains why the advances exceeded the value of the crop brought in for weighment and the cultivators had to refund the balance; but it is an exceptional circumstance. In Benares the amount, viz. Rs. 1,38,017, which the cultivators had to refund for the year's advances far exceeded that in Bihar.

Irrigation.

9. Statement A of the Bihar Agency shows that out of a total area of 375,586 bighas, 68,057 bighas, or above 17 per cent., were unirrigated, against 81,678 bighas, or 20 per cent, in the preceding year. In the corresponding statement for the Benares Agency the unirrigated area is only 8,345 bighas, or a little above 2 per cent. The Bihar statement reduces the bighas into acres, which should in future be done

in the Benares statement, the Agency bigha in both Bihar and Benares being equal to $\frac{5}{8}$ths of an acre. In the Bihar Agency a strong prejudice, which the Agent reports to be well founded, exists against the use of canal water for poppy cultivation in the Shahabad and Patna districts. The amount advanced for the construction and repairs of wells was Rs. 49,535, against Rs. 24,355 in the previous year in the Bihar Agency, and Rs. 11,359 against Rs. 15,583 in 1890-91 in the Benares Agency. The Benares Agent reports that the reasons which operate against the expansion of the system are (1) insecurity of the tenure on which the raiyats generally hold their lands; (2) fear of the cultivators of their inability to repay the loan; and (3) want of sound and sufficient security. It appears to Sir Charles Elliott to be very remarkable and contrary to the belief which has hitherto prevailed if the raiyat in Bihar feels more secure in his tenure than the raiyat in the North-Western Provinces. This matter will be brought to the notice of the Government of the North-Western Provinces.

Saw Mills.

10. The account furnished in the Board's report of the working of the Patna Saw Mills and Chest Department is very confused. From the report of the Bihar Opium Agent it appears that during the year 1891-92 22,388 chests were made, of which 11,892 were sâl and 10,496 mango wood, against 26,113 chests, all of sâl, in the previous year. The cost of a sâl wood chest was Rs. 5-14-7, and of a mango wood chest Rs. 2-7-5. The difference between these two prices represents the saving effected by the substitution of mango wood for sâl wood. The total amount of saving in this way is represented by Rs. 35,937. With a view to economy the Mill was, with the sanction of Government, closed for the month of October 1891, and for April, May, and June 1892. The net expenditure on account of the mills in 1891-92 is stated by the Board to have been Rs. 19,384, after deducting certain receipts, against Rs. 22,425 in the preceding year. The separate letter on this subject referred to by the Board shows, however, that the actual expenditure was Rs. 24,434 against Rs. 27,751. This shows a satisfactory saving. But it appears from the Bihar Agent's report that 33,000 ready-made chests purchased for contractors with lids were sent to Ghazipur. This appears to have been hardly wise, unless the cost of a purchased chest is less than that of a chest made at the Saw Mill, as *primâ facie*, instead of keeping the Mill closed for some months, it might have been utilized for the chests required for the Ghazipur Agency. The reason also why 33,000 chests were required for Ghazipur when 22,388 sufficed for Patna requires explanation.

Breaches of Opium Laws.

11. Compared with the year 1890-91, there was a decrease of 72 in the number of cases in Bengal, and an increase of 41 cases in the North-Western Provinces and Oudh, the total number during the year 1891-92 being 501 in the former and 605 in the latter. Three of the cases in Bengal during the year were of considerable importance. In one case 19 seers of opium were sent up from Hooghly: it was reported that the opium was dropped by some up-country men who were passing through the town and ran away when challenged, leaving their property behind them. In another case four jars, containing about 3 maunds 15 seers, supposed to have been stolen during transit to Ghazipur out of a truck in the Bengal and North-Western Railway, were found on board some boats in the river at Calcutta. In May last about 11 maunds 35 seers of opium smuggled from Nepal were seized in a station on the Tirhut State Railway. The opium was concealed in packages said to contain spices. The Lieutenant-Governor notices with satisfaction that in the Bihar Agency, as well as in the Benares Agency, the requisite enquiries are made by the local opium officers to ascertain from what source the illicit drug in any case of smuggling which comes to light has been obtained. A large number of cases in Benares consisted of those in which a cultivator's wife or mother claimed to have retained a few grains of opium for medical purposes. The Agent did not think it necessary to punish the accused departmentally in addition to the punishment inflicted in the Criminal Court, as they were good cultivators. Mr. Rivett-Carnac considers that the existence of any organized contraband trade assisted by the cultivators is improbable, but he appears to think that smuggling to Calcutta is carried on by the purchase of excise opium at Rs. 16 per seer, which is the price fixed for the Patna

Division, and also for adjoining districts of the North Western Provinces. The propriety of raising this figure is now under discussion with the Board, and an additional argument for such a measure may be found in the fact that the State loses considerably by selling at the present price. The statistics of the average price of provision opium sold at Calcutta from October 1891 to September 1892 show that Bihar provision opium sold at Rs. 17 per seer. Considering the higher consistence of excise opium, Rs. 16 per seer represent a much lower price than the Calcutta price of provision opium.

Tours.

12. Mr. Stevens, while in charge of the Miscellaneous Revenue Department in the Board of Revenue, visited both the factories as well as the weighing station at Ekdari in the Nepal frontier. He submitted notes to Government of discussions with the local opium officers on (1) the question of obtaining Nepal opium through Mr. Cockell; (2) the partial introduction of the assamiwar system prevalent in the Benares Agency in a part of the Motihari Agency; and (3) an improved method of packing opium jars. Orders have been passed separately by Government on these matters. With regard to the introduction of the Benares system of engagements, the Lieutenant-Governor is of opinion that it is hardly worth while to discuss the merits of the system or to make an experiment in a single kothi, unless there is a definite intention of carrrying out a change. At present there is no such intention, and it is not worth while to enquire whether the reason given by Mr. Kemble, namely, the additional cost which the Benares system would entail, is valid or not. The Agents and the Sub-Deputy Agents made useful tours within their respective charges. Under orders of Government directing the mutual interchange of visits between the Factory Superintendents, the Superintendent of the Ghazipur Factory visited the Patna Factory in September last. The Lieutenant-Governor has no doubt that these visits will be of decided benefit to the factories and to the interests of Government by the interchange of ideas.

Merits of officers.

13. The Board have reported to Government the names of Messrs. Tytler, Ryves, Harrison, Bryson, Murray and Blair among the Sub-Deputy Opium Agents as having worked well in the Bihar Agency. The Benares Agent has not made any recommendations this year. Dr. Sedgefield, Dr. Owen and Mr. Gregory are favourably reported on for their able discharge of their duties. The Lieutenant-Governor has again to acknowledge the efficient management of the Opium De, artment by the Agents, Mr. Kemble, Mr. Rivett-Carnac, and Mr. Hopkins, who held charge during the year, and the careful supervision exercised by the Board of Revenue.

By order of the Lieutenant-Governor of Bengal,

C. E. BUCKLAND,

Secretary to the Government of Bengal.

GOVERNMENT OF BENGAL, MARINE DEPARTMENT.

The 28th February 1893.

THE correspondence below regarding the construction of a bathing ghat at Ramkrishnapore at the expense of Babu Chintamoni De is published for general information. Arrangements have been made with the Port Commissioners, Calcutta, for the construction of the ghat—

Copy of a letter No. 868M., dated 8th December 1892, from the Commissioner of the Burdwan Division, to the Secretary to the Government of Bengal, Municipal Department.

I HAVE the honour to enclose, for the information of Government, a copy of a letter received from the Magistrate of Howrah (his No. 1306G., dated 9th ultimo), together with a copy of its enclosure, relating to an offer of promissory notes of the nominal value of Rs. 35,000 made by Babu Chintamoni De for construction of a bathing ghat at Ramkrishnapore in Howrah to be called after his name.

2. The Magistrate has deposited the amount for safe custody in the Howrah Treasury, and requests, that this really munificent offer may be accepted and that a public acknowledgment of it be made by the Local Government in the *Calcutta Gazette*. I beg to recommend the Magistrate's proposal and the publication of the correspondence in the Gazette.

Copy of a letter No. 1306G., dated 9th November 1892, from the Magistrate of Howrah, to the Commissioner of the Burdwan Division.

I HAVE the honour to forward a copy of a letter received from Babu Chintamoni De, in which he states that he sends Rs. 35,000 to build a bathing ghat at Ramkrishnapore in Howrah, to be called after his name. The promissory notes to that amount have been deposited for safe custody in the Howrah Treasury pending orders, and I would urge that the public-spirited offer of this gentleman be accepted, and that public acknowledgment of the fact be made by the Local Government in the *Calcutta Gazette*.

Copy of a letter, dated 9th November 1892, from Babu Chintamoni De to the Magistrate of Howrah.

I HEREWITH send you Government securities, the numbers whereof are hereinafter mentioned, amounting to Rs. 35,000, duly endorsed to you for the purpose of having a masonry or iron ghat built on the west bank of the river Hooghly in front of the Ramkrishnapore ghat road, and beg you will be pleased to obtain the necessary site from the Port Commissioners and order the building of the ghat according to a plan to be approved of by me at a cost of about Rs. 35,000.

I further beg to suggest the following conditions:—

1st.—That the ghat be made in front of the Ramkrishnapore ghat road or thereabout.

2nd.—That a metalled road be made from the foreshore road to the site of the said ghat.

3rd.—That the ghat be divided into two parts with a fencing in the middle—one for gentlemen and the other for ladies.

4th.—That a chadney on iron pillars be put up at the ghat, of which a portion should be enclosed for the ladies.

5th.—That no traffic be allowed to be taken by the ghat.

6th.—That it be strictly a bathing ghat and be called after me.

In the last place I beg to state that I am willing and ready to pay a further sum of rupees three or four thousand if it be absolutely necessary for the execution of the works aforesaid.

Copy of a letter No. 3101 Marine, dated 30th December 1892, from the Secretary to the Government of Bengal, Marine Department, to the Commissioner of the Burdwan Division.

I AM directed to acknowledge the receipt of your letter No. 868M., dated the 8th instant, with which you submit a copy of a letter from the Magistrate of Howrah, and of its enclosure, relative to an offer of Rs. 35 000 made by Babu Chintamoni De for the construction of a bathing ghat at Ramkrishnapore in Howrah.

2. In reply, I am to say that the Lieutenant-Governor has much pleasure in accepting the offer made. Sir Charles Elliott recognises the liberality and public spirit evinced by Babu Chintamoni De in giving this handsome donation for a structure which will be of so much use to the public.

C. W. ODLING,

Secretary to the Government of Bengal.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 25th February, 1893.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.				
Burdwan Divn.	1	Burdwan Feb. 25, '93 Kalna ... Katwa ... Raniganj ..	3·39 3·67 2·74 2·67	Weather—rainy and cold. The heavy rainfall will damage to some extent the *rabi* crops No more rain wanted now. Condition of cattle good. Fodder and water sufficient. Prices of common rice :— Srs. Burdwan ... ... 11 to 13 per rupee. Kalna ... ... 10 to 13 per rupee. Katwa ... ... 13½ per rupee. Raniganj ... ... 13 per rupee.
	2	Bankura „ 25, '93 Vishnupur ...	2·85 2·41	Weather—cloudy and rainy. The copious showers during the week will cause some damage to the standing crops. Fodder and water sufficient. Common rice is selling at— Srs. Sadar ... ... 11½ per rupee. Visnupur ... ... 12 per rupee.
	3	Birbhum „ 25, '93 Rampur Hát ...	3·12 1·99	Weather—clouds and rainy throughout the week. The excessive rain will do some injury to the *rabi* crops. Price of common rice 13 to 15 seers per rupee. Cow-pox prevails in some villages of thana Dubrajpur and outpost Mahmedbazar.
	4	Midnapore „ 25, '93	2·71	Weather—unusually cold with heavy storms of rain. *Rabi* crops still being gathered. Ploughing going on. Prices of common rice :— Srs. Sadar ... ... 12 per rupee. Contai ... ... 9 to 13 per rupee. Tamluk ... ... 12 to 14 per rupee. Garhbeta ... ... 11 to 12 per rupee.
	5	Hooghly „ 25, '93 Serampore ... Jahanabad ...	2·22 1·84 1·79	Weather—chilly and rainy. The Subdivisional Officer of Serampore says that the continual rain has to some extent rendered the prospects of potatoes, mangoes and *kalai* still more worse. *Rabi* crops slightly damaged in the Jahanabad subdivision. In the Sadar subdivision the state of the *rabi* crop is not good, but harvesting of potatoes finished. Difficulty of water and fodder-supply still felt at Pandua and Dwarbasini; elsewhere fodder and water sufficient. Prices of common rice :— Srs. Sadar ... ... 11 per rupee. Serampore ... ... 10 to 11½ per rupee. Jahanabad ... ... 12 to 13 per rupee.
	6	Howrah „ 25, '93 Ulubaria ...	2·74 1·95	Weather—disagreeably wet and cold. *Khesari* crop, which is being reaped, has been somewhat injured by the rain. Pressing of sugarcane in progress. Condition of cattle good. Fodder and water-supply sufficient. Price of rice 11 to 11½ seers per rupee.
Presidency Divn.	7	24-Parganas „ 25, '93	2·37	Weather—cold and rainy. Excessive rain has done injury to the standing *rabi* crops. Cultivation has been retarded. Fodder sufficient. Prices of common rice :— Srs. Srs. c. Sadar ... ... 10 to 14 8 per rupee. Dum-Dum ... ... 12 0 per rupee. Barasat ... ... 10 5 per rupee. Barrackpore ... ... 12 4 per rupee. Diamond Harbour ... 13 0 per rupee. Basirhat ... .. 12 5 per rupee.
	8	Nadia „ 25, '93 Kushtia ... Meherpur ... Chuadanga ... Ranaghat .	4·11 1·77 2·70 1·23 3·76	Heavy rainfall during the week. Prospects of wheat and barly good, but the heavy rain of the week has caused some damage to linseed, gram and mango blossoms, but it has facilitated ploughing. Price of rice almost stationary. Health of cattle good. Fodder and water-supply sufficient.
	9	Khulna „ 25, '93 Bagerhat ... Satkhira ...	1·68 1·33 1·90	Weather—unusually rainy. Transplantation of *boro* going on. The heavy and constant rain will probably do some damage to tobacco and some other *rabi* crops. Common rice selling at from 11 to 14 seers per rupee. Supply of fodder and water sufficient
	10	Jessore „ 25, '93 Jhenida ... Magura .. Narail ... Bangaon ...	2·18 2·51 1·62 1·27 1·95	Weather—cold, cloudy and rainy. The rainfall of the week has done some injury to the *rabi* crop, the harvesting of which has commenced. Mango blossoms have also been injured to some extent. Cultivation of paddy has been progressing well. Prices of rice have risen slightly. Fodder and water sufficient.
	11	Murshidabad „ 25, '93	2·56	Weather—cold and cloudy with constant showers. It has been raining constantly the last three days. This untimely rain will probably damage all the standing *rabi* crops. Common rice selling at 13 seers per rupee. Fodder sufficient for cattle.

Division	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and State and prospects of the crops.
BENGAL—*concld.*					
CHITTAGONG DIVN.	12	Chittagong	Feb. 25, '93	0·73	Weather—seasonabe. Prospect of crops good. *Rabi* cultivation in progress. Prices stationary. Condition of cattle good. Supply of fodder sufficient.
	13	Noakhali	" 25, '93	0·89	Weather—cloudy and variable. *Rabi* crops are thriving well. Lands are being ploughed for *aus* paddy. Fodder and water available. No cattle-disease except in thana Sundip and outpost Companiganj. Price of rice stationary.
	14	Tippera	" 25, '93	1·70	Weather—cold, cloudy and damp. Standing crops doing well. Ploughing going on vigorously. Prospects excellent.
	15	Chittagong Hill Tracts.	" 24, '93	1·03	Weather—cloudy and rainy. Chillies, tobacco and vegetables progressing. Condition of cattle reported to be good. Common rice is being sold at 10 seers per rupee.
DACCA DIVN.	16	Dacca	" 25, '93	Not reported.	Weather—cold and cloudy. *Rabi* crops being gathered. *China* and *kaon* thriving. Cultivation and sowing of *aman* and *aus* paddy going on. Fodder available. No cattle-disease. Common rice selling at from 11 to 14 seers per rupee.
	17	Faridpur	" 25 '93	3·57	Weather—rainy. Continued rain is doing harm to pulses, but will probably benefit cereals. It will also retard ploughing on low lands. Common rice sells at 13 seers per rupee at Goalundo and Madaripur and 12 seers at Sadar. Cattle doing well and get fodder.
	18	Backergunge	" 25, '93	1·94	Weather—stormy and cold. Prospects of crops good. Ordinary rice sells at from 10 to 14 seers per rupee. Fodder and water sufficient.
	19	Mymensingh	" 25, '93	2·04	Weather—very wet. Prospects of standings crops good. Rice sells at from 11½ to 14 seers per rupee.
RAJSHAHI DIVN.	20	Dinajpur	" 25, '93	0·68	Weather—very cold and cloudy. The sky has been cloudy for the whole week. It has been raining more or less almost daily. The rain has facilitated the preparation of lands for *bhadoi* and jute. Pressing of sugarcane still continues in places. Price of rice at Sadar 14 seers 12 chitaks per rupee; that at Thakurgaon stationary. Condition of cattle good. The cattle-disease, which broke out in the Thakurgaon subdivision, has disappeared. Fodder and drinking water sufficient.
		Thakurgaon	...	0·56	
	21	Rajshahi	" 25, '93	2·65	Weather—cold and rainy. Prospects of cold-weather crops generally good. The rain that has fallen during the week has been injurious to the standing *rabi* and ganja crops. Lands are being prepared for sowing of *aus*, *aman* and *til*. Some cases of small-pox among cattle reported from the Tanore thana. Fodder and water generally sufficient. Price of common rice ranges from 12 to 15½ seers per rupee.
		Nator	...	2·56	
		Naugaon	...	2·07	
	22	Rangpur	" 25, '93	0·70	Weather—cold and rainy. Prospects of crops continue good. Fine weather wanted for mustard harvest. Common rice 12 to 15 seers per rupee.
		Kurigaon	...	0·51	
		Nilphamari	...	0·59	
		Gaibanda	...	Nil	
		Ulipur	...	0·43	
	23	Bogra	" 25, '93	1·75	Weather—cloudy and wet. Lands are being ploughed for *aus* paddy and jute. Condition of *rabi* crops good. Outturn of sugarcane estimated at 14 annas. Common rice sells at 13½ seers per rupee. Fodder and water sufficient.
		Sherpur	...	2·02	
		Naukhila	...	1·85	
	24	Pabna	" 25, '93	2·01	Weather—cloudy and rainy. Owing to excessive rain that fell during the week some damage is done to the standing crops. Sugarcane is being reaped. Rice selling at 12½ seers per rupee at Pabna and Rs. 3-8 to Rs. 5 per maund at Sirajganj. Jute sells at Rs. 4 to Rs. 5 per maund. Condition of cattle good. Fodder and water-supply sufficient.
	25	Darjeeling	" 25, '93	0·83	Weather—very cloudy and foggy. Snow on Wednesday (22nd) afternoon. Very cold for the time of year. *In the hills*:—Wheat, barley and potatoes progressing favourably. Mustard and *phaphur* being harvested. *In the terai*:—Mustard and potatoes are nearly all harvested. Tobacco coming to perfection. Barley in ear. Prices of coarse rice:— Srs. Hills ... ... 11 } per rupee. Terai ... ... 13 } per rupee.
		Siliguri	...	0·48	
	26	Jalpaiguri	" 25, '93	0·58	Weather—cold and cloudy. Ploughing commenced for *aus* and *bhadoi* crops. Potato is being harvested; outturn 14 annas. Prospects of tobacco continue good. Common rice sells at 14 seers per rupee. Supply of fodder and water sufficient.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
Bhagalpur Divn.	27	Monghyr Feb. 25, '93	1·53	Continual showers. Weather damp and cold. The present weather is injurious to much of the *rabi*, but it is hoped the wheat and other late kinds may benefit to some extent. Poppy must suffer severely as the extraction had already commenced, and each day's rain takes away some of the value. The loss may be now roughly put down at 3 annas, and the outturn is likely to be less even than that of last year, although the land sown is 2,000 bighas more and the failure of crop reported was 300 bighas less than in the previous year. The renewed moisture will be very advantageous for indigo lands. Prices of common rice :— Srs. Sadar ... ... 13 to 16¼; Begusarai ... ... 16; Jamui ... ... 15 } per rupee.
		Begusarai ...	0·65	
		Jamui ...	0·77	
	28	Bhagalpur „ 25, '93	1·33	Weather—unusually cloudy and cold. Gram and *rahar* suffered slightly by this rain. Indigo and castor oil-seed much benefited. Cattle also reported to be affected slightly by the rain. Common rice 15 seers 2 chitaks per rupee.
		Banka ...	2·01	
		Madhipura ...	0·92	
		Supaul ...	0·40	
	29	Purnea „ 25, '93	0·62	Weather—cloudy with slight showers; damp and very chilly, but it is getting warmer now. The recent rain is expected to do some injury to the tobacco if it is not followed soon by bright sun. Otherwise it will benefit the standing *rabi* crops. The *tori* harvest is finished in Araria with a very fair outturn; elsewhere that crop is being reaped. The rain will also facilitate ploughing of the *bhadoi* lands. Fodder and water sufficient. No cattle-disease. Price of rice almost stationary.
		Kishanganj ...	0·76	
		Araria ...	0·62	
	30	Malda „ 25, '93	1·27	Weather—rainy and wet throughout the week. Rainfall has improved the condition of standing *rabi* crops except within Kaliachuk thana, but it has damaged the mango blossoms which are out. Lands are being prepared for *bhadoi* paddy and jute. Common rice sells at from 13 to 17 seers per rupee. Fodder and water-supply ample.
		Chanchal ...	1·06	
		Shibganj ..	2·39	
		Gajole ...	1·03	
	31	Sonthal Parganas „ 25, '93	1·69	Weather—cold and rainy, with thunder. The excessive rain has injured the standing *chaiti* crops, the *mahua* and the mangoes. It has helped the sugarcane. Price of new rice 14 to 15 seers per rupee, as high as last year at this time. Many cattle killed by the cold.
		Deoghur ...	1·45	
		Godda ...	2·04	
		Jamtara ..	2·86	
		Pakur ...	3·30	
		Rajmahal ...	1·64	
Patna Division.	32	Patna .. 25, '93	0·86	Cloudy weather with rain on and off during the whole week, which is distinctly unfavourable to the *rabi* and poppy crops. The rain has damaged both the standing and harvested *rabi* crops such as gram, peas, mustard and *masur*. Prices of common rice :— Srs. Sadar ... ... 17; Barh ... ... 12; Bihar ... ... 17; Dinapore .. .. 14 } per rupee.
		Barh ...	1·57	
		Bihar ...	1·86	
		Dinapore ...	0·80	
	33	Gaya .. 25, '93	2·14	Weather—very cloudy and rainy throughout the week. The rainfall has done some good to the late *rabi* crops, while it has done some injury to the early crops. The crops cut and stored in open fields have been specially damaged, but their proportion is still small. The weather still continues cloudy and rainy, and if there is no bright sunshine soon much damage will be done to the *rabi* crops. The repeated showers have washed off some lanced drugs of the poppy, and the high winds have done some damage to the plants. This crop is, however, still in flower in many places, and the damage will not be very serious if there is bright sunshine soon. Fodder and water for cattle sufficient.
		Aurangabad ...	1·36	
		Nawada ..	2·24	
		Jahanabad ...	1·83	
	34	Shahabad .. 25, '93	0·88	Weather—cloudy and variable with constant showers. The rainfall has done a certain amount of damage to the standing *rabi* crop and the opium, but if the weather now clears up and a dry west wind sets in, the damage will not be serious. Extraction of opium has begun. Prices stationary. Fodder and water sufficient. No cattle-disease reported.
		Buxar ...	0·77	
		Sasaram ...	1·10	
		Bhabhua ...	0·73	
	35	Darbhanga .. 25, '93	0·32	Weather—cloudy. Prospects of *rabi* still continue favourable, but some damage is likely to be caused to linseed, *rahar*, tobacco and gram by the rain. Extraction of opium commenced in places. No damage is reported to have been done to this crop by the rain. Condition of cattle good. Prices stationary.
		Samastipur .	0·82	
		Madhubani ..	0·53	
	36	Muzaffarpur .. 25, '93	0·60	Weather—cloudy with east wind. Peas growing. *Rahar* and wheat much damaged by the rainfall. No injury done to poppy so far, but clear weather and west wind much wanted. Lancing commenced in advanced crops. Water and fodder ample. No disease among cattle.
		Sitamarhi (23rd) ..	0·38	

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
	BIHAR—*concld.*		
	Patna Division—concld.		
37	Saran „ 25, '93 Siwan .. Gopalganj ..	0·42 0·61 0·58	Weather—cloudy and rainy throughout the week; unusually cold. The Sub-divisional Officer of Siwan says that rain has been doing harm to the standing crops. The Subdivisional Officer of Gopalganj reports that no damage has been done yet, but dry weather is required. The cloudy weather is likely to bring caterpillars. No reports received yet from the Sub-Deputy Opium Agents as to damage to poppy. The Sub-Deputy Opium Agent, Siwan, said on 19th that clear settled weather with light west winds was much required and was then becoming a necessity. Poppy lancing has commenced. Fodder and water abundant. Prices of common rice are:— Srs. c. Chapra ... ... [redacted] } per rupee. Siwan ... ... [redacted] Gopalganj 14 3
38	Champaran „ 25, '93	0·83	Weather—cloudy and rainy. Some of the *rabi* crops are in flower and others in ear. Prospect of crops good, but sunshine is now much wanted, or the crops will suffer. Moisture in the soil is more than sufficient. Poppy plants are healthy and looking well, and much improved by the rain. Even where they suffered from hail in the end of January, the latest reports are more hopeful. Cattle in good condition. Water and fodder sufficient. Prices unaltered.
	ORISSA.		
	Orissa Divn.		
39	Cuttack Feb. 25, '93	Nil	Weather—cloudy. What crops are on the ground are doing well. Supply of fodder and water sufficient. Average prices of common rice:— Srs. c. Srs. c. Sadar .. ... 10 8 to 15 1 } Jajpur ... ... 18 6 to 21 0 } per rupee. Kendrapara ... ... 16 0 to 19 0 } Banki ... ... 17 0 }
40	Puri „ 23, '93 Khurda ... Banpur ...	0·02 0·25 0·60	Weather—cloudy. Lands are being ploughed for the ensuing *sarad* crop. *Dalua* paddy thriving. *Rabi* crops doing well. Rice sells from 14 seers 7 chitaks to 17 seers 8 chitaks per rupee.
41	Balasore „ 25, '93	1·57	Weather—cloudy and rainy. Ploughing almost stopped owing to continuous rain. Prices stationary. Fodder and water sufficient.
	CHOTA NAGPUR.		
	South-West Frontier Agency.		
	Chota Nagpur Divn.		
42	Hazaribagh Feb. 25, '93 Giridi ...	1·85 2·52	Weather—cloudy and rainy. Rain has been harmful to the crops. Lands are being ploughed. Common rice 11 to 11 seers per rupee. Poppy being damaged. It is reported that two days' lancings have been washed away, but that the rain has benefited the backward plant.
43	Lohardaga „ 25, '93	3·24	Weather—cold and cloudy. Ploughing of land commenced. Prospect of *rabi* continues favourable, but if the fall of rain continues, some damage will be done to this crop. Common rice selling at 13 seers per rupee. Fodder and water sufficient.
44	Palamau „ 24, '93	0·98	Weather—cloudy. Rain in almost all parts of the district. The rainfall and the weather will tell upon the *rabi* which promised a good outturn. Cattle-disease in some parts. Prices generally stationary.
45	Singhbhum „ 25, '93	3·18	Weather—rainy and cloudy thoughout the week; raining to-day (25th). In the Kolhan it is reported that the crops (*rahar, masuri*, gram and linseed) are damaged by the rain. Unless fair weather sets in soon the damage to the *rabi* crops will be heavy. Rice selling at 14 seers per rupee.
46	Manbhum „ 25, '93 Gobindpur ...	3·45 1·67	Weather—rainy throughout the week. Harvesting of *rabi* crops nearly over. Prospects of standing crops, such as wheat, gram, and sugarcane and also *mahua*, are bad on account of the rainfall. Rice selling at from 10 to 14 seers per rupee. Fodder and water-supply sufficient.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 28th February, 1893.

C. E. BUCKLAND,
Secy. to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS. Air pressure. Mean barometric height, 8 A.M., reduced to 32°.	Air pressure. Mean reduced to sea-level and constant gravity, lat. 45°.	Air pressure. Variation from mean.	Wind. Prevailing direction.	Wind. Mean wind velocity.	Temperature. Highest.	Temperature. Date.	Temperature. Lowest.	Temperature. Date.	Temperature. Mean maximum temperature.	Temperature. Mean minimum temperature.	Temperature. Mean daily temperature.
Orissa.	Puri	Puri ...	29·979	29·928	—	NE	315	90·7	25th Feb.	67·6	24, 25 Feb.	83·4	71·7	77·6
		Gopalpore ...	29·976	29·935	—·023	Variable	442	83·2	19, 20, 24. ,,	69·9	22nd ,,	80·9	71·6	76·2
		False Point ...	29·993	29·956	—·016	NEly	261	82·9	19, 20, 21. ,,	66·5	21st ,,	80·8	69·8	75·3
	Cuttack	Cuttack ...	29·927	29·952	—·017	Variable	92	88·1	19th ,,	66·8	25th ,,	84·3	69·0	76·7
	Balasore	Balasore ...	29·974	29·978	+·007	NNE	98	81·3	19th ,,	58·6	21, 24 ,,	75·7	61·8	68·8
South-West Bengal.	Midnapore	Midnapore ...	29·899	30·002	+·020	N	251	81·3	19th ,,	56·2	21, 23 ,,	73·8	59·8	66·8
	24-Parganas	Calcutta ...	30·017	29·965	+·014	Variable	58	78·2	19, 20 ,,	54·7	21st ,,	73·9	59·3	66·6
		Saugor Island	30·064	29·974	+·011	NEly	281	80·2	20th ,,	57·9	21st ,,	76·6	62·7	69·6
	Howrah ... ... Hooghly													
	Nadia	Krishnagar ...	30·007	30·005	+·056	Ely	98	79·3	20th ,,	54·0	22nd ,,	72·7	57·8	65·3
	Khulna ... ... Jessore	Jessore ...	30·017	29·993	+·028	Variable	71	78·7	20th ,,	51·0	23rd ,,	73·0	56·9	64·9
	Burdwan ...	Burdwan ...	29·961	30·012	+·033	Calm	18	77·5	19, 20, 22,,	55·6	21st ,,	71·3	59·8	65·6
		Raniganj ...	29·719	30·026	+·026	Variable	57	76·7	19, 22 ,,	55·2	23rd ,,	70·6	58·5	64·6
	Bankura	Bankura ...	29·718	29·985	+·024	Calm & N.	58	78·8	19th ,,	55·4	21st ,,	71·7	59·2	65·5
	Birbhum ... ... Murshidabad	Berhampore...	29·982	30·001	+·026	Variable	53	77·6	19th ,,	53·0	21st ,,	71·3	57·8	64·6
North Bengal.	Pabna	Sirajganj ...	29·994	29·993	+·034	Variable	31	76·5	20th ,,	53·6	21st ,,	72·4*	55·3*	63·9*
	Bogra	Bogra ...	29·975	29·993	+·053	Calm	48	73·3	20th ,,	50·2	22nd ,,	72·9	54·8	63·9
	Rajshahi	Rampur Boalia.	29·979	30·002	+·055	Calm	63	75·9	24th ,,	52·5	22nd ,,	71·9	55·4	63·7
	Malda	Malda ...	29·982	30·018	—	NE	85	78·6	19th ,,	49·7	21st ,,	72·5	54·7	63·6
	Dinajpur	Dinajpur ...	29·930	30·008	+·032	W	75	78·6	19th ,,	48·5	22nd ,,	71·7	53·8	62·8
	Rangpur	Rangpur ...	29·927	30·011	+·032	W	44	77·7	19th ,,	48·1	22nd ,,	71·9	52·7	62·4
	Jalpaiguri ... ... Kuch Bihar	Jalpaiguri ..	29·778	30·053	+·054	Variable	53	74·9	21st ,,	45·6	21st ,,	70·6	51·8	61·2
	Darjeeling	Darjeeling* ...	22·927	—	—·041	Variable	207	46·5	20th ,,	28·9	23rd ,,	43·5†	32·1	38·2†
	Sikkim	Gnatong ...	19·111	—	—	WNW	139	40·9	22nd ,,	2·8	24th ,,	29·8	9·2	19·5
East Bengal.	Chittagong	Chittagong ...	29·951	29·989	+·014	NNEly	49†	82·7	20th ,,	54·1	22nd ,,	73·9	62·7	70·3
	Chittagong Hill Tracts	Demagiri ...	Observations not received.											
	Backergunge	Barisal ...	30·020	29·988	+·040	Calm	79	80·3	19th Feb.	57·1	21, 22 ,,	76·9	60·7	68·8
	Noakhali	Noakhali ...	30·006	29·997	+·028	N	108	78·9	19th ,,	52·0	22nd ,,	76·8	59·0	67·9
	Faridpur	Faridpur ...	30·118	30·014	+·049	Calm	57	73·5	19, 20, 22. ,,	52·5	22nd ,,	72·4	56·9	64·7
	Dacca	Dacca ...	30·023	29·994	+·028	Ely	86	80·6	20th ,,	54·8	22nd ,,	74·1	58·2	66·1
	Tippera	Comilla ...	30·012	29·937	+·037	Variable	48	81·4	20th ,,	40·9	25th ,,	76·1	57·5	66·8
	Mymensingh	Mymensingh	29·979	29·996	+·017	Variable	72	77·8	20th ,,	51·1	21st ,,	73·3	55·8	64·6
North Bihar.	Purnea	Purnea ...	29·927	30·013	+·046	Calm	55	77·2	19th ,,	50·3	22nd ,,	70·2	53·6	61·9
	Bhagalpur	Bhagalpur ..	29·890	30·011	+·055	Calm	25*	77·3	22nd ,,	51·0	21st ,,	70·5	54·9	62·7
	Darbhanga	Darbhanga ...	29·881	30·011	+·035	WSW & NEly	118	75·0	19th ,,	50·7	20, 21 ,,	68·7	53·5	61·1
	Muzaffarpur	Muzaffarpur...	29·865	30·008	—	WSW	127	74·2	19th ,,	48·8	21st ,,	69·0	53·8	61·4
	Champaran	Motihari ...	29·790	29·985	+·031	Variable	16[illegible]	75·2	19, 24 ,,	46·9	20th ,,	70·1	51·9	61·0
	Saran	Chapra ...	29·855	30·001	+·052	ESE	125	76·4	19th ,,	47·7	21st ,,	69·3	52·9	61·2
South Bihar.	Shahabad	Dehri ...	29·657	29·984	+·001	SEly	94	78·3	22nd ,,	53·0	21, 25 ,,	71·8	54·1	63·0
		Buxar ...	29·799	30·008	+·020	W	131	77·6	22nd ,,	45·4	21st ,,	70·0	52·3	61·2
		Arrah ...	29·838	29·992	+·036	Ely	57	76·1	22nd ,,	47·4	21st ,,	68·9	52·7	60·8
	Gaya	Gaya ...	29·653	30·005	+·016	Ely	146	81·2	19th ,,	50·8	21st ,,	72·6	54·7	63·6
	Patna	Bankipore ...	29·867	30·013	+·026	NEly	133	75·2	22nd ,,	48·2	21st ,,	68·8	53·5	61·2
	Monghyr													
	Sontal Parganas ...	Naya Dumka	29·545	30·022	+·048	WNW	54	77·0	19, 23 ,,	51·1	21st ,,	69·8	55·9	62·8
Chota Nagpur.	Hazaribagh	Hazaribagh ...	27·962	30·004	—·008	Variable	194	75·2	22nd ,,	47·8	21st ,,	69·4	52·0	60·8
	Lohardaga ... ... Palamau	Ranchi ...	27·832	29·995	—·007	Variable	149	73·7	19th ,,	49·4	21, 23 ,,	67·4	52·3	59·8
	Singhbhum	Chaibassa ...	29·244	29·987	+·013	NE	46	80·8	19th ,,	55·6	21st ,,	73·7	59·1	66·5
	Manbhum													

* Mean of 6 days. | † Mean of 5 days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period
The humidity of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01
rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station
district, i.e., from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one or

for the week ending Saturday, the 25th of February 1893.

					DISTRICT OBSERVATIONS.										
					Of week				Rainfall						
									Since 1st of month.			Since 16th October 1892.			
Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.	District.
—	73·9	85	6·1	0·03		0·12		0·19		0·73			7·28		Puri.
+8·0	75·4	84	2·4	0·61											
+0·5	73·4	89	7·7	0·25											
−2·6	71·8	77	6·7	0·79		0·13		0·18		0·67			5·06		Cuttack.
−3·9	64·9	90	5·7	1·33		0·20		0·32		0·83			4·15		Balasore.
−5·8	63·5	86	7·7	2·62	2·57	0·51	2·75	0·38	4·06	1·05	+3·01	12·42	4·39	+8·03	Midnapore.
−6·3	63·3	88	8·3	2·37	2·32	0·55	2·43	0·52	5·05	1·27	+3·78	13·92	4·52	+8·40	24-Parganas.
−5·5	66·5	91	7·7	0·60											
					2·72	0·55	2·50	0·56	4·78	1·30	+3·48	8·61	3·73	+4·88	Howrah.
					2·45	0·24	3·00	0·37	5·53	0·87	+4·66	13·29	3·36	+9·93	Hooghly.
−3·9	62·8	86	7·4	4·11	2·82	0·35	3·00	0·43	5·26	1·00	+4·26	9·86	3·16	+6·70	Nadia.
					1·61	0·55	2·67	0·55	5·27	1·24	+4·03	12·34	4·32	+8·02	Khulna.
−7·2	62·4	90	7·9	2·18	2·25	0·40	3·00	0·50	4·27	1·10	+3·17	13·79	3·71	+10·08	Jessore.
−7·1	61·9	83	8·6	3·39	2·92	0·26	3·25	0·44	4·61	0·94	+3·67	9·63	3·03	+6·60	Burdwan.
−6·5	61·0	85	5·0	2·83											
−5·8	61·3	84	8·0	2·85	3·12	0·22	3·25	0·50	4·66	0·73	+3·93	10·00	2·77	+7·23	Bankura.
					2·64	0·06	2·67	0·28	4·86	0·69	+4·17	8·87	2·31	+6·56	Birbhum.
−6·5	60·8	96	7·9	2·56	2·18	0·09	2·33	0·31	3·94	0·59	+3·35	6·44	2·12	+4·32	Murshidabad.
−2·7*	60·4	93	6·4	2·25	2·13	0·29	3·00	0·44	4·34	1·05	+3·29	6·06	3·13	+2·93	Pabna.
−3·1	59·9	90	6·0	2·01	1·84	0·29	2·25	0·19	2·83	0·79	+2·04	4·08	2·36	+1·72	Bogra.
−2·8	61·6	88	5·9	2·74	2·31	0·16	2·67	0·37	3·87	0·61	+3·26	4·86	2·40	+2·46	Rajshahi.
—	59·5	77	5·0	1·27	1·14	0·02	2·00	0·08	2·51	0·42	+2·09	3·56	2·23	+1·33	Malda.
−3·4	57·3	89	7·4	0·73	0·93	0·08	1·40	0·21	1·64	0·46	+1·18	2·55	1·78	+0·77	Dinajpur.
−2·9	58·9	90	2·6	0·70	0·65	0·08	1·50	0·20	0·93	0·44	+0·49	2·62	2·10	+0·52	Rangpur.
−3·8	56·7	88	6·4	0·57	0·58	0·17	1·00	0·32	1·08	0·38	+0·70	2·76	3·31	−0·55	Jalpaiguri.
					0·35	0·03	1·00	0·03	0·77	0·40	+0·37	2·33	1·95	+0·39	Kuch Bihar.
−3·8†	36·9	77	6·8	0·43	0·56	0·12	1·00	0·31	0·90	0·61	+0·29	6·26	3·83	+2·43	Darjeeling.
—	21·9	77	7·1	1·34											Sikkim.
−0·5	66·6	87	7·7	0·74	0·42	0·18	1·00	0·49	0·58	0·99	−0·41	13·44	6·66	+6·78	Chittagong.
					0·92	0·64	2·00	0·85	1·49	1·35	+0·14	10·10	6·32	+3·78	Chittagong Hill Tracts.
−2·3	64·9	94	8·0	1·86	1·71	0·51	2·25	0·58	3·40	1·17	+2·23	11·60	5·47	+6·13	Backergunge
−1·4	64·9	90	2·6	0·89	0·95	1·01	2·00	0·77	2·14	1·65	+0·49	17·80	7·21	+10·59	Noakhali.
−3·9	62·2	93	6·3	3·57	2·62	0·45	3·00	0·58	4·50	1·19	+3·31	11·93	3·41	+8·52	Faridpur.
−5·9	61·7	90	6·9	2·00	2·22	0·25	3·00	0·31	3·61	0·99	+2·62	12·75	3·90	+8·85	Dacca.
−3·1	62·6	91	4·9	1·75	1·63	0·40	3·50	0·66	2·42	1·12	+1·30	11·32	4·16	+7·16	Tippera.
−2·4	60·1	90	6·1	2·64	1·78	0·32	2·00	0·43	2·82	0·94	+1·88	6·23	3·32	+2·91	Mymensingh.
−5·3	56·7	89	4·7	0·67	0·69	0·01	1·00	0·05	1·23	0·40	+0·83	2·04	2·25	−0·21	Purnea.
−3·5	59·1	84	7·9	1·33	1·24	0·03	1·75	0·08	2·12	0·40	+1·72	3·47	2·00	+1·47	Bhagalpur.
−5·4	57·3	86	6·1	0·32	0·34	0·02	1·00	0·07	1·20	0·33	+0·87	2·70	1·91	+0·79	Darbhanga.
—	56·3	94	5·6	0·60	0·45	0·09	1·00	0·16	1·36	0·40	+0·96	2·57	2·06	+0·51	Muzaffarpur.
−2·7	56·7	83	6·0	0·83	0·72	Nil	1·00	0·00	1·57	0·30	+1·27	2·32	1·56	+0·76	Champaran.
−4·9	56·3	89	5·7	0·34	0·42	0·04	1·00	0·19	1·33	0·41	+0·92	2·53	2·10	+0·43	Saran.
−4·8	59·4	77	5·7	1·73											
−5·5	57·9	82	7·1	0·69	1·24	0·10	2·60	0·20	1·78	0·39	+1·39	2·91	2·52	+0·39	Shahabad.
−5·4	56·5	91	6·1	0·88											
−8·6	57·8	85	6·9	2·14	2·11	0·05	3·00	0·19	2·74	0·32	+2·42	3·32	2·16	+1·66	Gaya.
−6·3	58·2	84	7·1	0·86	1·29	0·03	1·50	0·14	2·67	0·34	+1·73	2·89	2·20	+0·69	Patna.
					1·88	0·03	2·67	0·16	3·45	0·41	+3·04	5·20	2·38	+2·82	Monghyr.
−5·7	59·4	85	6·9	1·69	1·69	0·08	2·67	0·24	3·04	0·31	+2·71	5·25	2·02	+3·23	Sonthal Parganas.
−7·2	56·5	80	7·9	2·30	2·34	0·15	3·40	0·28	3·56	0·60	+2·96	8·47	2·46	+6·01	Hazaribagh.
−6·5	55·7	84	8·4	3·24	2·92	0·12	4·00	0·38	4·67	0·68	+3·99	11·82	3·25	+8·57	Lohardaga.
					1·44	0·03	3·00	0·33	1·77	0·33	+1·44	3·41	2·68	+0·73	Palamau.
−5·4	60·9	93	8·6	3·18	3·18	0·17	4·00	0·35	5·81	0·67	+5·14	12·34	3·46	+8·88	Singhbhum.
					2·88	0·11	5·00	0·27	4·53	0·67	+3·86	8·87	2·72	+6·15	Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 25th of February 1893.

Meteorological Division.	District.	Station.	RAINFALL.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th October 1892.	Average rainfall from 16th October to date.
			Sunday, 19th.	Monday, 20th.	Tuesday, 21st.	Wednesday, 22nd.	Thursday, 23rd.	Friday, 24th.	Saturday, 25th.							
ORISSA	Puri ...	Puri ...	...	...	0·02	..	...	0·01	...	Nil	0·03	0·10	2·61	0·71	14·84	8·01
		Khurda ...	...	...	0·23	0·02	0·02	.	...	1	0·27	0·10	1·39	0·54	7·03	5·51
		Banpur ...	..	...	0·82	3·20	.	.	...	2	4·02	0·03	4·75	0·99	12·11	6·89
		False Point ...	...	...	0·25	...	...	...	...	1	0·25	0·26	0·42	0·78	12·22	8·69
		Gop ..	.	...	0·29							?		?		?
		Satpara .	.	...	0·18							?		?		?
		Pipli ...	0·25	...	0·07	0·06	..	0·72				?		?		?
	Cuttack ...	Jagatsingpore										0·18		0·76		4·90
		Banki .	1·29	0·33	...	0·33	0·02	..	.	3	1·91	0·04	2·19	0·47	7·34	4·86
		Cuttack ..	0·52	..		..	.			1	0·52	0·04	0·93	0·50	11·18	5·06
		Kendrapara ..	0·51	..	...	...	..	0·03	0·02	1	0·56	0·08	0·70	0·68	8·64	5·33
		Jajpur ...	...	.	...	...	0·05	0·58	0·42	2	1·05	0·31	1·68	0·93	6·52	5·03
		Dharmsala ...	0·32		...	...	...	1·45				?		?		?
		Salipore .	1·29	0·30								?		?		?
		Pal Lahara ...										?		?		?
	Balasore ...	*Akhyapada* ...	...	...	...	.	0·05	0·37	...	1	0·42	?	0·72	?	5·14	?
		Chandbali ..	...		...	0·10		0·56				0·03		0·70		5·25
		Bhadrak ..	..	0·71	...	..	0·10	0·20	...	3	1·00	0·16	4·00	0·89	11·18	4·58
		Soro ..		0·31	...	0·15	0·10	0·65	..	4	1·21	0·27	2·90	0·75	9·78	3·80
		Balasore ..	0·03	0·65	...	...	0·79	0·09	...	2	1·57	0·33	3·55	1·19	14·39	5·38
		Jellasore ...										0·26		0·73		2·99
		Baripodah .	0·25	...	...	1·42	0·11	0·04	0·51	4	2·36	0·13	4·44	0·74	12·61	2·83
SOUTH-WEST BENGAL.	Midnapore	Contai ...	0·01	1·24	0·01	...	0·18	0·64	...	3	2·08	0·41	3·28	0·94	13·96	6·49
		Tamluk ..	..	1·46	...	...	0·84	0·09	...	2	2·39	0·88	3·41	1·38	9·21	4·69
		Midnapore ...		0·65	...	..	1·85	0·21	..	3	2·71	0·48	4·28	1·12	12·46	4·09
		Ghatal ...	0·14	1·39	...	...	1·55	0·02	0·01	3	3·11	0·27	5·28	0·76	14·05	2·18
		Kukrahaty ..	...	1·42	...	...	1·12	0·74	...	3	3·28	?	4·32	?	9·23	?
		Garhbeta ...	..	0·38	...	...	1·75	0·12	...	3	2·25	?	3·97	?	7·93	?
	24-Parganas ...	Saugor Island*	...	0·11	...	...	0·31	0·18	...	3	0·60	0·26	1·31	0·53	17·45	6·52
		Diamond Harbour ..	...	2·74	...	...	0·50	0·88	...	3	4·12	0·79	5·60	1·61	12·99	5·12
		Canning Town	...	1·16	...	..	0·56	1·12	...	3	2·84	?	4·39	?	14·22	?
		Alipore (Jail)	...	1·41		...	0·60	0·36	...	3	2·3	0·56	4·15	1·55	9·70	4·71
		Barrackpore...	...	1·02	...	...	0·76	0·06	0·03	2	1·87	0·53	6·18	1·21	14·8	3·78
		Dum-Dum ...	...	1·67	...	...	0·84	...	...	2	2·51	0·64	5·44	1·26	10·05	3·89
		Barasat .	...	1·21	...	..	0·74	..	...	2	1·95	0·49	5·24	1·21	12·04	4·03
		Basirhat ...	..	2·50		...	0·35	...	...	2	2·85	0·60	6·54	1·22	13·21	3·67
		Howrah	...	1·80	0·08	...	0·71	0·15		3	2·74	0·61	4·45	1·27	7·83	4·10
	Howrah ...	Mohesreka ...	...	1·60	...	...	1·05	0·04	...	2	2·69	0·50	5·08	1·04	9·34	3·34
		Ulubaria ...	...	0·90	...	...	0·80	0·14	...	3	1·84	?	3·49		7·65	?
	Hooghly ...	Serampore ...	...	1·00	...	...	0·76	0·11	...	3	1·87	0·19	6·26	0·76	15·72	3·31
		Hooghly ...	...	1·04	0·18	...	1·00		...	3	2·22	0·23	5·62	0·83	13·89	3·59
		Jahanabad .	...	1·11	..	...	1·79	0·37	...	3	3·27	0·24	4·74	1·02	10·16	3·39
	Nadia ...	Ranaghat .	.	1·25	..	.	0·83	0·81	...	3	2·89	0·31	5·33	0·94	11·61	3·33
		Krishnagar ...	...	0·85		...	0·86	2·40	...	3	4·11	0·24	6·37	0·87	12·65	2·61
		Chuadanga .	..	0·41		...	0·82	0·49		3	1·72	0·32	3·48	0·99	?	3·38
		Meherpore ...	...	1·23	...	...	1·37	0·33	.	3	2·93	0·44	6·50	1·11	8·89	3·07
		Kushtia	...	0·57	...	...	0·90	0·64	0·03	3	2·14	0·42	4·55	1·10	8·05	3·37
	Khulna ..	Satkhira	.	1·31	...	...	0·36	0·03	...	2	1·70	0·78	5·75	1·35	10·99	4·16
		Bagerhat .	...	1·08	...	..	...	0·38	...	2	1·46	0·20	4·20	1·07	12·85	4·18
		Khulna ...	...	1·11	0·15	...	0·23	0·19	...	4	1·68	0·68	5·86	1·30	13·20	4·53
		Nakipur ...	...	1·65	.	...	0·08	0·61		2	2·34	?	3·25	?	8·77	?
		Rampal ...	...	1·67	...	..	...	0·30	...	2	1·97	?	3·87	?	10·62	?
	Jessore ...	Narail .	..	0·70	..	...	0·34	0·55	...	3	1·59	0·23	2·85	1·05	12·33	4·20
		Jessore ..	..	0·98	.	..	0·48	0·72	..	3	2·18	0·41	3·91	1·03	18·14	4·07
		Jhenidah	.	0·53	...		1·3	1·60	..	3	3·46	0·61	5·35	1·39	14·16	3·76
		Magura .	...	0·48	...	.	0·44	1·55	...	3	2·47	0·24	4·53	0·80	11·83	2·96
		Bangaon	..	0·52	...	...	0·63	0·58	..	3	1·53	0·53	4·73	1·12	12·50	3·69
	Burdwan ..	Kalna	.	0·71	...	...	1·55	0·79		3	3·05	0·31	4·75	0·90	12·52	3·16
		Burdwan ..	..	1·09	...	..	0·88	1·41	0·01	3	3·39	0·25	5·39	0·77	11·17	2·93
		Katwa	...	0·71	..	..	1·32	0·38	0·01	3	2·42	0·25	4·09	0·96	8·36	3·20
		Raniganj ..	.	0·59	...	0·07	1·44	0·38	0·14	4	2·83	0·22	4·31	1·09	6·45	2·79
		Mankur ...	...	0·59	...	...	1·78	0·55	0·11	4	3·43	?	4·60	?	6·81	?
	Bankura	Bankura .	..	0·42	...	0·01	1·50	0·90	0·02	3	2·85	0·33	4·15	0·81	9·82	3·04
		Vishnupur ...	...	0·53	..	...	1·56	0·71		3	2·79	0·29	4·48	0·95	10·99	2·80
		Maliara ..	..	0·47	...		2·95	0·51	0·08	3	5·11	0·18	4·57	0·53	6·39	2·13
		Khatra ...	...	0·90	...	0·84	1·81	0·17	..	4	3·71	0·09	5·42	0·64	12·77	3·12
		Indas .	...	0·72	...	...	1·32	0·95	..	3	2·99	?	4·48	?	10·39	?
		Kotalpur .	...	0·55			2·21			2	2·76	?	4·01	?	8·16	?
		Onda	...	0·39	0·42	0·92	0·75	0·84	0·07	5	3·39	?	4·59	?	9·92	?
		Gangajalghati	...	0·62	...	...	2·15	0·63	0·04	3	3·44	?	4·24	?	6·61	?
		Raipur .	..	1·35	...	...	2·18					?		?		?
		Sonamukhi ...	..	0·84	..	...	1·41	2·38	...	3	4·61	?	6·76	?	12·97	?
	Birbhum ...	Suri	...	0·85	..	...	2·15	0·03	0·09	2	3·12	0·57	6·34	0·58	8·85	2·63
		Hetampore .	...	0·63	...	..	1·71	0·07	0·03	2	2·44	0·06	4·82	0·83	10·29	2·03
		Rampur Hat...	...	0·54	.	...	1·45	0·24	0·12	4	2·35	0·06	5·42	0·65	7·69	2·28
		Bolpur	...	0·75	.		1·79	0·31	0·10	4	2·85	?	5·39	?	8·05	?
		Murarai	..	0·52	..	...	1·10	...	..	2	1·62	?	3·08	?	4·62	?
	Murshidabad	Kandi	...	1·05	...	...	2·[illegible]7	0·96	...	2	3·18	0·06	5·89	0·76	9·19	2·37
		Berhampore ...	...	0·78	...	.	1·59	0·04	0·05	2	2·56	0·16	13·38	0·80	8·29	2·55
		Lalbagh ..	...	0·57	...	...	1·47	0·03	0·06	2	2·13	0·09	5·15	0·59	6·87	1·77
		Azimganj ..	...	0·49	..	.	1·58		0·18	3	2·36	0·13	3·53	0·42	5·42	2·15
		Jangipur ..	...	0·38	...		0·75	0·05	0·04	2	1·12	0·09	3·09	0·45	5·06	1·88
		Lalgola ..	...	0·45	.	0·95	1·75	.	0·07	3	3·22	0·10	4·17	0·53	5·87	1·98
		Akhriganj ...	.	0·15	..	...	1·50	0·5[illegible]	0·06	3	2·72	?	3·82	?	5·16	?
		Patkabari .	..	0·70	...	...	1·29	0·30	...	3	2·10	?	5·50	?	8·30	?
NORTH BENGAL.	Pabna ...	Pabna	...	0·66	...	...	0·84	0·15	0·03	3	2·01	0·27	4·80	0·99	7·51	2·86
		Sirajganj ...	..	0·20	...	...	1·51	0·73	0·01	3	2·25	0·31	3·87	1·10	4·50	3·36
	Bogra ..	Sherpore ..	...	0·11	...	...	1·52	0·80	...	3	2·43	0·27	3·76	1·09	5·12	2·79
		Nowkeilla ...	...	0·10	...	...	1·60	0·63	0·04	3	2·37	0·27	5·39	1·00	4·84	2·55
		Bogra ...	...	0·02	...	...	1·51	0·46	0·04	2	2·03	0·17	3·05	0·61	4·21	2·65
		Panchbibi ...	...	...	...	...	0·47	0·04	...	1	0·51	0·08	1·12	0·44	2·14	1·30
	Rajshahi ..	Boalia ...	...	0·41	...	...	1·21	1·00	0·03	3	2·65	0·05	3·95	0·46	5·48	2·23
		Natore ...	...	0·25	...	...	1·46	0·96	...	3	2·68	0·09	4·59	0·69	5·60	2·83
		Naugaon ...	.	..	...	...	1·50	0·10	...	2	1·60	0·35	3·07	0·69	3·53	2·13
		Lalpore ..	...	0·54	...	...	1·55	0·31	...	3	2·10	?	3·94	?	4·92	?
		Manda ..	...	0·80	...	...	1·60	...	...	2	2·40	?	2·82	?	3·26	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 25th of February 1893—contd.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 19th.	Monday, 20th.	Tuesday, 21st.	Wednesday, 22nd.	Thursday, 23rd.	Friday, 24th.	Saturday, 25th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BENGAL—concld.	Malda	Maldah ...	...	...	...	0·07	0·98	0·02	0·20	3	1·27	0·04	3·02	0·41	4·49	2·47
		Chanchal ...	...	...	...	...	0·60	0·36	0·05	2	1·01	Nil	1·99	0·41	2·61	1·93
		Gajol ...	...	...	...	...	0·70	0·10	0·03	2	0·83	?	1·81	?	2·19	?
		Sibganj ...	...	...	...	...	1·34	0·20	...	2	1·54	?	4·04	?	5·40	?
	Dinajpur ..	Mohadebpore	...	...	...	...	1·25	...	0·07	1	1·32	0·01	2·56	0·47	3·17	1·49
		Churaman ...	...	0·01	...	...	0·63	0·29	0·02	2	0·95	0·03	1·68	0·47	2·37	1·50
		Raiganj ...	...	...	...	...	0·60	...	...	1	0·60	0·07	1·15	0·58	2·71	1·51
		Dinajpur ...	...	0·05	...	..	0·57	0·05	0·01	1	0·68	0·16	1·06	0·51	1·94	2·98
		Balurghat ...	...	0·06	...	...	0·78	0·22	0·04	2	1·10	0·12	1·78	0·26	2·40	1·45
		Thakurgaon	...	...	...	...	0·56	...	...	1	0·56	?		?		?
	Rangpur ...	Bhawanigunge (*Gyabanda*)	...	...	...	...	0·70	0·10	...	2	0·80	0·14	1·02	0·58	1·69	2·24
		Rangpur ...	...	0·12	...	...	0·58	...	...	2	0·70	0·05	1·13	0·32	5·15	2·50
		Kurigaon ..	...	...	...	...	0·49	...	...	1	0·49	0·04	0·59	0·32	1·25	1·85
		Bagdogra (*Nilphamari*)	...	...	...	...	0·59	...	...	1	0·59	0·10	0·97	0·52	2·36	1·76
		Ulipore ...	...	...	...	...	0·43	...	...	1	0·43	?	0·66	?	1·06	?
	Jalpaiguri ...	Jalpaiguri ...	...	...	...	...	0·58	...	...	1	0·58	0·17	1·08	0·38	2·76	3·31
		Alipore Dooar	...	...	...	...	0·23	...	...	1	0·23	?	0·67	?	2·87	?
		Fallacotta ...	...	...	..	...	0·45	...	...	1	0·45	?	0·80	?	2·45	?
		Debiganj ...	...	...	...	...	0·80	...	..	1	0·80	?	0·80	?	2·05	?
		Bhagatpore ... (*Nagrakatta*)	...	...	...	...	0·36	...	...	1	0·36	?	0·63	?	8·83	?
	Kuch Bihar	Dinhatta ...	...	...	...	...	0·35	...	...	1	0·35	0·02	0·57	0·42	1·85	2·01
		Kuch Bihar ...	...	...	...	..	0·30	...	...	1	0·30	0·01	0·83	0·23	2·58	1·91
		Mickliganj ...	...	...	...	...	0·39	...	..	1	0·39	0·05	0·90	0·53	2·50	2·08
		Mathabhanga	...	...	...	.	0·34	..	..	1	0·34	0·02	0·77	0·44	2·54	1·75
	Darjeeling ..	Buxa ...	...	...	...	..	0·34	...	...	1	0·34	0·17	0·75	0·82	15·38	5·51
		Siliguri ...	...	...	...	...	0·48	...	...	1	0·48	Nil	0·92	0·23	3·83	1·82
		Darjeeling ...	...	...	...	0·10	0·43	..	...	2	0·53	0·15	1·09	0·72	2·65	5·17
		Kalimpong ...	...	...	...	...	0·97	..	...	1	0·97	0·17	1·22	0·65	3·05	2·75
		Kurseong ...	...	...	...	...	0·81	...	...	1	0·81	?	1·46	?	4·64	?
EAST BENGAL	Chittagong ..	Cox's Bazar ...	...	0·08	0·03	...	...	...	...	Nil	0·11	0·31	0·15	0·74	13·39	7·51
		Chittagong ...	...	0·34	0·39	...	...	...	...	2	0·73	0·04	1·03	1·22	13·58	5·73
		Kutubdia ...	...	0·35	0·26							?	?	?		?
		Satkanya ...	...	0·61								?	?	?		?
		Kodala ...	...									?	?	?		?
		Fenoa ...	...	0·45	..	0·40						?	?	?		?
		Mirsarai ...	...	0·50	0·12	...	0·01	...	...	2	0·63	?	1·14	?	?	?
	Chittagong Hill Tracts.	Rangamati ...	...	0·88	0·31	...	...	0·03	...	2	0·92	0·64	1·49	1·35	10·10	6·32
		Bundarban ...	...	0·36	0·10	...	...	...	...	2	0·46	?	0·16	?	9·15	
	Backergunge	Patuakhali ...	..	1·37	0·30	...	...	...	...	2	1·67	0·34	2·92	0·98	11·90	5·81
		Pirojpur ...	...	1·79	0·08	...	0·05	0·13	...	2	2·05	0·52	4·51	1·31	12·56	5·37
		Barisal	...	1·33	0·37	...	..	0·24	...	3	1·94	0·63	2·57	1·29	10·33	5·58
		Gournaddi ...	...	0·80	0·16	.	0·08	0·17	...	3	1·21	?	2·52	?	8·35	?
		Bhola ...	...	0·88	0·28	...	...	...	...	2	1·16	0·54	3·16	1·04	11·40	5·01
		Daulatkhan ...	..	1·10	0·07	...	0·03	...	...	1	1·20	?	2·77	?	14·37	?
		Bauphal ...	...		..	..	0·04	0·24				?		?		?
	Noakhali	Noakhali ..	...	0·66	0·11	...	0·03	0·09	...	2	0·89	0·07	2·07	1·49	18·41	6·31
		Fenny ...	...	0·84	0·10	...	...	0·06	...	2	1·00	1·05	2·19	1·79	17·17	8·06
		Harishpore ...	...	1·05								?		?		?
		Ramganj ...	.	0·90	0·40	...	...	...	.	2	1·30	?	3·55	?	14·28	?
	Faridpur ..	Madaripur ...	...	1·05	0·09	...	0·17	0·61	...	3	1·92	0·69	3·33	1·31	9·14	3·63
		Faridpur ...	...	1·07	...	...	0·88	1·62		3	3·57	0·42	5·47	1·30	16·35	3·44
		Goalundo ...	..	1·15	..	...	0·53	0·70	...	3	2·38	0·25	4·73	0·97	16·05	3·17
	Dacca	Munshiganj ..	..	1·15	...	...	0·37	0·92	...	3	2·44	0·44	3·35	1·27	10·61	4·51
		Dacca ...	...	0·54	...	...	0·65	0·94	...	3	2·13	0·35	3·21	1·05	15·23	3·21
		Narayanganj...	.	0·63	0·03	...	0·56	1·21	...	3	2·43	0·06	3·23	0·67	13·36	4·71
		Manikganj ...	...	0·83	0·02	..	0·37	0·67		3	1·89	0·15	4·65	0·95	11·61	3·01
		Joydebpore ...	...	0·46	...	..	0·37	0·47	0·01	3	1·31	?	2·95	?	7·04	?
	Hill Tippera Tippera	Agartola ...	...	0·40	...	..	0·47	0·86	...	3	1·73	0·20	2·27	0·96	9·68	4·41
		Comilla ...	...	0·46	0·35	...	0·42	0·53	...	4	1·76	0·43	2·14	1·05	11·36	4·25
		Chandpore ...	...	1·00	0·10	...	0·12	0·30	...	4	1·52	0·38	2·84	0·93	10·85	3·42
		Brahmanbaria	...	0·40		...	0·50	0·66	.	3	1·56	0·59	2·41	1·51	13·35	4·55
		Ramchandrapore	...	...	...	...	0·09	0·09	...	Nil	0·18	?	0·58	?	8·71	?
		Nasirnagar ...	...	0·10	..	...	0·58					?		?		?
		Daudkandi ...		1·50	..	...	0·30	0·82	...	3	2·62	?	2·82	?	7·52	?
		Kasba ...	..	0·10	.	...	0·15	0·60	..	3	0·85	?	1·35	?	14·04	?
		Laksham ...	...	0·70	1·10	...	0·10					?		?		?
	Mymensingh.	Kishorganj ...	...	0·21	..	...	0·60	0·81	...	3	1·62	0·26	1·49	0·83	8·54	3·23
		Atia (*Tangail*)	...	0·19	..	...	0·63	0·33	...	3	1·15	0·35	2·93	1·19	6·17	2·23
		Mymensingh ...	...	0·02	...	..	1·29	0·73	...	2	2·04	0·33	3·21	0·94	4·39	3·42
		Jamalpur	...	..	..	.	1·85	0·08	.	1	1·93	0·34	2·74	1·11	4·77	3·34
		Netrakona ..	...	...	.	...	2·05	0·08	...	1	2·13	0·30	3·13	0·60	7·31	3·28
		Subornakhally	...	0·09	...	...	1·50	0·75	...	2	2·34	?	3·53	?	4·22	?
		Durgapore ..	..	..	...	...	1·00	0·50	.	2	1·50	?	1·94	?	4·41	?
		Sherepore Town	...	...	.	...	1·36	0·56	...	2	1·92	?	2·70	?	6·21	?
		Dewanganj ...	...	...	...	...	1·20					?		?		?
NORTH BIHAR	Purnea ..	Kishanganj ...	...	...	...	...	0·76	...	..	1	0·76	0·01	1·40	0·37	2·16	2·21
		Araria ...	...	...	...	...	0·60	0·04	...	1	0·64	0·01	1·03	0·40	2·14	1·93
		Purnea ...	...	.	...	...	0·60	0·02	0·05	1	0·67	Nil	1·24	0·41	2·68	2·53
		Gondwara (Korah) ...	...	...	...	..	0·46	...	0·10	2	0·56	?	1·23	?	1·23	?
		Barsoe ...	...	..	...	...	0·58	0·03	0·05	1	0·66	?	1·16	?	1·86	?
		Forbesganj .	...	..	...	..	0·38	0·32	..	2	0·70	?	1·30	?	1·88	?
		Kaliaganj ..	...	...	...	...	0·66	...	...	1	0·66	?	0·97	?	1·32	?
	Bhagalpur ...	Madhipura ...	...	...	...	...	0·70	...	0·45	2	1·15	0·04	1·05	0·49	2·69	1·98
		Bongaon (Sujabad)	...	...	...	...	0·78	...	0·13	2	0·91	?	1·17	?	2·27	?
		Supaul ...	...	...	...	...	0·28	...	...	1	0·28	0·01	0·85	0·35	2·42	1·74
		Protabganj .	...	...	.	...	0·26	...	...	1	0·26	?	0·92	?	1·61	?
		Bhagalpur	...	.	...	...	1·04	0·09	0·20	2	1·33	0·63	3·14	0·50	3·32	2·07
		Banka ...	...	0·07	...	...	1·72	...	0·40	2	2·19	0·63	2·81	0·35	4·98	2·18
		Colgong ...	...	...	...	...	0·90	0·05	0·19	2	1·14	?	2·67	?	4·86	?
	Darbhanga ..	Tajpur ..	...	...	...	...	0·52	...	...	1	0·52	0·01	1·14	0·35	1·98	1·83
		Darbhanga ...	...	...	...	...	0·29	...	0·03	1	0·32	0·06	0·75	0·38	2·73	1·99
		Madhubani ...	...	...	...	...	0·19	...	...	1	0·19	Nil	1·75	0·29	3·42	2·03
		Bahera ...	...	...	...	...	0·30	...	...	1	0·30	?	0·62	?	2·30	?
		Roshera ..	...	...	..	...	0·31	...	...	1	0·31	?	0·78	?	1·42	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 25th of February 1893—concld.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 19th.	Monday, 20th.	Tuesday, 21st.	Wednesday, 22nd.	Thursday, 23rd.	Friday, 24th.	Saturday, 25th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BIHAR—concluded	Muzaffarpur...	Sitamarhi ...	...	...	...	...	0·38	0·07	...	1	0·45	0·22	1·60	0·44	3·05	1·66
		Muzaffarpur	...	...	...	...	0·23	...	...	1	0·23	0·02	0·76	0·38	2·09	2·60
		Hajipur	..	...	...	...	0·62	...	0·06	1	0·68	0·02	1·71	0·36	2·57	1·86
		Paru	...	...	...	...	0·27	...	...	1	0·27	?	1·08	?	1·70	?
		Mahwa (Chitwarra.)	...	...	...	...	0·45	...	...	1	0·45	?	1·55	?	2·40	?
		Sirhar	...	...	...	...	0·15	0·03	...	1	0·18	?		?		?
		Pupri										?		?		?
	Champaran	Motihari	...	...	...	...	0·83	...	...	1	0·83	Nil	1·90	0·27	2·58	1·50
		Bettiah	...	...	...	...	0·60	...	...	1	0·60	Nil	1·23	0·30	2·03	1·57
		Bagaha ...	...	...	...	...	0·54	0·03	...	1	0·57	?	1·09	?	2·50	?
		Burharwa	0·02	...	...	...	0·38	...	...	1	0·40	?	1·32	?	1·78	?
	Saran	Gopalganj ..	...	...	...	...	0·46	...	0·02	1	0·48	0·08	1·50	0·56	2·34	1·80
		Siwan	...	..	...	...	0·37	...	0·06	1	0·43	0·02	1·37	0·42	2·67	2·43
		Chapra ...	...	...	...	...	0·38	...	0·04	1	0·42	0·03	1·25	0·28	2·62	2·13
SOUTH BIHAR	Shahabad ..	Buxar ..	...	...	...	0·30	0·28	...	0·11	3	0·69	0·03	1·38	0·26	2·72	2·36
		Dehri ...	...	...	...	0·45	1·04	...	0·24	3	1·73	0·34	1·75	0·50	3·10	2·64
		Bhabhua	..	..	..	0·73	0·68	...	0·35	3	1·76	0·06	2·01	0·48	2·92	2·80
		Sasaram ..	...	..	...	0·38	0·72	...	..	2	1·10	0·03	1·33	0·31	2·20	2·50
		Arrah .	...	0·64	...	...	0·68	0·12	0·07	2	0·91	0·03	2·41	0·35	3·29	2·17
		Mohanea	0·01	...	...	0·90	...	0·30	...	2	1·21	?	1·24	?	1·33	?
		Khiri ..	...	...	...	0·80	0·20	0·30	...	3	1·30	?	1·97	?	2·47	?
		Ageaon ...										?		?		?
		Ramnagar ..	...	...	...	...	0·73	...	0·17	2	0·90	?	1·71	?	3·21	?
		Koath ...	0·01	...	...	0·15	0·75	...	0·30	3	1·21	?	1·67	?	3·01	?
		Sikroul ...	...	...	...	0·78	..	..	0·20	2	0·98	?	1·58	?	2·18	?
		Bassowan ...	...	...	...	1·50	.	0·17	0·25	3	1·92	?	2·23	?	3·66	?
		Monaharpur	...	...	...	0·35	0·56	...	0·30	3	1·21	?	2·08	?	2·90	?
	Gaya ...	Aurangabad ...	...	...	...	0·52	0·84	...	0·46	3	1·82	0·04	2·13	0·28	3·87	1·87
		Gaya ...	...	...	...	0·15	1·30	...	0·69	3	2·14	0·03	2·60	0·32	3·47	2·31
		Nawadah ...	...	...	...	0·36	1·56	0·03	0·68	3	2·63	0·09	3·56	0·31	4·77	2·26
		Jahanabad ..	...	...	...	0·16	1·45	...	0·22	3	1·83	0·03	2·65	0·35	3·08	2·11
		Arwal	...	0·05	...	...	1·10	...	0·21	2	1·36	?	1·99	?	2·42	?
		Daudnagar ...	...	...	...	0·55	0·70	...	..	2	1·25	?		?		?
		Sherghati	...	...	...	0·43	2·60	...	0·63	3	3·66	?	3·93	?	5·96	?
		Rajauli ...	...	...	...	0·20	2·37	...	0·70	3	3·27	?	3·61	?	7·5	?
		Pakri Barawan	...	...	...	...	1·28	...	0·59	2	1·87	?	2·89	?	3·51	?
	Patna ...	Patna	...	0·03	...	0·02	0·73	...	0·08	1	0·86	0·01	1·55	0·28	2·52	2·13
		Dinapore ...	...	0·04	...	0·06	0·57	..	0·08	1	0·75	0·02	1·32	0·30	2·14	2·01
		Bihar ..	...	...	...	...	1·77	0·02	0·22	2	2·01	0·05	2·80	0·43	3·44	2·49
		Barh ...	...	0·08	...	...	1·27	0·03	0·15	2	1·53	0·04	2·53	0·35	3·33	2·18
		Bickram ..	...	...	...	0·10	0·95	...	0·15	3	1·20	?	2·50	?	3·26	?
		Hilsa .	...	...	...	1·43	...	...	0·20	2	1·63	?	3·07	?	3·81	?
	Monghyr ..	Begusarai ...	...	...	...	...	1·48	...	0·16	2	1·64	0·02	2·98	0·36	5·73	2·60
		Monghyr ...	...	...	...	...	1·16	0·19	0·18	3	1·53	0·04	3·87	0·45	5·10	2·37
		Jamui	...	0·03	...	0·14	1·60	...	0·70	3	2·47	0·02	3·51	0·42	4·79	2·19
		Gouri .	...	...	...	...	1·16	...	...	1	1·16	?	9·07	?	10·86	?
		Shaikpura ...	...	...	...	..	1·15	...	0·58	2	1·73	?	2·97	?	4·02	?
		Chahai Bamda	...	...	0·10	0·35	1·59	0·15	0·17	5	2·27	?	3·48	?	5·48	?
	Sonthal Parganas.	Rajmahal ..	...	0·05	...	...	0·86	...	0·15	2	1·06	0·10	2·78	0·33	3·04	1·62
		Godda	...	0·08	...	...	1·55	0·03	0·25	2	1·91	0·04	[illegible]	0·38	4·07	1·73
		Pakour ...	...	0·15	...	...	1·21	0·08		2	1·44	0·04	2·96	0·14	7·45	1·41
		Naya Dumka	...	0·60	...	...	0·95	0·03	0·11	3	1·69	0·05	2·90	0·47	5·15	2·53
		Deoghur	...	0·15	...	...	1·10	...	0·20	3	1·45	0·11	2·64	0·33	3·81	2·63
		Jamtara ...	...	0·50	...	...	1·75	0·14	0·17	4	2·56	0·15	4·02	0·35	7·33	2·15
		Belbodda ..	...	...	...	...	1·03	...	0·40	2	1·43	?	3·53	?	3·67	?
		Nanihal ..	...	0·18	...	...	1·00	...	0·15	3	1·33	?	2·33	?	2·95	?
CHOTA NAGPUR	Hazaribagh ...	Pachamba (Giridih). ...	...	0·85	...	0·43	0·40	0·08	0·32	4	2·08	0·12	3·73	0·51	7·38	2·33
		Hazaribagh	...	...	...	0·36	1·44	...	0·30	3	2·30	0·11	3·63	0·56	7·68	2·64
		Semtagura..										0·26		0·76		2·24
		Mahudi Hills	...	...	...	1·48	...	.	0·60	2	2·08	0·15	3·16	0·67	9·01	2·46
		Jhumra Hill	...	...	...	1·70	0·10	0·70	0·10	4	2·60	0·12	3·30	0·53	9·50	2·56
		Karhi .	...	0·62	...	0·45	1·07	..	0·52	4	2·68	?	3·71	?	5·33	?
		Chatra ...	...	0·47	...	1·00	1·34	...	1·10	4	3·91	?	4·44	?	6·75	?
		Sanagocha	...	0·29	...	0·19	0·87	0·03	0·40	4	1·78	?	2·38	?	4·15	?
		Ramgar ...	...	0·17	...	0·94	0·62		0·75			?		?		?
	Lohardaga	Lohardaga ...	...	0·73	...	0·58	0·08	0·14	0·98	4	2·51	0·03	3·92	0·51	11·03	3·11
		Ranchi ...	...	0·60	...	1·14	0·91	0·07	0·61	4	3·33	0·20	5·41	0·94	12·57	3·36
		Silli ...										?		?		?
	Palamau ...	Palamau (Daltonganj).	...	...	...	0·43	0·55	...	0·46	3	1·44	0·03	1·77	0·33	3·41	2·68
		Kalumath	...	...	...	0·65	0·77					?		?		?
		Husainabad	...	...	...	0·45	1·15	...	0·50	3	2·10	?	2·22	?	4·23	?
		Garhwa	...	0·07	...	0·32	1·28					?		?		?
	Singhbhum ...	Chaibassa .	...	0·16	...	0·81	2·00	0·02	0·19	4	3·18	0·17	5·81	0·67	12·34	3·46
		Chakardharpur.	...	0·35	...	1·23	1·70	...	0·35	4	3·63	?	6·17	?	12·51	?
		Ghatsila	...	1·00	...	0·90	1·50	...	0·12	4	3·52	?	7·15	?	12·15	?
		Baharagura	...	·030	...	...	2·37	...	0·57	3	3·24	?		?		?
	Manbhum ..	Purulia ...	...	0·27	...	0·50	1·95	0·58	0·15	5	3·45	0·21	5·43	0·85	11·13	2·79
		Gobindpur	...	0·18	...	0·60	1·25	0·15	0·12	5	2·30	0·02	3·60	0·46	6·58	2·58
		Raghunathpore	...	0·24	...	0·32	0·37	0·16	0·33	5	1·42	?	2·08	?	4·72	?
		Barahabhum	...	1·10	...	1·30	1·39	0·35	0·25	5	4·29	?	5·09	?	10·80	?
		Jhalda	...	0·22	...	0·60	0·60	0·27	0·26	5	1·95	?	3·46	?	5·94	?
		Chas	...	0·20	...	0·75	1·04	0·08	0·15	4	2·22	?	3·69	?	6·61	?
		Pandra ...	...	0·33	...	0·19	1·26	0·21	0·11	5	2·10	?	3·88	?	6·00	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the 28th February* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 25TH OF FEBRUARY 1893.

AT the close of the previous week a barometric depression had passed in an easterly direction over Bengal, and on the 18th, or the last day of the week, had apparently reached Burma. Hence rain had been received at many stations in Bengal, and the falls were general and rather heavy in the eastern and southern districts, while conditions over Bengal remained very disturbed. On the 19th, or the first day of the present week, the barometric changes in Bengal were irregular, a low pressure area existed over the Central Provinces and the neighbouring parts of Orissa, and also over the northern parts of Madras. Pressure was also falling rather rapidly on this day at Darjeeling, pointing to the existence of disturbed weather in and near the Himalayas, and at Gnatong a snowstorm was reported, while a few rain showers also fell in parts of Bengal. On the 20th the area of low pressure had apparently passed over the north of the Bay, and pressure was generally rising over Bengal, though at Gnatong a fall had been reported. The weather from the 19th to the 20th had been very disturbed in Bengal, heavy rain had fallen at many stations, and in several cases the rain accompanied rather severe thunderstorms, while at Jessore hail was also reported. On the 21st the area of low pressure in the Bay apparently filled up or disappeared, and weather generally in Bengal improved rapidly and the sky cleared to a great extent, and only a few light showers were reported, and these were confined to parts of Orissa and South-East Bengal. In the hills, however, the disturbed conditions continued and Gnatong again reported a snowstorm. On this date, however, a fresh barometric disturbance or depression was entering North-Western India from the westward, which was advancing in an easterly direction, and on the 22nd one barometric depression was over the Central Provinces while a second large depression existed over the Punjab. Hence pressure was falling generally in Bengal except in and near the hills, and rain had recommenced at some of the Bihar and Chutia Nagpur stations, while at Gnatong snow was again reported. On the 23rd the depression from the Central Provinces had reached Orissa, and the depression in the Punjab had passed eastward into the hills, while a new depression had advanced from the westward into North-Western India. Hence again conditions were exceedingly disturbed and rain became general in Bengal, and on the 23rd heavy rain, exceeding one and two inches, was reported at many stations, while Gnatong again reported a snowstorm. On the 24th the depression in Orissa had advanced a little in an easterly direction and had become more diffused, while pressure was generally rising slowly, and rain was again received in the southern districts of Bengal. Finally on the 25th pressure had again risen slowly in Bengal, and apparently the depression was moving from Orissa in a south-easterly direction, but weather in Bengal was still very disturbed, and over the whole of the south of the province the sky was heavily overcast, though from the 24th to the 25th the rainfall reported was confined to parts of South-West Bengal, Bihar and Chutia Nagpur. Hence throughout the whole week and quite up to its close very unsettled weather prevailed in Bengal, and considerable amounts of rain had fallen over the whole province.

Pressure.—Notwithstanding the passage of several depressions over and near the province during the week, the general pressure has been in excess of the normal by from about 0·02" to 0·04." At the extreme western and south-western stations, however, which have been mainly affected by the passage of the depressions, pressure has been in slight defect of the normal, and this has been the case at Gopalpur, False Point, and Cuttack in Orissa, and also at Hazaribagh and Ranchi. At Darjeeling also pressure has been no less than 0·04" in defect of the normal.

Temperature.—Owing to the unusually heavy rainfall during the week, and the heavily clouded skies in the plains, and to the comparatively large snowfall in the hills, temperature has been unusually low during the week, and the mean of the province has been no less than 4·1° in defect of the normal. This defect has been largest in South-West Bengal, South Bihar and Chota Nagpur, where it has been about 6° and upwards.

The distribution of temperature during the week and its variation from the normal value are best seen in the table below, where the average maximum, minimum and mean temperatures for the week at nine typical stations in different districts of the province are compared with the normal values for the period. It will be seen that the defects have again been largest in the day or maximum temperatures, which have been in many cases 10° and upwards in defect, and at Burdwan the day temperature has been even 14·1° lower than usual. At Calcutta the defect in the maximum temperature has been 9·7°:—

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 25th February 1893.

	Normal mean maximum temperature for the week ending 25th February.	Actual mean maximum temperature for the week ending 25th February 1893.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 25th February.	Actual mean minimum temperature for the week ending 25th February 1893.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 25th February.	Actual mean daily temperature for the week ending 25th February 1893.	Variation of actual mean from the normal.
Cuttack	91·7	84·3	−7·4	66·8	69·0	+2·2	79·3	76·7	−2·6
Calcutta	83·6	75·9	−9·7	62·1	59·3	−2·8	72·9	66·6	−6·3
Dacca	84·5	74·1	−10·4	59·5	58·2	−1·3	72·0	66·1	−5·9
Burdwan	85·4	71·3	−14·1	59·9	59·8	−0·1	72·7	65·6	−7·1
Patna	80·5	68·8	−11·7	54·4	53·5	−0·9	67·5	61·2	−6·3
Gaya	83·8	72·6	−11·2	57·6	54·7	−2·9	70·8	63·6	−7·2
Purnea	81·6	70·2	−11·4	52·7	53·6	+0·9	67·1	61·9	−5·2
Hazaribagh	79·8	69·4	−10·4	56·0	52·0	−4·0	67·9	60·8	−7·1
Darjeeling	48·3	46·5	−1·8	35·9	32·1	−3·8	42·2	38·2	−4·0

Rainfall.—The falls during the week have been exceedingly heavy, and have averaged nearly two and-a-half inches in Chota Nagpur and South-West Bengal, more than one and-a-half inches in East Bengal and South Bihar, an inch and-a-quarter in Orissa and North Bengal, and about two-thirds of an inch in North Bihar. It is needless to say that these falls have been many times larger than the normal for the week.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 25th of February 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
			Averages for week.				Of week.			Rainy days.			Since 1st of month.		Since 16th Oct. 1892.	
	Highest observed during week.	Lowest observed during week.	Of highest of each day.	Of lowest of each day.	Of mean for each day.	Average mean of week above or below normal mean of week.	Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	90·7	58·6	81·0	68·8	74·9	+0·5	1·25	0·15	+1·10	2·00	0·24	+1·76	2·31	0·75	10·43	5·30
South-West Bengal ...	81·3	51·0	73·0	59·1	65·9	−6·1	2·53	0·34	+2·19	2·78	0·44	+2·31	4·71	0·97	10·81	3·40
North Bengal	78·6	48·1	72·0	54·1	63·1	−3·1	1·20	0·12	+1·08	1·80	0·20	+1·60	2·11	0·56	3·43	2·24
East Bengal	82·7	40·9	75·5	58·7	67·1	−2·8	1·67	0·45	+1·22	2·52	0·55	+1·97	2·31	1·12	11·22	4·57
North Bihar	77·3	46·9	69·6	53·4	61·6	−4·4	0·67	0·03	+0·64	1·17	0·09	+1·08	1·32	0·37	2·71	1·97
South Bihar	81·2	45·4	70·3	53·9	62·1	−6·0	1·60	0·06	+1·54	2·45	0·19	+2·26	2·57	0·36	3·99	2·21
Chota Nagpur	80·8	47·8	70·1	54·5	62·4	−6·1	2·49	0·13	+2·27	4·00	0·31	+3·09	3·88	0·62	8·89	2·73

METEOROLOGICAL OFFICE, BENGAL,
The 28th February 1893.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 19th to 25th February 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Temperature. Maximum.	Temperature. Range.	Temperature. Minimum.	Hygrometry. Mean wet bulb.	Hygrometry. Vapour tension.	Hygrometry. Dew point.	Hygrometry. Humidity.	Wind. Prevailing direction.	Wind. Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
Feb.	19th	131 7	3·4	29·923	69·6	78·1	14·2	63·9	66·5	0·612	64·7	85	E, calm and variable.	60	0·37	Chiefly cloudy, o, g, t, d, p, ⌓.
„	20th	115 5	2·6	·962	67·9	73·7	10·8	62·9	65·0	·581	63·2	86	NNE and calm ...	55	1·04	Chiefly cloudy, o, g, d, p.
„	21st	134·4	8 7	30 013	65·7	76·2	21·6	54·6	60·7	·467	57·0	76	N and calm ...	11	Nil	Chiefly clear, ⌓, .
„	22nd	113·2	0·2	29 985	62·2	69 7	13·1	56·6	59·2	·465	56·9	83	Calm and variable	101	0 42	Cloudy, o, g, d, p, K, ⌓.
„	23rd	131·8	2·5	·975	63·2	72·7	17·2	55·5	60·3	·486	58·1	84	ESE ...	98	0·23	Chiefly cloudy, o, g, d, p.
„	24th	93·8	Nil	30 022	63·2	68·6	7·4	61·2	62·6	·561	62·2	97	NNE and calm ...	30	0·31	Cloudy, o, g. p.
„	25th	83 7	„	·046	62·7	65·9	5·4	60·5	61·8	·541	61·2	95	NNE and calm ...	45	0·15	Cloudy, o, g, d.

	Inches.
The mean pressure of the seven days	29·989
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	29·931
	Hours.
The total number of hours of bright sunshine	17·4
The maximum possible number of hours of sunshine	80·5
	°
The mean temperature of the seven days	64·9
The average temperature of the corresponding period for 24 years, S.-G.'s Office	75 2
The extreme variation of temperature	23·5
The maximum temperature	78·1
	Miles.
The highest velocity of the wind in one hour	15
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	87
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	66
	Inches.
The total fall of rain from 19th to 25th February 1893	2·52
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·21
The total fall from 1st January to 25th February 1893	5·00
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	1·36

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; t, thunder; d, drizzling rain; p, passing temporary showers; K, thunderstorm; ⌓, dew; ≡, fog.

C. Little,
For Meteorological Reporter to the Govt. of India.

Meteorological Office, Govt. of India;
Calcutta, the 20th February 1893.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 19th to 25th February 1893.

Month	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature. Daily mean.	Maximum.	Range.	Minimum.	Hygrometry. Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	Rainfall at 10 A.M. for past 24 hours.
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
February ...	19th ...	29·992	71·9	78·9	14·0	64·9	71·6	67·6	·623	65·2	81	Nil
" ...	20th ...	30·013	68·2	73·4	10·5	62·9	68·6	65·6	·592	63·7	85	1·73
" ...	21st ..	·079	66·5	77·9	22·8	55·1	70·6	63·6	·496	58·7	66	Nil
" ...	22nd ...	·009	65·4	70·9	11·0	59·9	69·6	62·7	·478	57·7	66	"
" ...	23rd ...	·028	66·4	74·9	17·0	57·9	64·1	60·7	·486	58·1	81	0·61
" ...	24th ...	·078	64·9	68·9	8·0	60·9	63·6	62·7	·558	62·0	95	0·48
" ...	25th ...	·129	61·7	68·4	7·5	60·9	65·4	63·6	·566	62·4	90	Nil

	Inches.
The mean 10 A.M. pressure of the seven days	30·047
	°
The mean temperature of the seven days	66·9
The extreme variation of temperature	23·8
The maximum temperature	78·9
	%
The mean 10 A.M. relative humidity of the seven days .	81
The total fall of rain from 19th to 25th February 1893	2·82 inch.

The daily mean temperatures are the crude means of maximum and minimum temperatures.

C. LITTLE,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 27th February 1893.

Vital statistics of the Districts of Bengal for the month of January 1893.

Divisions.	Districts.	Population under registration.	Births. Number registered.	Births. Ratio per 1,000 of population per annum.	Deaths. Cholera. Number registered.	Cholera. Ratio per 1,000 of population per annum.	Small-pox. Number registered.	Small-pox. Ratio per 1,000 of population per annum.	Fever. Number registered.	Fever. Ratio per 1,000 of population per annum.	Dysentery and Diarrhœa. Number registered.	Dysentery and Diarrhœa. Ratio per 1,000 of population per annum.	Injury. Number registered.	Injury. Ratio per 1,000 of population per annum.	Other causes. Number registered.	Other causes. Ratio per 1,000 of population per annum.	Total of all causes. Number registered.	Total of all causes. Ratio per 1,000 of population per annum.	Average of corresponding month of previous five years. Number registered.	Average. Ratio per 1,000 of population per annum.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Burdwan ...	Burdwan	1,391,880	3,324	28·56	103	·84	18	·12	2,240	19·32	97	·72	8	·06	628	5·40	3,103	26·64	2,875	24·72	
	Bankura	1,069,668	2,0 3	23·04	3	·02	4	·03	1,148	12·84	13	·12	3	·02	321	3·60	1,4 2	16·68	1,571	17·28	
	Birbhum	797,834	2,371	35·64	80	1·20	1	·01	1,174	17·61	12	·12	10	·12	377	5·64	1,654	24·84	1,[illegible]20	27·36	
	Midnapore	2,631,516	7,455	33·96	142	·60	106	·48	4,432	20·16	217	·96	24	·10	1,222	·46	6,143	27·96	6,181	28·08	
	Hooghly including Serampore	1,076,710	3,398	37·80	68	·72	1	·01	2,263	25·20	253	2·76	17	·12	458	5·04	3,060	34·08	2,686	29·88	
	Howrah	721,211	2,223	36·96	87	1·44	...	...	775	12·84	298	4·92	19	·24	421	6·96	1,600	26·52	1,663	27·60	
Presidency ...	24-Parganas	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Return not received up to date.
	Nadia	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Jessore	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Murshidabad	1,250,946	4,909	47·04	56	·48	2	·01	2,256	21·60	7	·06	10	·08	320	3·00	2,651	25·32	2,683	25·68	
	Khulna	1,177,652	3,921	39·84	209	2·04	...	...	2,555	25·92	14	·12	15	·12	480	4·80	3,273	33·24	3,017	30·72	
Rajshahi ...	Dinajpur	1,555,835	6,062	46·68	29	·12	7	·04	4,391	33·84	15	·10	7	·04	343	2·64	4,792	36·96	4,631	35·64	
	Rajshahi	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto.
	Rangpur	2,065,464	5,643	32·76	24	·12	...	...	4,943	28·68	22	·12	11	·06	204	1·08	5,204	30·12	5,971	24·98	
	Bogra	817,494	3,910	42·60	108	1·56	21	·24	1,990	29·16	15	·12	40	·48	411	6·00	2,588	37·92	1,943	28·44	
	Pabna	1,362,392	4,880	42·96	101	·84	24	·12	2,914	25·56	30	·24	20	·12	138	1·20	3,227	28·32	3,166	27·72	
	Darjeeling	223,314	251	13·44	...	...	...	...	369	19·80	63	3·36	4	·12	87	4·56	523	28·08	426	22·80	
	Jalpaiguri	681,352	2,035	35·76	...	...	...	...	1,575	27·72	2	·02	3	·04	10	·12	1,590	27·96	1,078	29·52	
Dacca ...	Dacca	2,420,656	10,910	54·12	751	3·72	148	·72	4,281	21·12	176	·84	29	·12	1,284	6·36	6,669	33·00	5,290	26·16	
	Faridpur	1,797,320	6,941	46·32	140	·84	23	·12	3,651	24·36	27	·12	12	·07	632	4·20	4,485	29·88	4,268	28·44	
	Backergunge	2,153,965	9,260	51·48	547	3·00	1	·001	5,902	32·88	88	·48	53	·24	2,327	12·96	8,918	49·68	6,247	34·80	
	Mymensingh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto.
Chittagong	Chittagong	1,290,167	4,409	40·92	97	·84	2	·01	2,599	24·12	59	·48	36	·24	840	3·12	3,131	29·04	2,552	23·64	
	Noakhali	1,009,693	4,638	55·08	111	1·20	...	...	2,609	30·96	12	·12	23	·24	382	4·44	3,137	37·20	2,370	28·08	
	Tippera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto.
Patna ...	Patna	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto.
	Gaya	2,138,331	6,225	34·92	1	0·04	151	·84	3,114	17·40	25	·12	70	·36	419	2·28	3,780	21·12	3,202	17·88	
	Shahabad	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto.
	Muzaffarpur	2,711,445	8,714	38·52	26	·10	6	·02	5,108	22·56	68	·24	29	·12	728	3·12	5,963	26·28	3,237	14·28	
	Darbhanga	2,801,955	6,703	28·68	...	...	4	·01	4,750	20·28	115	·48	21	·08	595	2·52	5,485	23·40	3,213	13·68	
	Saran	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto.
	Champaran	1,859,465	5,070	32·64	...	...	...	...	3,275	21·12	8	·04	39	·24	821	5·28	4,143	26·64	2,999	19·32	
Bhagalpur ...	Monghyr	2,036,021	6,466	38·04	...	...	26	·12	3,009	17·64	18	·09	37	·12	487	2·76	3,577	21·00	3,7[illegible]7	22·20	
	Bhagalpur	2,032,696	5,389	31·80	...	...	42	·24	3,701	21·84	34	·12	73	·36	453	2·64	4,303	25·32	3,684	21·72	
	Purnea	1,944,658	5,029	30·96	11	·06	17	·09	4,768	29·40	8	·04	7	·03	61	·36	4,872	30·00	4,271	26·28	
	Malda	814,919	2,791	41·04	1	·01	...	...	1,788	26·28	4	·01	2	·02	100	1·44	1,8[illegible]5	27·84	2,108	30·96	
	Sonthal Parganas	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto.
Orissa ...	Cuttack	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto.
	Puri	944,998	1,883	23·88	43	·18	340	4·20	574	7·20	279	3·48	27	·24	1,183	15·00	2,446	30·96	2,471	31·32	
	Balasore	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto.
Chota Nagpur.	Hazaribagh	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto.
	Lohardaga	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto.
	Palamau	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto.
	Singhbhum	545,488	1,149	25·20	2	·03	5	·10	488	10·68	42	·84	13	·24	128	2·76	678	14·88	821	18·00	
	Manbhum	1,193,328	2,346	23·52	3	·02	17	·12	1,202	12·00	14	·12	6	·05	311	3·12	1,533	15·60	1,438	14·40	
	Total ...	44,518,372	139,377	37·56	2,743	·72	969	·24	83,853	22·56	2,033	·48	668	·12	15,671	4·20	105,937	28·44	92,223	24·84	
Average of the corresponding month of previous five years			Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		5,165	1·32	511	·12	70,271	18·84	2,396	·60	553	·12	13,327	3·48	92,223	24·84	...	...	
Difference + or −			......		−2,422	−·60	+458	+·12	+13,582	+3·72	−303	−·12	+115	equal	+2,344	+·72	+13,714	+3·60	...	..	

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,
The 25th February 1893.

W. H. GREGG, *Surgeon-Lieut.-Col.,*
Dip. Publ. Health, Camb., Sanitary Commr. for Bengal.

Vital Statistics of Towns in Bengal with a population of 20,000 and over during the month of January 1893.

Districts.		Towns.	Population under registration.	Births. Number registered.	Births. Ratio per 1,000 of population per annum.	Cholera. Number registered.	Cholera. Ratio per 1,000 of population per annum.	Small-pox. Number registered.	Small-pox. Ratio per 1,000 of population per annum.	Fever. Number registered.	Fever. Ratio per 1,000 of population per annum.	Dysentery and Diarrhœa. Number registered.	Dysentery and Diarrhœa. Ratio per 1,000 of population per annum.	Injury. Number registered.	Injury. Ratio per 1,000 of population per annum.	Other causes. Number registered.	Other causes. Ratio per 1,000 of population per annum.	Total of all causes. Number registered.	Total of all causes. Ratio per 1,000 of population per annum.	Average of corresponding month of previous five years. Number registered.	Average of corresponding month of previous five years. Ratio per 1,000 of population per annum.	Remarks.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Burdwan ...	1	Burdwan	34,477	64	22·20	...	...	...	...	77	26·76	22	7·56	1	·24	21	7·20	121	42·00	100	34·80	
Midnapore ...	2	Midnapore	32,264	81	30·12	...	...	...	...	25	9·24	7	2·52	...	...	31	11·52	63	23·40	73	27·12	
Hooghly ...	3	Hooghly and Chinsura	32,562	75	27·60	1	·36	...	...	39	14·28	9	3·24	1	·36	17	6·24	67	24·60	129	47·52	
	4	Serampore	35,952	69	22·92	2	·60	...	...	42	13·92	32	10·68	1	·24	14	4·56	91	30·36	112	37·32	
Howrah ...	5	Howrah	116,606	198	20·28	16	1·56	...	...	78	7·92	45	4·56	6	·60	65	6·60	210	21·60	223	23·92	
24-Parganas ...	6	Cossipore-Chitpur ...	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Return not received up to date.
	7	Maniktala	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	8	Barnagore	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	9	South Suburban ...	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	10	Khorda or South Barrackpore.	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	11	Naihati	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	12	Nawabganj or North Barrackpore.	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Nadia ...	13	Krishnagar	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	14	Santipur	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Murshidabad	15	Murshidabad City ...	35,576	62	20·88	...	...	...	...	83	27·96	...	...	...	...	11	3·60	94	31·68	121	40·80	
	16	Berhampore ...	23,515	52	26·52	...	...	...	...	38	19·32	...	...	1	·48	...	...	39	19·80	64	32·64	
Rajshahi ...	17	Rampur Boalia ...	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
Pabna ...	18	Sirajganj	23,267	57	29·28	9	4·56	...	...	46	23·64	...	...	2	·96	2	·96	59	30·36	37	19·08	
Dacca ...	19	Dacca	118,408	220	22·20	3	·24	...	...	89	9·00	14	1·32	2	·12	63	6·36	171	17·28	169	17·04	
Chittagong ...	20	Chittagong	21,069	36	17·88	...	...	...	...	22	10·92	1	·48	...	...	7	3·48	30	14·88	47	23·40	
Patna	21	Patna City	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
	22	Bihar	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
	23	Dinapore	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
Gaya ...	24	Gaya	80,383	202	30·12	1	·12	2	·24	115	17·16	4	·48	6	·84	28	4·08	156	23·28	194	28·92	
Shahabad ...	25	Arrah	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
	26	Sasaram	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
Muzaffarpur	27	Muzaffarpur	49,102	149	36·24	...	...	1	·24	64	15·60	7	1·68	...	...	39	9·48	111	27·00	59	14·28	
	28	Hajipur	21,487	80	44·64	...	...	...	...	32	17·76	8	4·44	2	1·08	12	6·60	54	30·12	38	21·12	
Darbhanga ...	29	Darbhanga	73,561	157	25·56	...	...	...	...	71	11·52	26	4·20	...	...	63	10·20	160	26·04	147	23·88	
Saran ...	30	Chapra	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
Champaran ...	31	Bettiah	22,780	40	21·00	...	...	...	...	35	18·36	2	·96	1	·48	10	5·16	48	25·20	55	28·92	
Monghyr ...	32	Monghyr	57,077	156	32·76	...	...	...	...	45	9·36	13	2·64	1	·12	56	11·76	115	24·12	105	21·96	
Bhagalpur ...	33	Bhagalpur	69,106	166	28·80	...	...	20	3·36	95	16·44	10	1·68	1	·12	32	5·52	158	27·36	126	21·84	
Cuttack ...	34	Cuttack	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
Puri ...	35	Puri	28,794	47	19·56	1	·36	11	4·56	17	7·08	11	4·56	1	·36	53	20·08	94	39·12	106	44·16	
Balasore ...	36	Balasore	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
Lohardaga ...	37	Ranchi	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Ditto ditto.
		Total ...	8,79,076	1,911	26·04	33	·36	34	·36	1,013	13·80	211	2·88	26	·24	524	7·08	1,841	25·08	1,905	25·92	
		Average of the corresponding month of previous five years.	...	Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		135	1·80	45	·60	875	11·88	285	3·84	27	·36	538	7·32	1,905	25·92	...	...	
		Difference + or − ...	...	...	...	−102	−1·44	−11	−·24	+138	+1·92	−74	−·96	−1	−·12	−14	−·24	−64	−·84	...	...	

Office of Sanitary Commissioner for Bengal,
The 25th February 1893.

W. H. GREGG, *Surgeon-Lieut.-Col.,*
Dip. Publ. Health, Camb., Sanitary Commissioner for Bengal.

Supplementary Vital Statistics for December 1892 received too late for publication with the figures of that month on the 28th January 1893.

Divisions.	Districts.	Population under registration.	BIRTHS. Number registered.	BIRTHS. Ratio per 1,000 of population per annum.	DEATHS. Cholera. Number registered.	DEATHS. Cholera. Ratio per 1,000 of population per annum.	DEATHS. Small-pox. Number registered.	DEATHS. Small-pox. Ratio per 1,000 of population per annum.	DEATHS. Fever. Number registered.	DEATHS. Fever. Ratio per 1,000 of population per annum.	DEATHS. Dysentery and Diarrhœa. Number registered.	DEATHS. Dysentery and Diarrhœa. Ratio per 1,000 of population per annum.	DEATHS. Injury. Number registered.	DEATHS. Injury. Ratio per 1,000 of population per annum.	DEATHS. Other causes. Number registered.	DEATHS. Other causes. Ratio per 1,000 of population per annum.	DEATHS. Total of all causes. Number registered.	DEATHS. Total of all causes. Ratio per 1,000 of population per annum.	Average of corresponding month of previous five years. Number registered.	Average of corresponding month of previous five years. Ratio per 1,000 of population per annum.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Burdwan ...	Midnapore	2,631,516	5,754	*26·16*	155	*·60*	81	*·36*	4,345	*19·80*	181	*·72*	23	*·09*	1,047	*4·68*	5,832	*26·52*	7,456	*33·96*
Patna ...	Patna	1,769,004	3,808	*25·80*	10	*·06*	59	*·36*	2,724	*18·36*	131	*·84*	36	*·24*	656	*4·44*	3,616	*24·48*	3,317	*22·56*
Orissa ...	Cuttack	1,938,132	4,280	*26·40*	866	*5·28*	121	*·72*	2,758	*17·04*	292	*1·80*	61	*·36*	1,445	*8·88*	5,543	*34·20*	4,838	*29·88*
	Total ...	6,338,653	13,842	*26·16*	1,031	*1·92*	261	*·48*	9,827	*18·60*	604	*1·08*	120	*·12*	3,148	*5·88*	14,991	*28·32*	15,631	*29·52*
	Average of corresponding month of previous five years.	......	Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		1,046	*1·92*	231	*·36*	10,213	*19·32*	919	*1·68*	120	*·12*	3,102	*5·76*	15,631	*29·52*	......	......
	Difference + or −	......	......	......	−15	Equal	+30	+*·12*	−386	−*·72*	−315	−*·60*	Equal	Equal	+46	+*·12*	−640	−*1·20*	......	......
	TOTAL FOR THE PROVINCE ...	70,368,267	178,432	*30·36*	9,675	*1·56*	1,000	*·12*	139,303	*23·64*	3,359	*·48*	1,127	*·12*	25,340	*4·32*	179,804	*30·60*	187,576	*31·92*
	Average of corresponding month of previous five years.	......	Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		14,773	*2·40*	646	*·10*	140,332	*23·88*	4,806	*·72*	1,126	*·12*	25,893	*4·32*	187,576	*31·92*	......	......
	Difference + or −	......	......	......	−5,098	−*·84*	+354	+*·02*	−1,029	−*·24*	−1,447	−*·24*	+1	Equal	−553	Equal	−7,772	−*1·32*	......	......
Districts.	*Towns.*																			
Midnapore ...	Midnapore	32,264	70	*25·92*	1	*·36*	...	..	49	*18·12*	12	*4·44*	1	*·36*	20	*7·32*	83	*30·84*	84	*31·20*
Patna ...	Patna City	152,770	454	*35·64*	6	*·36*	1	*·07*	203	*15·84*	50	*3·84*	7	*·48*	145	*11·28*	412	*32·28*	222	*17·40*
	Bihar	47,723	153	*38·40*	...	..	...	...	63	*16·32*	10	*2·40*	2	*·48*	38	*9·48*	115	*28·80*	[illegible]	*17·28*
	Dinapore	44,419	39	*10·44*	...	...	...	...	25	*6·72*	3	*·72*	1	*·24*	10	*2·64*	39	*10·44*	69	*18·60*
Cuttack ...	Cuttack	47,186	87	*23·08*	3	*·72*	1	*·24*	16	*3·96*	9	*2·28*	1	*·24*	38	*9·60*	68	*17·28*	71	*18·00*
	TOTAL ...	324,362	803	*29·64*	10	*·36*	2	*·07*	358	*13·20*	84	*3·00*	12	*·36*	251	*9·24*	717	*2[illegible]·52*	515	*18·96*
	Average of corresponding month of previous five years.	......	Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		46	*1·68*	6	*·12*	201	*7·32*	74	*2·64*	9	*·24*	179	*6·60*	515	*18·96*	......	......
	Difference + or −	......	......	......	−36	−*1·32*	−4	−*·05*	+157	+*5·88*	+10	+*·36*	+3	+*·12*	+72	+*2·64*	+202	+*7·56*	......	......
	Total of towns with a population of 20,000 and over.	1,671,128	3,832	*27·48*	220	*1·56*	14	*·09*	2,473	*17·64*	441	*3·12*	48	*·24*	946	*6·72*	4,142	*29·64*	3,[illegible]65	*27·00*
	Average of corresponding month of previous five years.	......	Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		436	*3·12*	36	*·24*	1,760	*12·60*	507	*3·60*	49	*·24*	968	*6·84*	3,765	*27·00*	......	......
	Difference + or −	......	......	......	−216	−*1·56*	−22	−*·15*	+704	+5·04	−66	−*·48*	−1	Equal	−22	−*·12*	+377	+*2·64*	......	......

OFFICE OF SANITARY COMMISSIONER, FOR BENGAL,
The 25th February 1893.

W. H. GREGG, *Surgn.-Lieut.-Col.,*
Dip. Publ. Health, Camb., Sanitary Commissioner for Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 25th February 1893, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 25th February 1893.			Week ending Saturday, the 27th February 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	886	2,39,225	4,780	767	3,13,795	5,562
Jute	52	34,550	578	11	5,300	93
Firewood	67	48,550	692	97	55,425	860
Other articles	695	1,75,645	2,668	894	2,55,595	3,979
Total ...	1,700	4,97,970	8,118	1,769	6,30,115	10,494

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 18th February 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*330,975	*3,77,787 9 0	27,90,018 0	6,17,029 12 0	16,900 8 0	10,11,717 13 0	80,653¾	109,688½	190,342
Or per mile of railway	......	234 9 3	......	383 12 1	10 7 11	628 3 3	......	......	.....
For previous 6 weeks of half-year	1,783,371	20 74,070 9 0	1,66,13,908 0	37,51,034 5 0	1,03,154 10 0	59,28,259 8 0	472,454	637,989¼	1,110,443¼
Total for 7 weeks ...	2,123,346	24,51,858 2 0	1,94,03,926 0	43 68,064 1 0	1,20,055 2 0	69,39,977 5 0	553,107¾	747,677¾	1,300,758?
Comparison.									
Total for corresponding week of previous year	296,418¼	3,29,030 6 9	30,20,398 30	6,70,920 4 11	16,210 6 7	10,16,170 2 3	74,702	109,810	184,512
Per mile of railway corresponding week of previous year ...	......	207 14 2	......	423 14 1	10 3 11	642 0 2	......	... ..	......
Total for corresponding 7⅔ weeks of previous year	2 050,904½	23,02,739 14 5	1,98,20,148 20	45,32,297 8 0	1,20,846 14 5	69,55,884 4 10	553,260	727,081	1,280,350

* The increase is partly due to the running of special trains and partly to pilgrims on account of "Sibaratree."

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 18th February 1893, on 161⅝ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs A. P.			
Total traffic for the week ...	*17,302	*12,332 11 0	51,395 0	6,861 9 0	45 0 0	19,239 4 0	5,361¼	3,225	8,586¼
Or per mile of railway	... ..	76 6 7	......	42 8 2	0 4 6	119 3 3	......	......	......
For previous 6 weeks of half-year	†103,093	†67,338 14 0	‡3,20,152 30	‡48,896 14 0	§228 0 0	1,16,463 12 0	31,182	19,659¼	50,841¼
Total for 7 weeks ...	120,395	79,671 9 0	3,71,547 30	55,758 7 0	273 0 0	1,35,703 0 0	36,543¼	22,884¼	59,428
Comparison.									
Total for corresponding week of previous year	15,299¼	10,525 2 9	39,461 20	7,374 3 0	77 3 6	17,976 9 3	5,825	1,927	7,752
Per mile of railway corresponding week of previous year .	......	65 3 5	......	45 11 0	0 7 8	111 6 1	......	......	......
Total for corresponding 7⅔ weeks of previous year	101,364¼	70,752 9 4	3,22,255 10	55,834 15 0	460 0 6	1,27,047 8 10	42,468	15,153	57,621

* The increase is chiefly due to journeys undertaken by pilgrims on account of "Sibaratree."
† Added number of passengers 1,153 and deducted Rs. 144 }
‡ Ditto maunds 37 and " 658 } On account of difference between the approximate and audited figures for the week ended 14th January 1893.
§ Deducted " 12 }

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 18th February 1893, on 22¼ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*30,940	*8,708 9 0	9,440 0	315 6 0	11 0 0	9,034 15 0	995	105	1,100
Or per mile of railway	......	391 6 4	......	14 2 9	0 7 11	406 1 0	......	......	.....
For previous 6 weeks of half-year	†129,777	†32,244½ 6 0	‡62,523 30	‡2,168 11 0	§61 0 0	34,474 1 0	5,182	698	5,880
Total for 7 weeks ...	160,717	40,952 15 0	71,963 30	2,484 1 0	72 0 0	43,509 0 0	6,177	803	6,980
Comparison.									
Total for corresponding week of previous year	22,216¾	5,591 0 6	17,654 30	686 15 0	16 1 0	6,294 0 6	848	120	968
Per mile of railway corresponding week of previous year	......	251 4 6	......	30 14 0	0 11 7	282 14 1	.....	......	.....
Total for corresponding 7¾ weeks of previous year ...	152,026	37,751 15 3	1,38,480 0	4,161 9 9	91 12 9	42,305 5 9	6,278	784	7,062

* The increase is chiefly due to journeys undertaken by pilgrims on account of "Sibaratree."

† Added number of passengers 1,028 and Rs. 225 }
‡ Deducted maunds 11 and added " 2 } on account of difference between the approximate and audited figures for the week ended 14th January 1893.
§ Deducted " 3 }

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for the week ended 18th February 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	175,576	86,720 0 0	6,46,521 0	86,330 0 0	11,760 0 0	1,84,810 0 0	27,896	26,310	54,206
Or per mile of railway	226	112 0 0	832 0	111 0 0	*1 0 0	224 0 0	......	......	......
For previous 6 weeks of half-year	1,133,065	5,25,040 0 0	41,39,844 0	6,50,360 0 0	94,950 0 0	12,70,350 0 0	166,092	180,570	346,668
Total for 7 weeks ...	1,308,641	6,11,760 0 0	47,86,365 0	7 36,690 0 0	1,06,710 0 0	14,55,160 0 0	193,988	206,880	400,874
Comparison.									
Total for corresponding week of previous year	170,231	90,986 0 0	5,66,934 0	80,015 0 0	13,652 0 0	1,84,653 0 0	27,665	29,551	57,216
Per mile of railway corresponding period of previous year ...	219	117 0 0	730 0	103 0 0	*1 0 0	221 0 0	......	......	......
Total to corresponding date of previous year	1,242,773	6,20,418 0 0	40,65,329 0	6,09,073 0 0	97,587 0 0	13,27,078 0 0	199,656	213,294	412,950

* Excluding steamer earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 18th February 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	29,498	10,050 0 0	69,655 0	4,030 0 0	280 0 0	14,380 0 0	3,504	2,168	5,672
Or per mile of railway	236	80 0 0	557 0	33 0 0	2 0 0	115 0 0	......	......	......
For previous 6 weeks of half-year	184,324	68,530 0 0	3,47,773 0	21,940 0 0	1,000 0 0	91,470 0 0	21,966	12,066	34,032
Total for 7 weeks ...	212,822	78,580 0 0	4,17,428 0	25,090 0 0	1,280 0 0	1,05,850 0 0	25,470	14,234	39,704
Comparison.									
Total for corresponding week of previous year	29,963	11,759 0 0	54,002 0	3,839 0 0	66 0 0	15,664 0 0	3,504	2,168	5,672
Per mile of railway corresponding week of previous year ...	240	94 0 0	432 0	30 0 0	1 0 0	125 0 0	......	......	......
Total to corresponding date of previous year	213,720	79,796 0 0	4,56,054 0	28,503 0 0	694 0 0	1,08,993 0 0	26,155	15,204	41,359

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 18th February 1893, on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	16,862	5,250 0 0	12,194 0	1,070 0 0	150 0 0	6,470 0 0	2,487	737	3,224
Or per mile of railway	196	61 0 0	142 0	12 0 0	2 0 0	75 0 0	......	......	......
For previous 6 weeks of half-year	110,894	35,540 0 0	1,07,028 0	9,900 0 0	1,110 0 0	46,550 0 0	14,883	4,461	19,344
Total for 7 weeks ...	127,776	40,790 0 0	1,19,222 0	10,970 0 0	1,260 0 0	53,020 0 0	17,370	5,198	22,568
Comparison.									
Total for corresponding week of previous year	18,038	6,004 0 0	11,583 0	1,559 0 0	70 0 0	7,633 0 0	2,519	725	3,244
Per mile of railway corresponding week of previous year ...	210	70 0 0	170 0	18 0 0	1 0 0	89 0 0	......	......	......
Total to corresponding date of previous year	125,104	41,903 0 0	79,305 0	7,928 0 0	827 0 0	50,063 0 0	18,136	5,254	23,390

BENGAL AND NORTH-WESTERN RAILWAY.

(Includes the Tirhut State Railway.)

Approximate Return of Traffic for the week ending 18th February 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of Passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	94,640	40,680	4,36,570	65,590	11,440	1,17,710	13,255	18,533	31,788
Or per mile of railway	125·19	53·81	577·47	86·76	15·13	155·70	......	......	......
For previous 6 weeks of half-year	518,400	2,20,890	24,77,210	3,56,020	71,610	6,48,520	61,274	94,210	155,484
Total for 7 weeks ...	613,040	2,61,570	29,13,780	4,21,610	83,050	7,66,230	74,529	112,743	187,272
Comparison.									
Total for corresponding week of previous year on 751 miles open	84,184	36,976	3,57,065	46,979	8,118	92,073	11,629	16,916	28,545
Per mile of corresponding week of previous year	112·10	49·24	475·45	62·55	10·81	122·60	......	......	......
Total to corresponding date of previous year	571,096	2,41,394	24,09,895	3,32,987	65,818	6,40,199	85,484	122,460	207,894

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 11th February 1893	12,561	0	0
Corresponding period of 1892	8,487	0	0
Increase	4,074	0	0
Receipts per mile for the week ending 11th February 1893	246	4	8
Corresponding period of 1892	166	6	8
Increase	79	14	0
Receipts from 1st January to 11th February 1893	56,775	0	0
Corresponding period of 1892	48,950	0	0
Increase	7,825	0	0

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Index to the Supplement

TO

THE CALCUTTA GAZETTE

FROM

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[REGISTERED No. 29.]

No. 10 of 1893.



SUPPLEMENT TO

The Calcutta Gazette.

WEDNESDAY, MARCH 8, 1893.

OFFICIAL PAPERS.

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CONTENTS.

Abstract of the Proceedings of the Council of the Lieutenant-Governor of Bengal, assembled for the purpose of making Laws and Regulations under the provisions of the Act of Parliament, 24 and 25 Vic., Cap. 67.

THE Council met at the Council Chamber on Saturday, the 18th February, 1893.

Present:

The HON'BLE SIR CHARLES ALFRED ELLIOTT, K.C.S.I., Lieutenant-Governor of Bengal, *presiding*.
The HON'BLE J. T. WOODROFFE, *Offg. Advocate-General.*
The HON'BLE T. T. ALLEN.
The HON'BLE H. J. S. COTTON, C.S.I.
The HON'BLE H. H. RISLEY, C.I.E.
The HON'BLE J. LAMBERT, C.I.E.
The HON'BLE H. LEE.
The HON'BLE DR. MAHENDRA LAL SIRCAR, C.I.E.
The HON'BLE A. H. WALLIS.
The HON'BLE GONESH CHUNDER CHUNDER.
The HON'BLE P. PLAYFAIR.
The HON'BLE MAULVI SYED FAZL IMAM, KHAN BAHADUR.

(Continued from last week's Gazette.)

THE HON'BLE MR. WOODROFFE in reply said:—"Sir, there has been, if I may be permitted to say so, a not unprofitable discussion on this motion of mine, and it is admitted that, if this matter were now before the Council for the first time, the case which I have attempted to lay before the Council is one which could not be satisfactorily met, that it is, in other words, a strong case. But it is said, and this is the only answer that has been attempted, that this is not now before the Council for the first time, and that the industries concerned ought to be satisfied with the partial relief secured to them by the Bill as it left the Select Committee. But I say with great submission that the whole question, whether these commercial interests should be subjected to taxation for the maintenance of the fire-brigade, is before the Council. It is because the present state of things is undesirable, because the injustice of it is apparent, that legislation has been recommended and held to be absolutely necessary.

"It is said that, the Committee of 1891 favoured a proposition adverse to that for which I am contending. But it is to be observed from the proceedings of that Committee that, the Chamber of Commerce was not addressed till the fundamental lines had been previously settled. Sir Henry Harrison stated so in express terms. When the Chamber and other bodies came before that Committee they were met, so to speak, with a foregone conclusion on this point. But notwithstanding that, the general principle was over and over again asserted after the door had been practically closed to its admission. In the first meeting, at which Mr. Malcolm, the representative of the Chamber of Commerce, was present, he contended 'that jute warehouses should be placed on the same footing as regards taxation for the maintenance of the fire-brigade as residential houses, mills and depôts for goods other than jute;' and quoted figures to show that, the value of the property (not jute) destroyed by conflagrations was nearly equal to the value of the jute which had been burned. He returned to the charge again at a later meeting, and said that 'he could only repeat what he urged on the last occasion, namely, that to do justice to all and to conform to the practice of other countries, there should be equal taxation on all classes for the support of the fire-brigade, and that the proposal to reduce the fees on jute warehouses by 50 per cent. was only a tardy act of justice to jute industries; but not, in the opinion of the Chamber, that entire measure of justice which they were entitled to claim, which consisted in jute owners being subjected to equal taxation with others whose goods are likewise protected by the fire-brigade.'

"It was in consequence of that position of affairs, that in a letter of this Government to the Government of India, I find it stated that the recommendations which the Committee arrived at were arrived at mainly by a sort of compromise and did not profess to be passed on any definite principle whatever. It was, in fact, the result of that species of drift which the late Sir Henry Harrison, to whose memory so just a tribute was paid by the HON'BLE MR. COTTON the other day, pointed out, was not due to any deliberate policy on the part of the Government. For these reasons, I venture to submit that the conclusions to which the Fire-brigade Committee arrived, are not of much weight in this matter. It is true they did suggest that, the jute industry should be relieved to the extent of 50 per cent., but that suggestion was made tentatively. It was sought to ascertain if it was possible, whilst not ignoring that there existed great difficulty in carrying out that principle. It is said that the Bill as it has left the Select Committee provides a final solution of the difficulty. But I venture to think that, in the attempted solution proposed by the majority of the Committee, so many serious difficulties exist that the solution can only be described, as Sir George Jessel once said of a case before him:—'It reminds me of nothing so much as a cullender, it is so full of holes.'

"It was suggested by the HON'BLE MR. COTTON that Calcutta is not so extraordinary a place as I spoke of it in the language of sarcasm, and that its position on the borders of the tropics renders it incomparable to other large cities. Bombay is not so far from the equator as Calcutta. Rangoon is at about the same distance, and Madras is nearer the equator than Calcutta. Further, it is said that, but for the jute industry, the fire-brigade would not have been consti-

tuted in its present state of efficiency. That may be. But for the growth of inhabitants in this town, it would still perhaps be permeated with those large open sewers which existed some twenty years ago. The frightful mortality from cholera necessarily led to increased taxation for sanitary purposes. Could it be suggested that an aditional tax should be imposed upon persons coming into Calcutta so as to prevent the population from growing, and rendering it less necessary to construct sewers and other sanitary appliances? I trow not.

"Now as to the meaning of the word 'permanent' in regard to fires. It has been said that, those are important fires which for a length of time require the services of the fire-brigade. Surely that is not the test of importance in regard to fires! It may be of great importance to the fire-brigade as regards the amount of work it has to perform. But is it suggested that those fires are therefore the more dangerous? Not so. Which really are the most dangerous fires? The fires which are dangerous are those which blaze and spread within so short a space of time, that very often the fire-brigade is unable to come before the conflagration has most widely spread. I am therefore not surprised to find that, the time occupied in putting out fires in jute warehouses is three days in the one and in bastis only five hours.

"There is one further matter to which I desire to refer. The HON'BLE MR. COTTON referred to a paper which he laid before the Select Committee with respect to the rate of insurance, as showing that jute presses paid a premium of $3\frac{1}{2}$ per cent. The hon'ble gentleman said that a rate of $3\frac{1}{2}$ per cent. in jute press-houses is an excessive rate as compared with the rates of insurance on godowns with loose jute (2 per cent.) and on baled jute (one per cent.) and $\frac{1}{8}$ per cent. on private houses. But I wish to draw the Council's attention to the note which is set opposite to that statement in the paper. In that note, the Commercial Union Company through their manager point out that, the premium on jute presses is $3\frac{1}{2}$ per cent., such premium is subject to a deduction of from 5 to 15 per cent, according to the nature of the appliances for putting out fires. But there is another note, and that the latest quotation which the writer had heard of was $3\frac{1}{2}$ per cent. less 30 per cent., or nearly one-third, so that the rates have come down to one-third of $3\frac{1}{2}$ per cent.

"One word more as to another matter, and I conclude. It is with reference to the observation of the HON'BLE MR. LEE dealing with the question of Act II of 1888. I had not forgotten the language of section 37. I did not refer to it because it is irrelevant. It is irrelevant because, when the Municipal Act was passed, the cost of the fire-brigade was borne by the jute and other industries, and the amendment of the Fire-brigade Act was not then in the contemplation of the Legislature. Consequently, although section 36 says, that the maintenance of the fire-brigade is one of the proper objects of municipal expenditure, it did not find a place in section 37. The object of my amendment is to remedy that state of affairs.

"THE HON'BLE MR. LEE referred at some length to the discussion which took place on the passing of Act II of 1888, with respect to education. But with every respect for educational projects, I for one do not see that the preservation of life and the protection of property from fire, stand on the same footing as education.

"Again, it is observed that, there is a project here of having special rates, which extend to all classes of property, and in that I am at one in saying that, I recognise to the full, the propriety of the imposition of these rates if there are to be differential rates on occupiers rather than upon the owners of houses. That, however, is a matter for subsequent consideration.

"I do not make any observations about the proportion of jute fires to other fires. I could not follow, though with every desire to do so, the HON'BLE MR. LEE in his attempted explanation of this matter. I still understand him to say that, 90 per cent. of the property consumed belongs to the jute industry. With the HON'BLE MR. RISLEY, I venture to express the opinion that, the value of property consumed is no element whatever in the consideration of the matter now before the Council.

"The time has now arrived in which this question, which has been so repeatedly brought forward, but which has hitherto not received that full discussion which is necessary, should receive its final solution. There can be

but one final solution—the acceptance of the principle of a general rate of taxation. If that solution is not arrived at on the present occasion, I feel sure that the time will come when the justice and fairness of the demand which I now formulate in this Council in this matter will render itself more and more apparent."

THE HON'BLE MR. WOODROFFE's Motion being put to the vote the Council divided:—

Ayes 4.	*Noes* 7.
The Hon'ble Mr. Playfair.	The Hon'ble Maulvi Syed Fazl Imam, Khan Bahadur.
The Hon'ble Babu Gonesh Chunder Chunder.	The Hon'ble Mr. Wallis.
The Hon'ble Mr. Risley.	The Hon'ble Dr. Mahendra Lal Sircar.
The Hon'ble Mr. Woodroffe.	The Hon'ble Mr. Lee.
	The Hon'ble Mr. Lambert.
	The Hon'ble Mr. Cotton.
	The Hon'ble Mr. Allen.

So the Motion was negatived.

The Motion, that the Report of the Select Committee be taken into consideration in order to the settlement of the clauses of the Bill, was then put to the vote and agreed to.

The Council adjourned to Saturday, the 25th February, 1893.

CALCUTTA;
The 6th March, 1893.

C. H. REILY,
Assistant Secretary to the Govt. of Bengal,
Legislative Department.

THE EMBANKMENT REPORTS FOR 1891-92.

No. 278I.

GOVERNMENT OF BENGAL,—PUBLIC WORKS DEPARTMENT.

Irrigation.

Dated Calcutta, the 7th March 1893.

RESOLUTION.

READ—

The Embankment Reports for 1891-92.

The public embankments in Bengal are of two classes—

First.—Embankments the property of Government which are maintained at the public expense.

Second.—Embankments maintained by Government officers at the cost of the persons interested.

In the first class there are—

A.—The embankments in Orissa which are maintained under Act XXXII of 1855.

B.—The embankments enumerated in Schedule D of Act VI (B.C.) of 1873, among which are included those of the Burdwan Ráj estate taken over in 1804, and some additional lengths which have at various times been added to the schedule under the provisions of section 43 of Act II (B.C.) of 1882, as also two short lengths of embankments in the Pabna and Bankura districts.

Embankments of the second class are situated in several districts, the most important being those on the banks of the river Gandak in the Champaran, Muzaffarpur and Saran districts, and those in the Midnapore district. These again are divided into two classes—

C.—Those in which the cost of maintenance is recovered from the persons interested by the payment of a fixed annual charge under a contract extending over a term of years not exceeding 30, as provided for in sections 63-68 of Act II (B.C.) of 1882.

D.—Those on which the cost of maintenance is recovered from the persons benefitted by an annual apportionment of the actual charges.

2. The lengths of embankments in each class and the total charges for maintenance during the year were as follows :—

Embankments.	Miles.	Feet.	Actual cost of works and repairs.	Charges of the year (inclusive of establishment and tools and plant).	Corresponding charges for 1890-91.
1	2	3	4	5	6
Embankments maintained at the expense of Government—			Rs.	Rs.	Rs.
A.—In Orissa	793	1,875	91,478	1,18,420	1,35,787
B.—Schedule D and other Government embankments.	1,135	3,677	2,37,275	3,16,513	2,55,186
Embankments not maintained at the expense of Government—					
C.—Maintained under contract ...	483	1,563	92,707	1,35,214	1,26,648
D.— Ditto by annual apportionment of charges.	75	840	13,398	16,029	17,475
Total for 1891-92 ...	......	......	4,34,858	5,86,176	5,35,096
Corresponding total for 1890-91 ...	......	......	3,84,252	5,35,096	......

The distribution of the above by districts is given in the appended statement B.

(A) Embankments of the first class in Orissa.

3. In Orissa the total length of the embankments at the close of the year was less than that in 1890-91 by 45 miles 2,920 feet, owing to the formal exclusion from the list of

certain embankments which had been superseded by more recently-constructed canal and other embankments. All these embankments are now being re-classified according to their comparative utility for purposes connected with the new settlement in progress in Orissa, and further reductions may not improbably be effected. The cost of repairs fell from Rs. 96,991 in 1890-91 to Rs. 77,565 in 1891-92, notwithstanding heavy damages caused by floods and by a cyclone which visited the district during the year under review.

4. In addition to the ordinary repairs to embankments, certain original works were carried out during the year at a cost of Rs. 13,803, the principal of which was the construction of six groynes at Pattamundi close to the canal in order to prevent further erosion of the right bank of the river Brahmani.

(B) Embankments of the first class—Schedule D and other Government embankments in Pabna and Bankura districts.

5. The total length of Schedule D embankments was nearly the same as last year. Two Government embankments in Pabna and Bankura were added during the year, but have not yet been brought on the schedule. Decreases occurred owing to the abandonment of 3 miles 4,082 feet of embankments in the Burdwan and Hooghly districts, while 2 miles 1,690 feet were added in the Rajshahi district. The actual charges for repairs, however, increased from Rs. 1,82,276 in the previous year to Rs. 2,37,275 in 1891-92. The main causes of the increase, amounting to Rs. 54,999, were as follows

6. A new embankment, called the Godágari road embankment, 2 miles 1,690 feet in length, was constructed in the Rajshahi district at a cost of Rs. 24,934 for the protection of the country north of Rampur-Boalia up to the Baral river, while four small retired lines of embankment, costing Rs. 5,860, in addition to Rs. 2,892 for land compensation, were necessitated in the 24-Parganas district by the encroachment of the rivers Hooghly and Bidiadhari and Diamond Harbour Creek, which seriously threatened the safety of the embankments at those places. The removal of portions of the embankments, including $3\frac{1}{4}$ miles of Schedule D and $1\frac{1}{2}$ miles of Takávi embankments on the right bank of the Damodar river to allow a free passage for the flood spill, coupled with the necessity for filling in breaches made by the floods, caused an expenditure of Rs. 24,013 in the Burdwan district, and in Midnapore Rs. 9,125 were spent on emergent repairs due to flood damages and the construction of retired lines. The last-mentioned district was the only one in which any high floods occurred, and here they were of ordinary character.

7. In the four districts mentioned above the cost of repairing these embankments aggregated Rs. 73,273 more than in the previous year, and savings were effected to the extent of Rs. 12,322 in the Murshidabad and Rs. 7,382 in the Hooghly districts. In theformer of these two districts the level to which the flood of the Bhagirathi river rose during the year was the lowest since the year 1883, but notwithstanding this the embankment was breached rather extensively in the 23rd mile at Mahula No damage, however, resulted owing to the dwarf bunds which had been thrown up in rear of the main embankment during the year 1890-91 for the protection of the town of Berhampore. A diversion channel for the Gobra nala, involving a weir at the outfall, was constructed in rear of the Lalthákuri bund, and acted effectively in intercepting drainage water and thus preventing percolation under that embankment.

8. The embankments, which protect the Burdwan Ráj Estate in the districts of Burdwan, Hooghly, Birbhum, and Midnapore are kept up by Government in consideration of an addition of Rs. 53,742 to the land revenue of the estate. The cost of repairs during the year amounted to Rs. 89,246, against Rs. 69,794 in 1890-91.

9. The Government embankment in Pabna alluded to above and situated on the right bank of the river Ichamati is 5,150 feet in length, and was constructed in 1890-91 for the protection of the Pabna civil station. It was repaired during the year at a cost of Rs. 443. The other embankment added during the year at Bankura is 4,600 feet in length, and was constructed in 1889-90 for the protection of the Government estates Pithaipur and Rajarbari from the floods of the river Darkeswar. During the year Rs. 702 was expended on protective works.

(C) Embankments maintained by contract.

10. The length of embankments maintained by Government under contract with the persons interested was increased during the year by 4 miles 1,901 feet owing to the construction of retired lines in the Champaran district. The sums payable under contract compared with the outlay, including book charges for establishment and tools and plant, on account of the maintenance of these embankments, from the introduction of the system to the end of 1891-92 are shown in the following statement:—

Year.	Midnapur District.		Saran District.		Champaran District.		Muzaffarpur District.		Total.	
	Maintenance charge.	Contract amount.	Maintenance charge.	Contract amount.	Maintenance charge.	Contract amount.	Maintenance charge.	Contract amount.	Maintenance charge.	Contract amount.
1	2	3	4	5	6	7	8	9	10	11
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1881-82	53,309	55,000	4,114	23,900	......	......	......	......	57,423	78,900
1882-83	66,329	55,000	76,938	23,900	......	......	......	......	1,43,258	78,900
1883-84	48,398	55,000	64,971	23,900	......	......	......	......	1,13,369	78,900
1884-85	31,168	55,000	32,051	23,900	36,039	13,000	52,987	10,415	1,57,253	1,02,315
1885-86	52,593	55,000	18,080	23,900	10,503	13,000	14,416	10,415	95,598	1,02,315
1886-87	40,009	55,000	18,354	23,900	11,730	13,000	14,247	10,415	84,340	1,02,315
1887-88	45,198	55,000	34,797	23,900	23,847	13,000	17,969	10,415	1,21,840	1,02,315
1888-89	48,121	55,000	27,449	23,900	35,507	13,000	18,719	10,415	1,29,700	1,02,315
1889-90	41,473	55,000	33,757	23,900	57,544	13,000	18,801	10,425	1,51,667	1,02,315
1890-91	24,165	55,000	17,348	23,900	68,549	13,000	16,595	10,415	1,20,648	1,02,315
1891-92	26,291	55,000	31,038	23,900	63,275	13,000	9,393	10,415	1,20,997	1,02,315
Total ...	4,82,051	6,05,000	3,58,915	2,62,900	3,07,025	1,04,000	1,63,208	83,320	13,11,189	10,35,220

The total amount payable yearly by the persons interested is Rs. 1,02,315, while the expenditure incurred purely on works and repairs amounted to Rs. 92,707, and including all charges to Rs. 1,35,214.* Government is therefore a loser of Rs. 32,899 on the results of the year.

11. Looking at the result of the year under review, the expenditure on repair works only in Midnapore, Muzaffarpur and Saran was within the contract amount, while in Champaran it was more than four times the amount owing to the erosion of the banks of the river Gandak, necessitating the construction of retired lines. In Saran a further expenditure of Rs. 8,759 was incurred by Government in surveying the river Gogra as a preliminary to deciding the question of embanking one or both banks. The cost of this survey is not included in the figures given above. The survey has been completed, and detailed estimates are under preparation for an embankment along the north bank from Gatni to Chapra.

(D) Embankments maintained on repayment of actual cost.

12. A decrease of 1 mile 2,047 feet occurred in the length of the embankments maintained under the system of annual apportionment of the actual charges, and the cost of repairs, excluding charges for establishment and tools and plant also fell from Rs. 14,551 in 1890-91 to Rs. 13,398 in the year under review.

13. The principal embankments maintained under this system are the Turkí main embankment on the right bank of the Bagmati river, in the Muzaffarpur district, and the Bazitpur and Monghyr embankments on the left bank of the river Ganges in the Darbhanga and Monghyr districts The repairs of the Turkí bund were carried out at a cost of Rs. 5,617, against Rs. 8,228 in 1890-91, the reduction being mainly due to the absence of heavy floods. A scheme, having for its object the protection of a considerable tract of country from the floods of the river Bagmati, and involving the construction of a masonry weir in the Turki embankment, and raising a portion of the Titariya road at an estimated cost of Rs. 19,970, has been approved by the Chief Engineer in the Irrigation Department, and a notification for carrying out the work under the provisions of section 14 of Act II (B.C.) of 1882 was published in Part I, page 1141 of the *Calcutta Gazette* of 21st December 1892. The amount of the estimate was deposited in the Muzaffarpur Collectorate in January 1892 by the proprietors of the Kánti Concern, who are the persons principally interested in the work. Ordinary repairs of the Bazitpur and Monghyr embankments were carried out during the year at a cost comparing favourably with that incurred in 1890-91, no damage having been caused to the embankments by floods.

* Exclusive of a deduction of Rs. 5,217 under suspense accounts, which reduces the amount to Rs. 1,29,997.

14. In this class (D) are also included six drainage schemes carried out under the provisions of Act VI (B.C.) of 1880, the heaviest expenditure having been Rs. 77,375 on the Dainan basin scheme in Midnapur, including Rs. 37,954 for the construction of a sluice at Srirámpur, which was completed in August 1891.

15. An amended estimate, amounting to Rs. 65,344, for capitalization of the maintenance charges of the Dankúni Drainage Project was sanctioned in Bengal Government No. 1793*I*., dated 21st December 1891, the date of apportionment of the capitalized amount being fixed as 1st April 1891, and an estimate, amounting to Rs. 5,178, being sanctioned to provide for the cost of repairs and maintenance during the year 1891-92, against which an expenditure of Rs. 4,070 was incurred. The annual cost of maintenance is calculated at Rs. 4,390, and it is expected that, on the average of a number of years, this amount will not be exceeded.

16. Details of the expenditure incurred during the year under review, the recoveries made and outstanding balances at the beginning and end of the year for each of the works in class D are given in the appended table A.

17. Among other works chargeable to the Provincial grant for agricultural works, the most important is the conversion of the Balliagahi Branch Canal into a drain, which was undertaken with the double object of improving the bed of the Rasúlpur river by causing an increased scour and of draining a tract of country known as the Barachauka jalla, and that lying to the west of the Argawal circuit embankment. In the above respects the work has so far proved successful, and it has further proved to be of considerable use as a navigation channel. The expenditure of the year amounted to Rs. 53,464. A sum of Rs. 1,119 was spent on remodelling the Partapkhali khal to provide for the drainage of a tract of 16 square miles of country in the Midnapore district. Repairs to the Balli Bhil drainage works involved an expenditure of Rs. 1,902. The question of the drainage of the south of the Midnapore district, involving proposals for the removal of the Argawal and Udbadal circuit embankments, and schemes for the retirement of the marginal embankments on the Rupnarayan, and for the abandonment of 31 miles of the Bhagirathi embankment in the Murshidabad district are still under consideration.

By order of the Lieutenant-Governor of Bengal,

C. W. ODLING,

Secretary to the Government of Bengal.

STATEMENT A.

Statement showing the outlay incurred, recoveries made, and balance outstanding on account of embankments and drainage works (Class D) maintained during the year 1891-92.

Names of Embankments and drainage works.	District.	Balance at end of 1890-91.	Outlay during 1891-92.	Total to end of 1891-92.	Amount recovered and adjusted with the Civil Departments during 1891-92.	Balance unadjusted on 31st March 1892.
1	2	3	4	5	6	7
Embankments.		Rs.	Rs.	Rs.	Rs.	Rs.
Turki Embankment	Muzaffarpur ...	9,530	6,530	16,060	9,549	6,511
Bazitpur ditto	Darbhanga ...	2,345	2,691	5,036	2,492	2,544
Sukri ditto	Gaya	1,234	634	1,868	1,252	616
Chandan ditto	Bhagalpur ..	1,273	1,035	2,308	1,273	1,035
Belwa ditto	Purnea	60	1,312	1,372	60	1,312
Monghyr ditto	Monghyr	1,618	944	2,562	1,690	872
Chota-Manika ditto	Bogra	.....	45	45	45	......
Madaria khal ditto	Hooghly	12,781	557	13,338	12,781	557
Tolly's Nullah ditto	24-Parganas ...	(—) 17	1,084	1,067	1,067	......
Kolia ditto	Birbhum	784	830	1,614	1,614	......
Joki ditto	Midnapore	317	377	694	451	243
Total Embankments ...	......	29,925	16,039	45,964	32,274	13,690
Drainage Works.						
Dankuni Drainage Project	Hooghly . ..	7,163	1,992	9,155	7,463	1,692*
Howrah ditto	Do.	......	1,214	1,214	1,214	......
Rajapur ditto	Do.	......	3,002	3,002	3,002	......
Ampta ditto	Do.	......	2,157	2,157	1,006	1,151
Chariyal khal ditto	24-Parganas ...	1,26,224	5,964	1,32,188	2,865	1,29,323
Dainan Basin ditto	Midnapore ...	32,791	44,584	77,375	5,477	71,898†
Total Drainage Works ...	..	1,66,178	58,013	2,25,091	21,027	2,04,064
GRAND TOTAL ...	. ..	1,96,103	74,952	2,71,055	53,301	2,17,754

* Includes Rs. 465 on account of establishment charges of the Land Acquisition Deputy Collectors which will be debited to Rupnarain Survey during 1892-93, and Rs. 27 on account of land charges of Kumrul sluice.

† Includes Rs. 37,954 on account of Srirampur sluice.

Statement B.

List of public embankments in Bengal in charge of Government officers, showing their length and the actual cost of repair (without charges for establishment) during the year 1891-92.

Name of Civil Division.	District.	Miles of embankments.				Total miles of embankments.	Cost of repairs to embankments maintained at the expense of Government.		Cost of repairs to embankments maintained at the expense of the persons benefitted.				Amount payable under contract by the persons benefitted.
		Maintained at the expense of Government.	Maintained at the expense of the persons benefitted.						Under contract.		By annual apportionment of charges.		
			Under contract.	By annual apportionment of charges.	Total.		Total.	Rate per mile.	Total.	Rate per mile.	Total.	Rate per mile.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
		M. FT.	M. FT.	M. FT.	M. FT.	M. FT.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Maintained under Act II (B.C.) of 1882. Patna	Muzaffarpur	......	52 400	24 1,050	76 1,450	76 1,450	......	......	6,310	121·18	5,617	232·11	10,415
	Darbhanga	......	......	17 3,960	17 3,960	17 3,960	......	......	......	......	2,240	120·25	......
	Saran	......	119 4,222	......	119 4,222	119 4,222	......	......	(a)15,601	130·22	......	......	23,900
	Champaran... ...	......	69 1,901	......	69 1,901	69 1,901	......	......	42,514	612·94	......	......	13,000
	Gaya	...	......	1 680	1 680	1 650	......	......	......	......	525	465·10	......
	Total ...	......	241 1,243	43 410	284 1,653	284 1,65[illegible]	......	......	64,426	267·06	8,382	194·6[illegible]	47,315
Bhagalpur.	Bhagalpur	......	......	3 2,960	3 2,960	3 2,960	......	......	......	......	821	230·57	......
	Malda	2 959	......	......	......	2 959	625	286·48	......	......	......	......	......
	Purnea	......	......	2 1,315	2 1,315	2 1,315	......	......	......	......	1,041	462·86	......
	Monghyr	......	......	11 1,320	11 1,320	11 1,320	......	......	......	......	790	70·22	......
	Total ...	2 959	......	17 315	17 315	19 1,274	625	286·48	......	......	2,652	155·45	......
Rajshahi	Rajshahi	8 652	......	......	......	8 652	(b)26,171	3,221·64	......	......	......	......	......
	Pabna	0 5,150	......	......	......	0 5,150	443	454·18	......	......	......	......	......
	Bogra	......	......	0 360	0 360	0 360	......	......	......	......	36	528·00	......
	Total ...	9 522	......	0 360	0 360	9 882	26,614	2,924·98	......	......	36	528·00	......
Presidency.	Murshidabad ...	95 0	......	......	......	95 0	37,988	399·88	......	......	......	......	......
	Nadia	0 4,000	......	......	......	0 4,000	33	43·56	......	......	......	......	......
	24-Parganas ...	220 1,342	......	2 0	2 0	222 1,342	37,386	169·74	......	......	876	438·00	......
	Total ...	316 62	......	2 0	2 0	318 62	75,407	238·62	......	......	876	438·00	......
Burdwan.	Burdwan	82 1,100	......	......	......	82 1,100	42,727	519·50	......	......	......	......	......
	Bankura	0 4,600	......	......	......	0 4,600	702	805·77	......	......	......	......	......
	Birbhum	3 1,320	......	0 3,715	0 3,715	3 5,035	448	137·84	......	......	683	970·72	......
	Hooghly	161 4,394	......	6 0	6 0	167 4,394	18,615	115·02	......	......	463	77·17	......
	Midnapore	560 1,180	242 320	6 1,320	248 1,640	808 2,820	72,137	128·76	19,522	80·64	306	48·96	55,000
	Total ...	808 2,034	242 320	12 3,675	255 4,675	1,063 2,109	1,34,629	166·54	19,522	80·64	1,452	114·36	55,000
	Grand Total ...	1,135 3,577	483 1,563	75 640	558 2,403	1,694 700	(c)2,37,275	208·92	83,948	173·70	13,398	178·26	1,02,315
Maintained under Act XXXII of 1855. Orissa	Balasore	64 447	......	......	......	64 447	7,287	113·70	......	......	......	......	......
	Cuttack	401 1,698	......	......	......	401 1,698	34,275	85·41	......	......	......	......	......
	Puri	327 5,010	......	......	......	327 5,010	36,003	109·78	......	......	......	......	......
	Total ...	793 1,875	......	......	......	793 1,875	(d)77,565	97·76	......	......	......	......	......

NOTE.—The figures given in this list as cost of repairs are exclusive of charges for establishment and tools and plant. The embankments in the Pabna and Bankura districts are embankments maintained at the expense of Government, but they have not yet been included in Schedule D.

(a) Exclusive of Rs. 8,759 expended on a new work during the year, viz., Survey of the river Gogra from Gatni to Chapra.
(b) Includes Rs. 24,934 expended on the construction of the Godagari road embankment.
(c) Exclusive of Rs. 34,384 expended on improvement and maintenance of certain drainage projects in the Midnapore and 24-Parganas districts, on repairs to opium tar shoots in the Eastern Sone Division, and on improvement of Balli Bhil and other works in the Circular and Eastern Canals, and Nadia Rivers Divisions, which the Examiner has shown as expenditure under Government embankments in his Finance Accounts for 1891-92.
(d) Exclusive of Rs. 13,803 expended on new works, and Rs. 110 on repairs to river gauges, &c., as shown in Examiner's Finance Accounts for 1891-92.

GIFT OF LAND REQUIRED FOR THE CONSTRUCTION OF THE HOWRAH FORESHORE ROAD.

GOVERNMENT OF BENGAL, PUBLIC WORKS DEPARTMENT.

Dated Calcutta, the 7th March 1893.

Notification No. 59.—The following correspondence is published for general information.

F. J. JOHNSTONE,
Secretary to the Govt. of Bengal.

No. 681R.L., dated Burdwan, the 10th February 1893.

From—A. POWER, ESQ., Commissioner of the Burdwan Division,
To—The Secretary to the Government of Bengal, Public Works Department.

WITH reference to your No. 6492C., dated the 21st December, to the address of the Board of Revenue, I have the honour to submit copy of a letter written by the Mukhtear of Moharani Swarnamoyi of Kasimbazar, to the Covenanted Deputy Collector of Howrah, waiving all her claims to compensation for her land in front of Shalimar House, required to be taken up for the new road connecting Howrah with the Botanical Gardens. It is reported that the actual value of the land is small, but the Moharani might have put in claims for severance which would have amounted to many thousands of rupees, which would have been very difficult to settle, and which, if accepted, would have made the road so expensive that it would have been impossible to construct it.

2. The road will not only be a great boon to the public, uniting Calcutta and Howrah with the Botanical Gardens along the riverside, but will also save a circuitous journey.

3. Mr. Grierson has suggested that she may be publicly thanked by Government for this very handsome gift. I support the Magistrate's recommendation.

Dated the 28th January 1893.

From—MOHARANI SWARNAMOYI, by her Mukhtear BABU TROYLUCKO NATH BARAT,
To—The Covenanted Deputy Collector, Howrah.

WITH reference to the notice No. 4 of 1892-93, dated the 21st December 1892, served upon me, requiring me to file a claim in respect of the acquisition of land required for the foreshore road in front of my Shalimar property in the village of Sibpur, I beg to state that I forego all my claims for compensation in respect of the acquisition of land aforesaid claimable under Act X of 1870.

No. 1272C., dated Calcutta, the 1st March 1893.

From—F. J. JOHNSTONE, ESQ., Secy. to the Govt. of Bengal, P. W. Dept.,
To—The Commissioner of the Burdwan Division.

I AM directed to acknowledge the receipt of your letter No. 681R.L., dated the 13th February 1893, submitting, for information, copy of a letter (dated the 28th January 1893) from the Mukhtear of the Moharani Swarnomoyi, of Kasimbazar, waiving all her claims to compensation for the land in front of Shalimar House required for constructing the Howrah foreshore road.

2. The actual value of the land given is small, but you rightly say that the Moharani might have put in claims for severance which would have amounted to many thousands of rupees. These, as you remark, would no doubt have been very difficult to settle, and, if accepted, would have made the foreshore road so very expensive that it would have been impossible to construct it.

3. In reply, I am to state that the Lieutenant-Governor notes with satisfaction this graceful act on the part of the Moharani in foregoing all her claims to compensation, and I am desired to request that you will convey to her the thanks of His Honour for her handsome gift, which will now enable the Government to proceed with the construction of the road, which will be a great boon to the public.

4. The correspondence on this subject will be published in the *Calcutta Gazette* for general information.

LIBERALITY OF RAJA NAM NARAIN SING AND BABUS SURUP NARAIN SING, TORAL NARAIN SING AND RAMESHAR NATH SING, ZAMINDARS IN THE DISTRICT OF HAZARIBAGH.

No. 764Med., dated Calcutta, the 1st March 1893.

From—H. H. Risley, Esq., C.I.E., Secy. to the Govt. of Bengal, Municipal Dept.,
To—The Commissioner of the Chota Nagpur Division.

I am directed to acknowledge the receipt of your letter No. 250T.M., dated the 25th January 1893, with which you forward a copy of a letter from the Honorary Secretary to the Dufferin Fund Committee, Ranchi Branch, reporting that the following donations were made to the Fund on the occasion of the visit of His Honour the Lieutenant-Governor to Chota Nagpur in November last:—

		Rs.
1.	Raja Nam Narain Sing, of Ramgurh	5,000
2.	Babu Surup Narain Sing, of Padma	1,500
3.	„ Toral Narain Sing, of Gowar	2,000
4.	„ Rameshar Nath Sing, of Kunda	1,000

You report that it is proposed to spend all the money subscribed in founding a hospital for women in the town of Hazaribagh, with the exception of Rs. 500, which is intended by Babu Surup Narain Sing for the benefit of the people of Lohardaga.

2. In reply, I am directed to say that the Lieutenant-Governor accepts the donations, and to request that you will be so good as to convey to the donors an expression of His Honour's thanks for their liberality and public spirit. This letter will be published in the *Calcutta Gazette*.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 4th March, 1893.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.				
Burdwan Divn.	1	Burdwan March 4, '93 Kalna ... Katwa ... Raniganj ..	0·21 0·91 0·25 0·70	Weather—cloudy and much warmer since the last rain The late rain did damage to all *rabi* crops. Ploughing going on everywhere. No want of fodder and sufficient water in tanks. Prices of common rice:— Srs. Sadar ... ... 11 to 13 per rupee. Kalna ... ... 10 to 13 per rupee. Katwa ... ... 13 per rupee. Raniganj ... ... 13 per rupee.
	2	Bankura „ 4, '93 Vishnupur ...	0·21 0·24	Weather—fair. Ploughing going on. Pressing of sugarcane continues. Fodder and water sufficient. Rice selling at— Srs. Sadar ... ... 11½ per rupee. Vishnupur ... ... 12 per rupee.
	3	Birbhum „ 4, '93 Rampur Hát ...	0·02 0·40	Weather—seasonable. State and prospects of *rabi* crops good. Fodder and water plentiful. Price of common rice continues from 13 to 15 seers per rupee.
	4	Midnapore „ 4, '93	0·22	Rain at the begining of the week, since which the weather has become fine and much hotter. *Rabi* crops mostly gathered. Ploughing going on extensively. Prices of common rice:— Srs. Sadar ... ... 12 per rupee. Contai ... ... 13 to 14 per rupee. Tamluk ... ... 12 to 14 per rupee. Garhbeta ... ... 11 to 12 per rupee.
	5	Hooghly „ 4, '93 Serampore ... Jahanabad ...	0·22 0·25 Nil	Weather—becoming hot. *Rabi* crops and potatoes reported to be considerably damaged by the late rain. Ploughing in progress. Mangoes not so much damaged as was supposed. Prices of common rice:— Srs. Sadar ... ... 11 per rupee. Serampore ... ... 10 to 11 per rupee. Jahanabad ... ... 12 to 12½ per rupee.
	6	Howrah „ 4, '93 Ulubaria ...	0·16 0·32	Weather—seasonable. Reaping of *khesari* continues. Condition of cattle good. Fodder and water-supply sufficient. Price of rice 11 to 11½ seers per rupee.
Presidency Divn.	7	24-Parganas „ 4, '93	0·15	Weather—seasonable. Winter crops being gathered. Cutting of sugarcane going on. Prospect fair. Sufficient fodder. No cattle-disease. Prices of common rice:— Srs. c. Sadar ... ... 10 to 14 8 per rupee. Barrackpore ... ... 12 4 per rupee. Parasat ... ... 10 5 per rupee. Diamond Harbour ... ... 13 0 per rupee. Basirhat ... ... 12 5 per rupee. Dum-Dum ... ... 12 0 per rupee.
	8	Nadia „ 4, '93 Kushtia ... Meherpur ... Chuadanga ... Ranaghat ...	0·14 0·75 0·46 0·07 0·96	Weather—cool and fine. Prospects of *rabi* crops fair. The harvest is beginning. Lands are being ploughed for *aus* paddy. Fodder and water sufficient. Prices of common rice almost stationary—about 13 seers per rupee.
	9	Khulna „ 4, '93 Bagerhat ... Satkhira ...	0·10 0·48 0·15	Weather—becoming warm. *Boro* doing well. *Rabi* harvest nearly over; outturn slightly damaged by recent rain. Coarse rice selling at 11 to 14 seers per rupee. Fodder and water sufficient.
	10	Jessore „ 4, '93 Jhenida ... Magura ... Narail ... Bangaon ...	0·22 1·73 1·66 0·77 0·73	Weather—cloudy with occasional rain in the first part of the week; now rather hot. The rainfall of the week has done injury to some of the standing *rabi* crops and to mango blossoms. Land is being extensively prepared for the cultivation of paddy. Indigo and *til* sowings have commenced. Cattle-disease reported from Gadkhali, Garapota and Gaighatta. Fodder and water sufficient. Price of rice stationary.
	11	Murshidabad „ 4, '93	0·08	Weather—seasonable. The recent rain has partially damaged the *rabi* crops, viz.—*mutar*, gram, *masuri*, rye, &c., both standing on fields and those stacked for threshing, excepting wheat and barley. Indigo and sugarcane plants progressing well. Common rice sells at 13 seers per rupee. There is sufficient fodder for cattle.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and State and prospects of the crops.
	BENGAL—*concld.*		
	Chittagong Divn.		
12	Chittagong Mar. 4, '93	Nil	Weather—seasonable. Prospects of crops good. *Rabi* cultivation in progress. Prices stationary. Condition of cattle good. Supply of fodder sufficient.
13	Noakhali „ 4, '93	0·15	Weather—seasonable *Rabi* crops doing well. Land being ploughed for *aus* paddy. Cattle-disease reported from Begumganj and Chhagalnaya. Fodder and water sufficient. Price of rice varies from 13 to 14 seers per rupee.
14	Tippera „ 4, '93	0·19	Weather—getting hot by day and cold at night. Mustard has almost been harvested and the outturn has been an average one. Both food-crops and fodder are sufficient.
15	Chittagong Hill Tracts. „ 3, '93	0·03	Weather—cold in the morning. Lands for *jum* cultivation being selected. Vegetables progressing. No cattle-disease reported. Prices of common rice :— Srs. Rangamati ... ... 10 } Bandarban ... ... 9½ } per rupee. Manicksury ... ... 20 }
	Dacca Divn.		
16	Dacca „ 4, '93	Nil	Weather—seasonable. *Rabi* crops being gathered Cultivation and sowing of *aman* and *aus* paddy going on. Fodder available. No cattle-disease. Common rice selling at from 12 to 14 seers per rupee.
17	Faridpur „ 4 '93	0·16	Weather—much warmer and more seasonable. Standing *rabi* crops fair, and no report of great damage by the late rain, although some harm has probably been done. Ploughing for early rice going on. *Til* and sugarcane being sown. *Boro* and *jali* paddy doing well. Common rice sells at 11½ seers per rupee at Sadar and 13 seers at Goalundo and Madaripur. Cattle get fodder and no cattle-disease.
18	Backergunge „ 4, '93	Nil	Weather—seasonable. Slight rain in the subdivisions. Prospects of crops good. Common rice selling from 10 to 14 seers per rupee. Fodder and water sufficient.
	Pirojpur ...	0·13	
	Bhola ...	0·14	
	Patuakhali ...	0·26	
19	Mymensingh „ 4, '93	0·09	Weather—getting warm. Prospects of standing crops good. Rice sells at from 11½ to 14 seers per rupee. Supply of water and fodder sufficient.
	Rajshahi Divn.		
20	Dinajpur „ 4. '93	0·01	Weather—getting hot. Cultivation of lands for *bhadoi* paddy and jute continues. Pressing of sugarcane nearly finished. Outturn of mustard reported to be 14 annas. Prices of rice both at Sadar and Thakurgaon continue stationary. Cattle reported to be in good condition. Fodder and drinking water continue sufficient.
	Thakurgaon ...	Nil	
21	Rajshahi „ 4, '93	Nil	Weather—cold and seasonable. Notwithstanding the unusual rain, it is hoped that the *rabi* crops will give a fair outturn. Ploughing has been much facilitated for future rice crops. Very little cattle-disease reported. Price of common rice varies from 12 to 16 seers per rupee. Fodder and water-supply ample.
	Nator ...	1·12	
	Naugaon ...	0·15	
22	Rangpur „ 4, '93	Nil	Weather—getting warmer with westerly wind. Lands still under preparation for *bhadoi* crops. Common rice from 11 to 15 seers per rupee.
	Kurigaon ...	Nil	
	Nilphamari ...	Nil	
	Gaibanda ...	0·82	
23	Bogra „ 4, '93	0·50	Weather—fine and warm. Lands are being ploughed for *aus* and jute. *Rabi* crops in good condition. Common rice 13½ seers per rupee. Fodder and water sufficient.
	Sherpur ...	0·89	
	Naukhila ...	0·67	
24	Pabna „ 4, '93	0·14	Weather—clear and cool. Standing *rabi* crops somewhat damaged by the incessant fall of rain last week, but it enabled the raiyats to plough their lands for the early rice crop. Rice selling 12½ seers per rupee at Pabna and Rs. 3-8 to Rs. 5 per maund at Sirajganj. Condition of cattle good. Water-supply and fodder sufficient.
25	Darjeeling „ 4, '93	0·04	Weather—fair and less cold. *In the hills* :—Barley and wheat progressing favourably. *Bhutta* being sown. Potatoes are being gathered. *In the Terai* :—Harvesting of potatoes and mustard finished. Tobacco and barley doing well. Lands being ploughed for *bhadoi* crops. Prices of coarse rice :— Srs. Hills ... ... 11 } Terai ... ... 13 } per rupee.
	Siliguri ...	Nil	
26	Jalpaiguri „ 4, '93	Nil	Weather—getting warm. Harvesting of tobacco commenced and that of mustard nearly finished. Ploughing for *aus* going on. Price of common rice 13 seers 5½ chitaks per rupee. Condition of cattle good and water and fodder sufficient.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.			
Bhagalpur Divn.			
27	Monghyr March 4, '93 Begusarai ... Jamui ...	Nil 1·64 2·30	Weather—partly fair and partly cloudy. Although the rain has done some damage to the *rabi* crops and poppy, still they are promising. The rain has done much good to indigo. Fodder and water sufficient. Considerable deaths of cattle during the late foul weather are reported from Jamui subdivision. Prices of common rice:— Srs. Sadar ... ... 13 to 16¼ } per rupee. Begusarai ... ... 16 } Jamui ... ... 15 }
28	Bhagalpur „ 4, '93 Banka ... Madhipura ... Supaul ...	0·10 0·40 Nil Nil	Weather—seasonable. Standing crops are reported not to have been very badly affected by the late rain. Wheat and linseed are expected to yield 12 annas. Price of common rice 15 seers 2 chitaks per rupee.
29	Purnea „ 4, '93 Kishanganj ... Araria ...	0·12 0·17 0·36	Weather—cloudy at the beginning of the week; west winds getting hot daily. Tobacco being gathered everywhere; outturn good. Pressing of sugarcane going on. Other *rabi* crops doing well. Lands being prepared for the next *bhadoi*. Fodder and water sufficient. No cattle-disease. Prices of common rice:— Srs. Sadar ... ... 14 to 16 } per rupee. Araria ... ... 18 } Kishanganj ... ... 15 }
30	Malda „ 4, '93 Shibganj ... Gajole ...	0·08 0·06 0·07	Weather—clear and cool, but cloudy at intervals. Wheat and other *rabi* crops ripening and their prospect continues favourable. Transplantation of *boro* rice progressing. Common rice sells at from 12 to 17 seers per rupee. No want of fodder or drinking water.
31	Sonthal Parganas „ 4, 93 Deoghur ... Godda ... Jamtara ... Pakur ...	0·08 0·35 0·41 0·35 0·8	Weather—cold with occasional clouds. West wind beginning. It is hoped that the damage feared to the *chaiti* crops, *mahua* and mangoes has been exaggerated. The dry weather this week is much in their favour. The intense cold caused many deaths among cattle. Water and fodder sufficient.
Patna Division.			
32	Patna „ 4, '93	0·08	Weather—cool and clear. Prospects of the *rabi* crops are not favourable. The standing and harvested *rabi* crops, such as gram, peas, mustard and *masur*, have been damaged by the rain. Poppy has sustained very little injury from rain. Common rice selling at Sadar 16 seers per rupee.
33	Gaya „ 4, 93 Aurangabad ... Jahanabad ... Nawada ...	0·10 0·46 0·44 0·91	Weather—cloudy on the first two days of the week, bright sunshine during the remaining days. Harvesting of *rabi* crops going on. The rain ceased at the beginning of this week. The bright sunshine after the rain is also a little injurious to the pulses, as the pods crackle and the grain is thus thrown away in fields. The sunshine is, however, very favourable to poppy. Lancing of poppy is in progress, and the yield is reported good, about 6 annas collection having been already made. Fodder and water for cattle sufficient. Prices rose when the weather was cloudy, and have been stationary since.
34	Shahabad „ 4, '93 Buxar ... Sasaram ... Bhabhua ...	0·07 0·29 Nil 1·03	Weather—seasonable. Prospects of *rabi* crops continue to be favourable. Slight damage is reported to have been done to peas and opium by rain, but the favourable weather which has followed has given an impetus to the later sowing of poppy, that it will fully if not more than make up for the slight loss sustained by the first sowing. Price of common rice at Sasaram has risen by 4 chitaks in the rupee; elsewhere it is stationary. Cattle in good condition with sufficient fodder and water.
35	Darbhanga „ 4, '93	Nil	Weather—clear with west winds. Prospects of *rabi* continue good, but *rahar* and peas much damaged by the late rain. Mustard being harvested, and the yield is estimated at 16 annas. The late continuous rain and cloudy weather spoiled the poppy leaves. The produce from capsules lanced is reported to have been small, but will improve if clear weather and the west wind continue. Prices remain stationary. Condition of cattle good.
36	Muzaffarpur .. 4, '93 Sitamarhi (on the 24th and 26th Feb.) . Hajipur ...	Nil 0·49 0·06	Weather—cloudy in the beginning of the week, but now seasonable. The *rabi* crops, except for the damage done by the late rainfall, are doing well. Poppy leaves injured by rain. Opium produce so far from the capsules lanced very small, but will probably improve now. No disease among cattle. Fodder and water ample.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR—*concld.*				
PATNA DIVISION—*concld.*	37	Saran Mar. 4, '93 Siwan .. Gopalganj ..	0·23 0·06 0·02	Weather—cleared up since Sunday last (26th February), but patches of clouds visible since yesterday (3rd March). Standing crops doing well. The Sub-divisional Officer of Gopalganj reports the yield of mustard at 18 annas. The sunshine since the clearing of weather with west winds has averted the danger that was imminent to poppy. *Rahar* and peas have suffered in Sadar and Siwan subdivisions from continued rain and east wind; but on the whole prospects are fairly good. Fodder and water abundant. Prices of common rice :— Srs. c. Chapra ... ... 14 3 } per rupee. Siwan ... ... 12 8 } Gopalganj ... ... 14 3 }
	38	Champaran „ 4, '93	Nil	Weather—fine. *Rabi* crops generally promising, but in places somewhat injured by heavy rain. Poppy plants in Bettiah are very promising. In the Sadar a little damage was done to the poppy, but with the present sunshine the outturn will be good. No disease among cattle. Fodder and water abundant. No marked change in prices.
ORISSA.				
ORISSA DIVN.	39	Cuttack „ 4, '93	1·01	Weather—cloudy. The rainfall has been beneficial. Local hailstones have done some damage to crops on the ground. Supply of fodder sufficient. Price of common rice remains unchanged.
	40	Puri „ 2, '93	0·49	Weather—seasonable. Ploughing for next *sarad* crop going on. *Dalua* paddy growing well. Miscellaneous crops thriving. Common rice sells at from 14 seers 7 chitaks to 17 seers 13 chitaks per rupee.
	41	Balasore „ 4, '93	0·51	Weather—warmer and more settled. Ploughing continues. The late *rabi* crop is being harvested. Rice sells at 15 seers per rupee at Balasore and 18 seers at Bhadrak.
CHOTA NAGPUR. *South-West Frontier Agency.*				
CHOTA NAGPUR DIVN.	42	Hazaribagh Mar. 4, '93 Giridi ...	0·12 0·48	Weather—getting warmer; occasionally cloudy. Rain has injured the crops. *Mahua* and *arhar* have suffered. Lands are being ploughed. Poppy has been damaged by rain. Common rice 12 to 14 seers per rupee.
	43	Lohardaga „ 4, '93	0·17	Weather—seasonable. Ploughing commenced; some damage has been caused by the recent rain to *rahar*, *musari* and *khesari*. Common rice selling at 13 seers per rupee. Fodder and water plentiful.
	44	Palamau „ 3, '93	0·53	Weather—seasonable. A little rain in some parts. Rainfall is not favourable to the *rabi* crops. Cattle-disease reported from some stations. Fodder sufficient. Prices stationary.
	45	Singhbhum „ 4, '93	0·20	Weather—cloudy at times; getting warm. The late heavy rain has damaged the *rabi* crop to some extent in the Kolhan, but it is considered that an average 12 annas crop for the whole district will be reaped. Common rice selling at from 12 to 16 seers per rupee. Cattle-disease on a small scale is reported from Baharagara outpost in Dhalbhum.
	46	Manbhum „ 4, '93 Gobindpur ...	Nil 0·27	Weather—bright and getting warmer daily. The late heavy rain has done considerable damage to the mango blossoms and *rabi* generally. There is also cause of anxiety regarding *mahua*. Rice selling at from 10 to 14 seers per rupee. Fodder and water-supply sufficient.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 7th March, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the

QUANTITIES PER RUPEE IN

Division	Number.	DISTRICTS.	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum. (*Sorghum Vulgare.*) Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
BENGAL.			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Burdwan Division.	1	Burdwan ...	12 0	12 0	11 8	...	...	...	10 4	10 8	11 10	12 0	12 0	13 14	..	...	...
	2	Bankura ...	11 8	11 14	11 4	...	...	...	10 0	10 0	12 8	10 12	11 4	15 10		...	...
	3	Birbhum ...	10 4	10 4	12 8	9 0	9 0	...	11 0	11 0	13 0	14 4	14 4	15 0	...	...	...
	4	Midnapore ...	11 0	10 4	11 0	...	...	...	10 0	10 0	11 0	12 12	12 8	14 0	...	...	...
	5	Hooghly ...	11 0	11 0	18 0	11 0	...	...	8 8	9 0	8 0	10 0	10 0	13 0	...	...	...
	6	Howrah ...	...	...	...	...	...	...	9 6	9 2	10 0	11 6	11 7	12 8	...	...	...
Presidency Division.		Calcutta ..	11 4	10 8	11 3	17 0	16 7	17 3	7 4	7 4	8 1	10 0	10 0	11 9	18 3	18 0	15 14
	7	24-Parganas ...	11 0	11 4	10 8	16 0	16 0	16 0	8 0	8 0	8 0	12 0	12 0	13 0	16 0	18 0	...
	8	Nadia ...	15 10	15 10	12 1	...	...	22 14	10 0	10 0	10 10½	12 12	12 8	11 13½	...	.	...
	9	Khulna ...	...	...	...	...	...	...	10 12	11 8	13 5	12 12	12 8	16 0	...	...	...
	10	Jessore ...	9 0	10 0	10 0	...	...	...	10 0	10 8	12 0	13 0	13 8	14 8	...	...	...
	11	Murshidabad ...	13 0	13 0	12 0	...	...	...	10 0	10 0	10 0	12 8	13 0	13 8	...	...	...
Chittagong Division.	12	Chittagong ...	9 12	9 4	10 0	...	...	...	11 0	11 0	10 0	13 0	12 0	13 0	...	...	...
	13	Noakhali ...	...	...	...	...	...	...	11 0	11 0	12 0	12 0	12 0	13 0	...	...	...
	14	Tippera ...	11 0	11 0	10 0	...	...	...	8 12½	8 12½	10 0	12 5	12 8	13 5½	.	..	...
	15	Chittagong Hill Tracts. ...	...	...	...	...	...	...	...	...	...	10 0	10 0	11 3¼	...	...	...
Dacca Division.	16	Dacca ...	...	...	...	...	...	...	11 0	10 8	12 0	11 8	11 8	14 0	...	...	...
	17	Faridpur ...	11 0	11 0	12 0	20 0	20 0	16 0	8 0	8 0	10 0	12 0	12 8	16 0	...	...	...
	18	Backergunge ...	...	...	...	...	...	...	11 0	11 2	11 4	12 8	12 12	12 12	...	...	...
	19	Mymensingh ...	9 8	9 8	9 0	...	...	...	10 0	10 0	11 0	12 0	11 0	14 0	...	..	...
Rajshahi Division.	20	Dinajpur ...	10 12	10 8	11 2	15 12	15 12	18 0	10 0	8 0	9 9	14 0	14 8	12 0	...	..	...
	21	Rajshahi ...	10 8	13 8	12 0	...	19 8	26 4	10 8	11 4	10 8	12 0	13 2	12 0	...	...	...
	22	Rangpur	10 13	10 10	9 0	...	...	...	9 9	10 0	9 0	12 8	12 15	10 10	...	...	.

A In the subdivisions the retail prices of salt per rupee are :—Kalna 10 seers, Katwa 11¾ seers, and Raniganj 11 seers.
B At Vishnupur the retail price of salt is 11 seers per rupee.
C At Rampore Hát the retail price of salt is 11 seers per rupee.
D At Tamluk the retail price of salt is 11 seers 2 chitaks per rupee.
E In the subdivisional marts the retail prices of salt per rupee are :—Bhaddreswar 12 seers and Jahanabad 10 seers 10 chitaks.
F At Ulubaria the retail price of salt is 10½ seers per rupee.
G In the mufassal marts the retail prices of salt per rupee are :—Chetla Hát 11 seers 7 chitaks, Baduria 10 seers 11 chitaks.
H In the mufassal marts the retail prices of salt per rupee are :—Bahadurkhali 10½ seers, Chuadanga 10 seers, Meherpur 10½ seers, and Ranaghat 10½ seers.
I In the subdivisions the retail prices of salt per rupee are :—Bagerhat 8 seers and Satkhira 10 seers 10½ chitaks.
J In the subdivisions the retail prices of salt per rupee are :—Jhenida 9 seers 9 chitaks, Magura 10 seers, Narail 9 seers [illegible] chitaks and Bongaon 10 seers 10 chitaks.

Head-quarters Station Bazars of the Districts of Bengal on the 28th February, 1893.

Indian-corn or Maize. (*Zea Mays.*)			Arhar or Thur, Cadjan Pea. (*Cajanus Indicus.*)			Firewood.			Salt.			Wholesale prices per maund of 40 seers. Salt.			Districts.	Number.	
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.			
															BENGAL.		
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.			
...	...	...	21 0	22 8	17 0	100 0	100 0	100 0	A 11 12	11 12	11 4	3 6 6	3 6 6	3 6 8	Burdwan	1	Burdwan Division.
...	...	19 0	12 0	12 0	17 0	320 0	320 0	240 0	B 11 0	11 0	11 2	3 10 0	3 10 0	3 9 6	Baukura.	2	
22 0	22 0	...	11 0	11 0	12 0	2[illegible]0 0	200 0	200 0	C 10 12	10 12	10 8	3 12 6	3 12 6	3 10 0	Birbhum.	3	
...	...	...	20 0	19 0	10 0	240 0	240 0	120 0	D 11 7	11 7	11 8	3 7 0	3 7 0	3 8 0	Midnapore.	4	
...	...	...	11 0	12 12	11 0	160 0	160 0	120 0	E 11 0	11 0	10 0	3 6 0	3 6 0	3 12 0	Hooghly.	5	
...	...	...	10 10	10 10	10 12	105 0	100 0	100 0	F 10 10	10 10¾	10 8	3 8 0	3 8 0	3 6 0	Howrah.	6	
18 4	19 0	15 9	12 5	12 5	15 3	93 0	85 0	95 0	9 8	9 8	11 6	4 0 0	4 0 0	3 4 0	Calcutta.		
20 0	20 0	...	18 0	18 0	18 0	100 0	100 0	100 0	G 11 0	11 0	11 0	3 4 6	3 4 6	3 4 6	24-Parganas.	7	Presidency Division.
...	...	...	22 1	22 1	17 4	128 0	128 0	...	H 10 0	10 0	10 10½	3 8 0	3 8 0	3 8 0	Nadia.	8	
...	...	...	9 8	10 0	...	160 0	160 0	160 0	I 9 4	9 0	10 0	3 8 0	3 12 0	3 12 0	Khulna.	9	
...	...	...	13 0	13 0	20 0	120 0	120 0	160 0	J 9 14	9 14	9 2	3 10 0	3 10 0	3 10 0	Jessore.	10	
...	...	...	17 0	17 0	16 0	200 0	200 0	200 0	K 10 8	10 8	10 8	3 7 0	3 7 0	3 12 0	Murshidabad.	11	
...	...	...	...	...	...	110 0	100 0	110 0	L 10 0	10 0	11 0	3 12 0	3 8 0	3 8 0	Chittagong.	12	Chittagong Division.
...	...	...	...	...	...	Not sold by weight.			M 10 0	10 0	10 0	3 12 0	3 12 0	3 12 0	Noakhali.	13	
...	...	..	11 0	11 0	8 0	Ditto.			N 10 13½	10 13½	10 0	3 12 0	3 12 0	3 12 0	Tippera.	14	
...	...	...	...	...	...	240 0	240 0	240 0	8 0	8 0	8 0	4 8 0	4 8 0	4 8 0	Chittagong Hill Tracts.	15	
...	...	...	...	...	...	130 0	120 0	120 0	10 0	10 0	10 0	3 10 0	3 10 0	3 8 0	Dacca.	16	Dacca Division.
...	...	...	...	...	...	...	...	...	O 10 12	10 12	10 8	3 12 0	3 12 0	3 12 0	Faridpur.	17	
7 0	Musuri 7 0	...	10 0	Mug. 10 0	...	82 0	82 0	80 0	P 10 8	10 8	10 0	3 10 0	3 10 0	3 10 0	Backergunge.	18	
...	...	...	13 0	13 0	10 0	120 0	120 0	...	Q 10 0	10 0	10 8	4 0 0	4 0 0	3 10 0	Mymensingh.	19	
...	...	...	13 8	13 8	19 3	160 0	160 0	160 0	10 8	10 8	10 4	3 12 0	3 12 0	3 14 0	Dinajpur.	20	Rajshahi Division.
...	...	...	18 4	18 8	20 4	240 0	240 0	240 0	R 9 9	9 9	9 9	3 10 8	3 10 8	3 10 8	Rajshahi.	21	
...	...	...	12 8	11 8	9 0	80 0	80 0	100 0	S 9 9	10 0	9 0	4 4 0	4 0 0	5 0 0	Rangpur.	22	

K At Kandi the retail price of salt is 11 seers per rupee.
L At Cox's Bazar the retail price of salt is 8 seers per rupee.
M At Fenny Hát the retail price of salt is 8 seers per rupee.
N In the subdivisions the retail prices of salt per rupee are :—Brahmanbaria 9 seers 2 chitaks and Chandpur 9 seers.
O At Madaripur and Goalundo the retail price of salt is 10 seers per rupee.
P In the subdivisions the retail prices of salt per rupee are :—Patuakhali 9 seers, Pirojpur 10½ seers, and Bhola 9 seers.
Q In the subdivisions the retail prices of salt per rupee are :—Jamalpur 10 seers, Kishorganj 10 seers, Netrakona 10 seers, and Kagmari 10 seers.
R In the subdivisions the retail prices of salt per rupee are :—Nator 9 seers and Naugaon 9 seers 9 chitaks.
S In the subdivisions the retail prices of salt per rupee are :—Nilphamari 10 seers and Kurigram 8 seers.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the Head-quarters

Number.	DISTRICTS.	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum (Sorghum Vulgare.) Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
		QUANTITIES PER RUPEE IN														
	BENGAL—*continued.*	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
	RAJSHAHI DIVISION—*concld.*															
23	Bogra ...	12 0	12 9	8 4	...	...	...	9 12	9 12	9 12	13 8	13 8	13 8	...	...	...
24	Pabna	13 8	13 14	11 4	22 8	21 0	...	6 0	6 4	7 8	12 2	13 2	13 0	...	.	...
25	Darjeeling	8 0	8 0	8 0	10 0	10 0	9 0	5 0	5 0	5 0	11 0	11 0	10 8	...	...	...
26	Jalpaiguri	11 0	11 8	10 0	13 0	13 0	14 0	9 0	10 0	7 0	13 0	13 0	11 0	.	...	...
	BIHAR.															
	BHAGALPUR DIVISION.															
27	Monghyr ...	12 1	12 0	13 10	12 10	...	21 0	10 8	10 8	9 7	13 10 to 15 12	14 0	11 11	...	...	18 14
28	Bhágalpur ...	12 10	12 10	12 10	12 10	12 10	20 3	12 10	12 10	11 6	15 2	15 2	12 10	.	.	...
29	Purnea (Kasba)	10 0	11 0	11 0	...	...	18 0	13 0	13 0	10 0	14 0	15 0	11 0	.	.	...
30	Malda ...	12 0	12 0	12 0	..	...	...	11 0	9 0	10 0	14 0	14 0	12 0	...	..	...
31	Sonthal Parganas.	9 8	10 0	11 0	...	...	...	11 8	11 8	12 0	14 0	14 8	13 8	...	...	...
	PATNA DIVISION.															
32	Patna ..	14 0 / 13 4	Red. 15 0 / White 14 0	14 0 / 13 0	19 0	20 0	25 0	10 0	10 8	10 8	16 0	17 0	14 0	20 0	21 0	22 0
33	Gaya ...	10 8	12 0	12 8	18 4	18 4	22 8	10 0	10 0	10 8	14 0	14 8	13 0	19 8	19 8	...
34	Shahabad ...	11 8	14 0	12 8	12 0	12 0	20 0	8 0	8 0	8 0	15 0	15 0	12 8	...	...	...
35	Darbhanga ...	11 0	12 1	12 1	11 0	12 0	20 14	10 0	11 0	11 8	14 13	15 8	12 1	...	...	...
36	Muzaffarpur	11 8	12 0	12 0	16 0	18 0	22 0	8 0	8 0	11 0	14 0	15 0	12 0	...	...	...
37	Saran ...	11 9	13 8	11 13	19 8	19 0	25 0	12 0	11 0	8 8	14 9	14 0	12 5	...	23 0	...
38	Champaran ...	11 0	11 8	10 8	...	14 0	20 0	8 8	8 8	9 0	15 8	15 4	13 8	...	...	...
	ORISSA.															
	ORISSA DIVISION.															
39	Cuttack ...	10 8	10 8	9 3	...	..	...	10 8	10 8	9 3	14 7	15 1	11 2	...	..	...
40	Puri ...	9 3	9 6	8 6	...	...	...	7 14	9 3	9 6	14 7	14 6	14 7	...	...	...
41	Balasore ...	11 0	11 0	11 0	10 0	10 0	10 0	10 0	10 0	13 0	16 0	16 0	17 0	...	...	...
	CHOTA NAGPUR.															
42	Hazáribágh ..	10 0	11 12	12 0	14 0	13 0	14 0	8 0	8 0	8 0	13 0	13 0	12 12	...	...	...
	CHOTA NAGPUR DIVISION.															
43	Lohardaga ...	8 0 / 6 8 to 7 0	Red. 10 8 / White. 7 8 to 9 0	9 8 to 10 0 / 7 0 to 8 0	12 0	12 0	13 0	12 0	12 0 to 13 0	11 8 to 12 0	Ordinary rice. 14 0 / Coarse rice. 15 0	14 0 / 15 8	14 0 / 15 8	...	...	...
44	Palámau ...	.	11 4	12 6	...	..	20 4	11 15	12 6	13 8	14 10	15 3	14 1	..	...	...
45	Singhbhum ..	12 0	12 0	15 0	...	...	10 0	10 0	10 0	12 0	14 0	14 0	16 0	...	...	...
46	Manbhum	11 8	11 8	11 8	..	...	...	9 0 to 9 8	10 0	13 0	11 8 to 13 8	13 0 to 14 0	17 8	...	...	...

* 25 seers entered in the return of 15th February was wrong.

T At Sirajganj the retail price of salt is 11 seers per rupee.
U In the subdivisions the retail prices of salt per rupee are :—Begusarai 10 seers and Jamui 10 seers.
V In the Banka, Madhipura and Supaul subdivisions the retail price of salt is 10 seers per rupee.
W In the subdivisions the retail prices of salt per rupee are:—Kisnanganj 10 seers and Araria 10 seers.
X In the subdivisions the retail prices of salt per rupee are :—Deoghur 10½ seers, Jamtara 9 seers, Pakur 10½ seers, and Rajmahal 11¼ seers.
Y In the subdivisions the retail prices of salt per rupee are :—Bihar 10 seers and Dinapore 10 seers.
Z In the subdivisions the retail prices of salt per rupee are :—Nawada 9 seers, Aurangabad 10¼ seers, and Jahanabad 10 seers.

CALCUTTA,
The 7th March, 1893.

Station Bazars of the Districts of Bengal on the 28th February 1893—(concluded).

Indian-corn or Maize (*Zea Mays.*) Present return.	Next preceding return.	Corresponding return of last year.	Arhar or thur, Cadjan Pea. (*Cajanus indicus.*) Present return.	Next preceding return.	Corresponding return of last year.	Firewood. Present return.	Next preceding return.	Corresponding return of last year.	Salt. Present return.	Next preceding return.	Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt. Present return.	Next preceding return.	Corresponding return of last year.	Districts.	Number.
															BENGAL—*continued.*	
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.		
...	...	...	...	...	...	90 0	90 0	90 0	9 15	9 9	9 12	3 13 4	3 13 4	3 13 4	Bogra.	23
...	...	...	22 8	22 8	16 8	200 0	200 0	200 0	T 10 8	9 12	9 12	3 8 0	3 10 0	3 12 0	Pabna.	24
12 0	11 0	16 0	8 0	8 0	10 0	120 0	120 0	120 0	8 0	8 0	8 0	4 10 0	4 10 0	5 0 0	Darjeeling	25
...	...	...	8 0	10 0	8 0	200 0	200 0	200 0	10 0	10 0	10 0	4 0 0	3 12 0	4 0 0	Jalpaiguri.	26
															Rajshahi Division—concld.	
															BIHAR.	
23 2	24 0	18 14	17 1	16 0	18 14	168 0	160 0	189 0	U 10 14	10 8	10 8	3 14 6	3 13 0	3 8 6	Monghyr.	27
22 11	25 4	16 12	16 6	16 14	15 2	151 8	176 0	176 12	V 10 11	10 11	10 11	3 12 0	3 12 0	3 12 0	Bhagalpur.	28
26 0	26 0	16 0	16 0	16 0	13 0	320 0	320 0	...	W 10 0	10 0	10 0	3 10 2	3 10 2	4 0 0	Purnea.	29
...	...	...	13 0	12 0	...	160 0	160 0	120 0	10 0	10 0	10 0	4 0 0	4 0 0	3 10 0	Malda	30
23 8	23 8	17 0	21 8	21 0	17 0	200 0	200 0	200 0	X 10 8	10 8	9 0	3 10 3	3 10 3	4 0 0	Sonthal Parganas	31
															Bhagalpur Division.	
22 0	23 0	22 0	20 0	20 0	21 0	130 0	130 0	120 0	Y 11 8	11 8	11 8	3 8 0	3 8 0	3 8 0	Patna.	32
18 8	18 8	...	20 0	20 8	17 8	120 0	140 0	160 0	Z 10 0	10 0	10 0	3 13 0	3 13 0	3 14 0	Gaya.	33
20 0	22 0	20 0	22 0	18 0	20 0	160 0	160 0	160 0	a 11 0	11 0	10 0	3 10 0	3 10 0	4 0 0	Shahabad.	34
23 2	24 3	19 0	13 3	17 10	14 8	176 0	176 0	160 0	b 10 0	10 4	11 0	3 14 0	3 12 0	3 6 0	Darbhanga.	35
21 4	24 0	20 0	15 0	16 0	15 0	160 0	160 0	160 0	c 11 0	11 0	11 0	3 10 0	3 10 0	3 10 0	Muzaffarpur.	36
19 8	21 8	22 8	14 4	18 0	17 0	200 0	200 0	160 0	d 10 12	10 12	10 12	3 10 6	3 11 0	3 11 0	Saran.	37
21 8	23 12	20 4	14 8	15 4	14 12	160 0	160 0	160 0	e 10 8	10 8	10 8	3 12 0	3 12 0	3 12 0	Champaran.	38
															Patna Division.	
															ORISSA.	
...	...	...	18 6	18 6	18 6	80 0	80 0	80 0	10 12	10 12	11 0	3 6 0	3 6 0	3 12 0	Cuttack.	39
...	...	...	14 7	15 8	15 12	80 0	80 0	80 0	11 8	11 8	11 13	3 5 0	3 6 0	3 5 0	Puri.	40
...	...	...	10 12	10 12	...	160 0	160 0	140 0	g 11 0	11 0	10 8	3 10 0	3 10 0	3 14 0	Balasore.	41
															Orissa Division.	
															CHOTA NAGPUR.	
20 0	20 0	18 0	15 0	16 0	16 0	240 0	210 0	240 0	h 9 0	9 0	10 0	3 14 6	3 14 0	3 12 0	Hazáribágh.	42
20 0	21 0	20 0	Big. 14 0 Small. 16 0	Big. 14 0 Small. 16 0	Big. 14 0 Small. 18 0	160 0	160 0	140 0 to 160 0	9 8	9 8	9 8	4 0 0	4 0 0	4 0 0	Lohardaga.	43
...	27 0	21 15	...	19 8	16 14	...	...	..	9 0	9 1	...	...	...		Palámau.	44
...	...	20 0	14 0	14 0	16 0	100 0	100 0	160 0	9 0	9 0	9 0	4 6 0	4 6 0	4 4 0	Singhbhum.	45
18 8	20 0	...	18 8	19 0	18 0	...	.	...	10 10	10 10	10 10	3 10 0	3 10 0	3 12 0	Manbhum.	46
															Chota Nagpur Division.	

a In the subdivisions the retail prices of salt per rupee are:—Buxar 10½ seers, Sasaram 10¾ seers, and Bhabhua 10 seers.
b In the subdivisions the retail prices of salt per rupee are:—Madhubani 11 seers and Somastipur 10 seers.
c In the subdivisions the retail prices of salt per rupee are:—Hajipur 10½ seers and Sitamarhi 11 seers.
d In the subdivisions the retail prices of salt per rupee are:—Siwan 11 seers 5 chitaks and Gopalganj (Mirganj) 11 seers 13 chitaks.
e At Bettiah the retail price of salt is 10 seers per rupee.
f In the subdivisions the retail prices of salt per rupee are:—Jajpur 9 seers, Kendrapara 9 seers, and Banki 12 seers.
g At Bhadrak the retail price of salt is 9 seers per rupee.
h At Giridih the retail price of salt is 11 seers per rupee.

Published for general information.

H. H. RISLEY,
Secretary to the Govt. of Bengal.

PRICES-CURRENT (wholesale) of Food-grains, Firewood, and Salt

Number.	MARTS.	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice common. Present return.	Rice common. Next preceding return.	Rice common. Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
1	Calcutta ...	3 7 0	3 8 0	3 5 4	2 5 0	2 6 0	2 0 10	5 9 0	5 9 0	4 8 3	4 0 0	4 0 0	3 3 0
2	Sirajganj* ...	...	3 4 0	3 8 0	...	...	...		6 0 0	5 1 0		3 5 0	3 2 0
3	Dacca ...	...	...	3 12 0	...	...	1 8 0	3 10 0	3 10 0	3 4 0	3 6 0	3 6 0	2 13 0
4	Narayanganj*	...	...	...	...	...	...		3 8 0	3 0 0		3 4 0	2 10 0
5	Chittagong	4 0 0	4 2 0	4 0 0	...	...	...	3 9 0	3 8 0	4 0 0	3 1 0	3 4 0	3 0 0
6	Patna ...	2 13 6 (Red) 3 0 0 (White)	Red. 2 10 6 White. 2 13 6	2 13 8 (Red) 3 1 3 (White)	2 1 3	2 0 0	1 9 6	4 0 0	3 13 0	3 12 9	2 8 0	2 5 6	2 13 8
7	Balasore ...	3 8 0	3 8 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 0 0	2 8 0	2 8 0	2 6 0
8	Puri ...	4 4 0	4 4 0	4 12 0	...	...	...	5 1 0	4 5 0	4 9 0	2 11 0	2 12 0	2 15 0
9	Cuttack ...	3 10 0	3 10 0	4 4 0	...	...	...	3 10 0	3 10 0	4 4 0	2 12 0	2 10 0	3 8 0

* Present return not received.

CALCUTTA,
The 7th Macrh, 1893.

in the undermentioned Marts of Bengal on the 28th February 1893.

GRAM, CHANA, CHHOLA, KADALAY OR SUNAGA. (*Cicer Arietinum.*)			INDIAN-CORN OR MAIZE. (*Zea Mays.*)			ARHAR OR THUR, CADJAN PEA. (*Cajanus indicus.*)			FIREWOOD.			SALT.			MARTS.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
2 11 6	2 12 0	2 5 6	2 0 0	1 13 0	2 5 0	3 3 0	3 4 0	2 6 0	0 6 0	0 7 0	0 5 9	4 0 0	4 0 0	3 4 0	Calcutta.
	3 8 0	2 14 0	..	...	...	...	...	...		6 6 0	6 6 0		3 8 0	3 5 0	Sirajganj.
...	...	2 12 0	...	...	...	...	...	2 9 0	0 5 0	0 5 0	0 5 0	3 10 0	3 10 0	3 8 0	Dacca.
	...	3 8 0	...	...	...		...	3 8 0		0 6 0	0 8 0		3 10 0	3 8 0	Narayanganj.
3 11 0	3 12 0	3 8 0	...	...	...	...	...	...	0 5 0	0 6 0	0 5 0	3 12 0	3 8 0	3 8 0	Chittagong.
2 8 0	2 5 9	1 14 5	1 13 0	1 12 3	1 13 0	2 0 0	2 0 0	1 14 5	0 5 0	0 5 0	0 5 4	3 8 0	3 8 0	3 8 0	Patna.
2 14 0	2 14 0	2 12 0	...	...	...	3 10 0	3 10 0	...	...	...	...	3 10 0	3 10 0	3 14 0	Balasore.
2 2 0	2 8 0	2 15 0	...	...	...	2 11 0	2 8 0	2 8 6	0 8 0	0 8 0	0 8 0	3 5 0	3 6 0	3 5 0	Puri.
2 0 0	(Kalai.) †2 0 0	2 6 0	...	...	...	2 4 0	2 4 0	2 0 0	0 8 0	0 8 0	0 8 0	3 6 0	3 6 0	3 12 0	Cuttack.

† Rs. 1-9 entered in the return of 15th February, was wrong.

Published for general information.

H. H. RISLEY,

Secretary to the Govt. of Bengal.

STATEMENT SHOWING THE STOCKS OF RICE IN AND AROUND CALCUTTA.

Names of Marts.	Stock in hand as compiled on—												
	1st week of March 1892.	1st week of April 1892.	1st week of May 1892.	1st week of June 1892.	1st week of July 1892.	1st week of August 1892	1st week of Sept. 1892	1st week of Oct. 1892.	1st week of Nov. 1892	1st week of Dec. 1892.	1st week of Jan. 1893.	1st week of Feb. 1893.	1st week of March 1893.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds	Mds.	Mds.	Mds.
Baliaghata	11,29,000	12,67,000	10,25,000	12.28,000	9,62 000	8,39,000	6,74.000	4.96,500	4.39.000	3,16,000	3,34,000	4,05,000	6.19,000
Ultadanga	75,500	69,000	85,900	73,900	65.800	65.900	70,900	65.100	57.300	57.800	65,200	78,700	99,500
Chitpur, Golabaree, Kumartooly, Hatkhola, and Culpi Ghat.	8,41,400	8,78,400	7,88,000	7,61,300	7,20,400	6 56,300	6,41,400	5,63,300	5,64,800	5,40.700	5,64.700	7,01,900	6,54,500
Pathuriaghatta, Posta, and Jorabagan.	3,000	4,000	5,000	4.000	3,000	4,000	3,700	3,000	2,500	2,000	3,000	8,000	3,500
Tollygunge, Chetla, Kidderpore, and Munshiganj.	1,55,900	1,44,500	1,41,500	1,37,200	1,12,100	1,43,400	96,500	93,600	51.100	40.600	87,900	1,14 200	1,46,400
21 Minor bazars (estimated) ...	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40.000	2.40.000	2,40,000	2,40,000	2,40,000	2.40,000	2,40,000	2,40,000
Other retail shops, 3,129 in number (estimated).	2,50,000	2,50,000	2,50,000	2.50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50.000
Baidyabati, Nowabganj, Bhadreshwar, and Chandernagore.	31,250	59,450	42,000	32,325	26,062	61,125	51,250	33,008	31.125	40,037	63,961	69,800	76,380
Total ...	27,26,050	29,12,350	25,77,400	27,26,725	23,79,362	22,59,725	20,27,750	17,45,408	16,35,825	14,87,137	16,08,761	18,67,600	20,89,280
On Railway premises on both sides of the river.	41,862 (on 3rd March 1892.)	38,171 (on 3rd April 1892.)	17,133 (on 3rd May 1892.)	12.011 (on 3rd June 1892.)	5,239 (on 3rd July 1892.)	1,322 (on 3rd August 1892.)	11,336 (on 3rd Sept. 1892.)	17,216 (on 8th Oct. 1892.)	9,774 (on 3rd Nov. 1892.)	24,557 (on 3rd Dec. 1892.)	35,589 (on 3rd Jan. 1893.)	32,791 (on 3rd Feb. 1893.)	22,643 (on 3rd March 1893.)
On boats unloaded ... By Port Commissioners' returns.	53,460 (1st to 3rd March 1892.)	29,556 (1st to 3rd April 1892.)	28,662 (2nd to 4th May 1892.)	25,598 (1st to 3rd June 1892.)	27,288 (1st to 3rd July 1892.)	25,889 (1st to 3rd August 1892.)	18,308 (1st to 3rd Sept. 1892.)	27,678 (6th to 8th Oct. 1892.)	13,606 (1st to 3rd Nov. 1892.)	38,882 (1st to 3rd Dec. 1892.)	47,638 (3rd to 5th Jan. 1893.)	40,930 (1st to 3rd Feb. 1893.)	41,299 (1st to 3rd March 1893.)
On boats unloaded ... By Canal returns	96,456 (1st to 3rd March 1892.)	38,474 (1st to 3rd April 1892.)	17,050 (2nd to 4th May 1892.)	37,916 (1st to 3rd June 1892.)	21,650 (1st to 3rd July 1892.)	17,415 (1st to 3rd August 1892.)	27,069 (1st to 3rd Sept. 1892.)	24,097 (6th to 8th Oct. 1892.)	15.777 (1st to 3rd Nov. 1892.)	16,296 (1st to 3rd Dec. 1892.)	1,30,459 (3rd to 5th Jan. 1893.)	1,20,600 (1st to 3rd Feb. 1893.)	1,99,575 (1st to 3rd March 1893.)
Grand total of Stocks ...	29,17,828	30,18,551	26,40,245	28,02,250	24,33,539	23,04,351	20,84,163	18,14,390	16,74,982	15,66,872	18,22,447	20,61,921	23,52,796
Probable stock available for exportation by sea.	18¾ lakhs	19½ lakhs	15¾ lakhs	17½ lakhs	13¾ lakhs	12½ lakhs	10½ lakhs	7½ lakhs	6½ lakhs	5 lakhs	7½ lakhs	10 lakhs	13 lakhs

STATISTICAL DEPARTMENT,
The 6th March, 1893.

H. H. RISLEY,
Offg. Secy. to the Govt. of Bengal.

Abstract of the results of Meteorological Observations taken at the Alipore Observatory in the month of February 1893.

	Inches.	Date.	Hour.
The mean pressure of the month	29·997		
The average pressure of February from 24 years' registers ...	29·945		
The highest pressure in the month	30·157	16th	10
The lowest pressure in the month	29·850	17th	16
The range of pressure	0·307		
	Hours.		
The total number of hours of bright sunshine during the month	180·8		
The maximum possible number of hours of sunshine ...	318·0		
	ϴ		
The mean temperature of the month	65·0		
The average temperature of February from 24 years' registers	73·0		
The highest temperature in the month	80·7	17th.	
The lowest temperature in the month	46·9	2nd.	
The range of temperature during the month	33·8		
The mean daily range of temperature	17·4		
The greatest range of temperature in one day	27·2	4th.	
	Per cent.		
The mean humidity of the month	76		
The average humidity of February from 24 years' registers ...	67		
	Inches.		
The mean vapour tension of the month	0·468		
The average vapour tension of February from 9 years' registers	0·538		
The mean cloud proportion of the month	3·93		
The average cloud proportion of February from 16 years' registers	1·92		
The total rainfall of the month	4·30		
The total rainfall indicated by a Beckley's self-registering rain-gauge (mouth of the gauge about 52 feet above the ground)	4·21		
The average fall of February from 48 years' registers ...	0·87		
The greatest fall in 24 hours	1·41	20th.	
	Days.		
The number of rainy days in the month	7		
The average number of rainy days in February from 24 years' registers			
	ϴ		
The mean maximum equilibrium temperature of solar radiation during the month	126·1		
The mean difference of sun and air temperatures	51·9		
The greatest sun temperature	139·0	17th.	
The greatest excess of sun over air temperature	62·5	26th.	
The mean temperature of the nocturnal radiation thermometer on woollen cloth	51·8		
The mean depression of the nocturnal radiation thermometer below the minimum air temperature at 4 feet above the ground	5·4		
The greatest depression of the nocturnal radiation thermometer below the minimum air temperature	9·9	3rd.	
	Miles.		
The mean movement of the wind per day	53·3		
The greatest movement of the wind in one day	115·0	23rd.	
The greatest movement of the wind in one hour	15·0	22nd, 11 to noon.	

The number of hours with winds from each of the 8 points—

N. 172, N.E. 78, E. 51, S.E. 23, S. 31, S.W. 26, W. 26, N.W. 54, Calm 211.

The results of observations at the Alipore Observatory are not rigorously comparable with the registers of past years (at the Park Street Observatory). The barometer is about 3 feet higher at Alipore, and, other things being equal, reads therefore ·003 lower. The diurnal range of temperature is also greater at Alipore, and the mean temperature apparently about 2·1 lower; and, finally, the thermometer which furnished the record of temperature at the Surveyor-General's Office during 20 years and upwards is found to read 0·6 higher than the Kew standard thermometer, which is the standard of reference at the present Observatory.

C. LITTLE,

For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA;
Calcutta, the 6th March 1893.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	Station Observations. — Air pressure. — Mean barometric height, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. — Prevailing direction.	Mean wind velocity.	Temperature. — Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri ...	30·063	30·012	—	Calm	168	83·7	3, 4th Mar.	63·6	27th Feb.	80·4	67·5	74·0
		Gopalpore ...	30·063	30·024	+·114	NNW	233	83·2	4th ,,	64·9	26th ,,	80·3	69·2	74·7
		False Point ..	30·069	39·033	+·112	Variable	206	82·4	4th ,,	57·5	28th ,,	77·4	62·9	70·1
	Cuttack	Cuttack ...	30·011	30·036	+·125	Calm	49	87·6	3, 4th ,,	62·8	27, 28 ,,	81·7	66·0	73·9
	Balasore	Balasore ...	30·031	30·036	+·117	NNW	90	85·4	4th ,,	56·5	28th ,,	79·3	61·3	70·3
South-West Bengal.	Midnapore	Midnapore ..	29·955	30·058	+·132	N	201	85·3	3, 4th ,,	55·2	28th ,,	78 1	59·8	69·0
	24-Parganas	Calcutta ..	30·072	30·039	+·122	Calm	48	82 7	4th ,,	53·7	28th ,,	76·1	58·8	67·5
		Saugor Island	30·066	30·036	+·122	Variable	209	81·7	4th ,,	55·9	28th ,,	76·7	62·6	69·7
	Howrah ... ... Hooghly													
	Nadia	Krishnagar ...	30·041	30 039	+·140	NNW	82	84·3	4th ,,	52·4	28th ,,	76·8	55·9	66·4
	Khulna ... ... Jessore	Jessore ...	30 048	30·029	+·113	Calm	?	84·6	4th ,,	54·5	28th ,, 2nd Mar.	76·7	57·4	67·0
	Burdwan ...	Burdwan ...	30·003	30·054	+·133	Calm	14	84·0	4th ,,	54·4	28th Feb.	76 3	57·9	67·2
		Raniganj ...	29·753	30·068	+·121	NW	47	83·2	4th ,,	53·2	28th ,,	76·2	56·8	66·5
	Bankura	Bankura, ...	29 764	30·029	+·118	Calm	41	84·1	4th ,,	55·0	27th ,,	77·4	58·5	68·0
	Birbhum ... ... Murshidabad	Berhampore...	30·014	30·033	+·116	WSW	46	84·6	4th ,,	54·4	26th ,,	76·2	55·5	65·9
North Bengal.	Pabna	Sirajganj ...	30·028	30·026	+·119	W	66	82·4	4th ,,	51·9	28th ,,	76·0	54·1	65·1
	Bogra	Bogra ..	30·002	30·019	+·133	Calm	58	82·3	4th ,,	51·2	2nd Mar.	76·6	53·3	65·0
	Rajshahi	Rampur Boalia.	30·006	30·028	+·132	Variable	71	82·4	4th ,,	51·7	27th Feb.	76·6	53·6	65·1
	Malda	Malda ...	30·007	30·043	—	SW	86	82·6	4th ,,	50 2	1st Mar.	76·5	51·6	64·1
	Dinajpur	Dinajpur ...	29·940	30 018	+·092	W	82	81·6	4th ,,	51·4	2nd ,,	77·1	53·8	65·5
	Rangpur	Rangpur ...	29·946	30·029	+·113	W	52	81·4	4th ,,	49·7	27th Feb.	77·0	51·4	64·2
	Jalpaiguri ... .. Kuch Bihar	Jalpaiguri	29·787	30·040	+·121	Variable	44	79·4	2nd ,,	50·0	3rd Mar.	76 2	51·6	64·0
	Darjeeling	Darjeeling ...	22·859	—	+·031	Variable	135	52·1	4th ,,	33·9	26th Feb.	47·5	35·4	41·5
	Sikkim	Gnatong ..	19·162	—	—	Variable	161	41·3	28th Feb.	8·3	27th ,,	33·5	11·9	22·7
East Bengal.	Chittagong	Chittagong ...	29·981	30·019	+·077	N	66	84 2	4th Mar.	56·1	2nd Mar.	81·5	58·9	70·2
	Chittagong Hill Tracts	Demagiri ...	Observations not received.											
	Backergunge	Barisal ...	30·083?	30·027?	+·106	Calm	65	82·3	3rd Mar.	54·1	2nd ,,	78·2	58·3	68·2
	Noakhali	Noakhali ...	30·043	30·035	+·104	N	107	82·5	4th ,,	51·0	2nd ,,	78·3	56·4	67·4
	Faridpur	Faridpur ...	30·047	30·043	+·117	Calm	49	83·5	4th ,,	53·5	28th Feb.	75·2	55·5	65·4
	Dacca	Dacca ...	30·050	30·020	+·103	NNW	85	84·1	4th ,,	56·3	2nd Mar.	77·8	58·1	68·0
	Tippera	Comilla ...	30 043	30·027	+·110	N	44	84·4	4th ,,	54·5	26th Feb.	78·9	56·6	67·7
	Mymensingh	Mymensingh	30·007	30·025	+·095	WNW & Ely.	72	80·9	4th ,,	52·7	2nd Mar.	76·0	55·4	65·7
North Bihar.	Purnea	Purnea ...	29·948	30·034	+·125	Calm & SW.	69	80·2	3, 4th ,,	49·3	4th ,,	76·4	53·9	65·1
	Bhagalpur	Bhagalpur ...	29·910	30·031	+·130	Calm	20	80·8	3rd ,,	51·5	28th Feb.	75·2	53·2	64·2
	Darbhanga	Darbhanga ...	29·920	30 049	+·134	WSW	110	79·6	4th ,,	51·4	27, 28 ,, & 4th Mar.	75·1	52·6	63·9
	Muzaffarpur	Muzaffarpur...	29·906	30·049	—	WSW	112	79·7	4th ,,	48·8	27th Feb.	74 3	50·6	62·5
	Champaran	Motihari ...	29·835	30·030	+·134	WSW	140	80·2	4th ,,	47·9	4th Mar.	75·3	49·8	62·6
	Saran	Chapra ...	29·911	30·056	+·162	WSW	111	80·8	4th ,,	49·8	28th Feb.	75·1	52·1	63·6
South Bihar.	Shahabad	Dehri ...	29·730	30·054	+·129	S	43	82·3	3rd ,,	50·4	27th ,,	76·0	55·0	65·6
		Buxar ...	29·855	30·063	+·140	W	96	81·6	3rd ,,	50·4	28th ,,	76·8	52·4	64·6
		Arrah ...	29·900	30·054	+·159	Variable	75	83 6	4th ,,	49·0	28th ,,	76·2	51·[illegible]	63·9
	Gaya	Gaya ...	29·720*	30·071*	+·134*	SWly & W.	124	83·0	3rd ,,	51·0	27th ,,	75·8	53·8	64·8
	Patna	Bankipore ...	29·914	30·059	+·138	WNW	104	80·4	4th ,,	49·2	28th ,,	74·1	52·0	63·1
	Monghyr													
	Sonthal Parganas ...	Naya Dumka	29·581	30·057	+·137	NW	52	83·6	4th ,,	51·1	28th ,,	76·0	54·7	65·4
Chota Nagpur.	Hazaribagh	Hazaribagh ...	28·028	30·063	+ 100	Variable	192	78·2	3rd ,,	47·0	27th ,,	72·3	52·4	62·4
	Lohardaga	Ranchi ...	27·892	30·044	+·092	NW	140	76·7	4th ,,	47·4	27th ,,	71·1	52·5	61·8
	Palamau ... ... Singhbhum	Chaibassa ...	29·303	30·044	+·137	Variable	25	84·5	4th ,,	54·2	27th ,,	77·4	58·8	68·1
	Manbhum													

* Mean of 6 days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01 rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station district, *i.e.*, from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one or

for the week ending Saturday, the 4th of March 1893.

					DISTRICT OBSERVATIONS.										
					OF WEEK.				RAINFALL.						DISTRICT.
									Since 1st of month.			Since 16th October 1892.			
Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.	
—	71·4	82	3·4	0·48	0·81	0·18	1·00	0·41	Nil	0·10	—0·10	12·37	7·46	+4·91	Puri.
—2·9	72·5	85	2·3	0·76											
—7·4	69·8	87	6·1	0·87											
—8·4	70·5	74	4·6	1·06	0·47	0·37	0·89	0·54	Nil	0·29	—0·29	10·30	5·43	+4·87	Cuttack.
—6·7	67·0	83	1·9	0·55		0·27		0·46		0·20			4·42		Balasore.
—9·0	67·1	69	1·4	0·22	0·23	0·29	0·75	0·55	Nil	0·23	—0·23	12·65	4·68	+7·97	Midnapore.
—8·9	65·7	76	0·9	015	0·20	0·30	0·71	0·54	Nil	0·21	—0·21	13·12	4·82	+8·30	24-Parganas.
—8·8	67·3	91	2·7	0·38											
					0·17	0·26	1·00	0·56	Nil	0·19	—0·19	8·78	3·99	+4·79	Howrah.
					0·24	0·22	1·00	0·45	Nil	0·17	—0·17	13·53	3·58	+9·95	Hooghly.
—9·3	63·7	77	2·0	0·14	0·11	0·35	0·60	0·51	Nil	0·16	—0·16	9·97	3·41	+6·56	Nadia.
					0·11	0·36	1·00	0·54	Nil	0·23	—0·23	12·45	4·68	+7·77	Khulna.
—9·4	63·6	86	2·1	0·22	0·17	0·38	1·00	0·58	Nil	0·25	—0·25	13·96	4·09	+9·87	Jessore.
—9·3	63·9	72	2·4	0·21	0·19	0·33	1·00	0·49	Nil	0·20	—0·20	9·82	3·36	+6·46	Burdwan.
—9·3	61·1	78	0·6	0·18											
—9·5	63·5	76	2·3	0·21	0·17	0·27	0·75	0·46	Nil	0·20	—0·20	10·17	3·04	+7·13	Bankura.
					0·04	0·16	0·00	0·24	Nil	0·09	—0·09	8·91	2·47	+6·44	Birbhum.
—8·8	59·0	91	1·0	0·08	0·05	0·17	0·00	0·48	Nil	0·08	—0·08	6·49	2·29	+4·20	Murshidabad.
—7·4	61·9	81	0·3	0·08	0·11	0·27	0·50	0·59	Nil	0·15	—0·15	6·17	3·40	+2·77	Pabna.
—7·8	61·1	79	0	Nil	0·02	0·12	0·00	0·35	Nil	0·04	—0·04	4·10	2·48	+1·62	Bogra.
—7·2	63·5	79	0·4	0·08	0·09	0·13	0·33	0·26	Nil	0·04	—0·04	4·95	2·53	+2·42	Rajshahi.
—	62·5	80	1·4	0·08	0·09	0·15	0·50	0·35	Nil	0·07	—0·07	3·65	2·38	+1·27	Malda.
—4·8	59·5	78	1·0	Nil	0·04	0·09	0·00	0·25	Nil	0·04	—0·04	2·59	1·87	+0·72	Dinajpur.
—5·7	60·5	79	0·3	Nil	0·01	0·25	0·00	0·31	Nil	0·03	—0·03	2·63	2·35	+0·28	Rangpur.
—5·6	58·6	83	3·1	Nil	Nil	0·25	0·00	0·37	Nil	0·13	—0·13	2·76	3·56	—0·80	Jalpaiguri.
					Nil	0·20	0·00	0·35	Nil	0·10	—0·10	2·33	2·15	+0·18	Kuch Bihar.
—4·2	39·8	95	7·6	0·04	0·03	0·32	0·03	0·61	Nil	0·27	—0·27	6·29	4·15	+2·14	Darjeeling.
—	25·8	54	1·6	0·35											Sikkim.
—3·1	65·2	90	3·3	0·01	Nil	0·40	0·00	0·46	Nil	0·05	—0·05	13·44	7·06	+6·38	Chittagong.
					Nil	0·57	0·00	0·75	Nil	0·21	—0·21	10·10	6·89	+3·21	Chittagong Hill Tracts.
—7·7	64·8	89	2·4	0·12	0·13	0·12	0·75	0·54	Nil	0·14	—0·14	11·73	5·89	+5·84	Backergunge.
—5·7	65·0	83	1·3	0·15	0·17	0·54	1·00	0·90	Nil	0·24	—0·24	17·97	7·75	+10·22	Noakhali.
—8·9	61·7	81	1·0	0·16	0·18	0·65	1·00	0·91	Nil	0·40	—0·40	12·11	4·06	+8·05	Faridpur.
—7·6	63·5	80	1·1	0·18	0·16	0·46	1·00	0·69	Nil	0·15	—0·15	12·91	4·36	+8·55	Dacca.
—7·1	63·8	84	1·9	0·20	0·16	0·56	0·75	0·76	Nil	0·29	—0·29	11·48	4·72	+6·76	Tippera.
—4·6	61·2	82	1·0	0·09	0·02	0·31	0·00	0·54	Nil	0·15	—0·15	6·25	3·63	+2·62	Mymensingh.
—5·3	56·4	88	0·7	0·07	0·19	0·15	0·67	0·37	Nil	0·12	—0·12	2·23	2·40	—0·17	Purnea.
—7·7	60·5	74	2·0	0·10	0·03	0·13	0·25	0·27	Nil	0·05	—0·05	3·50	2·13	+1·37	Bhagalpur.
—6·4	58·9	70	1·3	Nil	Nil	0·12	0·00	0·27	Nil	0·09	—0·09	2·70	2·03	+0·67	Darbhanga.
—	57·2	83	1·3	Nil	0·12	0·19	0·33	0·40	Nil	0·11	—0·11	2·69	2·25	+0·44	Muzaffarpur.
—7·0	57·2	82	1·7	Nil	Nil	0·26	0·00	0·40	Nil	0·18	—0·18	2·32	1·83	+0·59	Champaran.
—7·5	58·0	77	0·4	0·23	0·08	0·08	0·33	0·21	Nil	0·03	—0·03	2·61	2·18	+0·43	Saran.
—7·3	62·9	63	0	0·04											
—7·4	60·5	67	1·6	0·18	0·04	0·19	0·20	0·38	Nil	0·16	—0·16	2·95	2·71	+0·24	Shahabad.
—8·5	57·8	70	1·1	0·07											
—9·8	59·8	73	1·6	0·10	0·14	0·15	0·75	0·32	Nil	0·10	—0·10	3·96	2·31	+1·65	Gaya.
—8·3	60·5	71	1·4	0·08	0·07	0·09	0·25	0·35	Nil	0·06	—0·06	2·96	2·29	+0·67	Patna.
					Nil	0·13	0·00	0·24	Nil	0·07	—0·07	5·20	2·51	+2·69	Monghyr.
—8·5	60·5	75	0·6	0·08	0·09	0·16	0·50	0·36	Nil	0·09	—0·09	5·34	2·18	+3·16	Sonthal Parganas.
—9·0	59·5	65	3·7	0·12		0·34		0·66	Nil	0·29	—0·29		2·80		Hazaribagh.
—11·0	59·3	71	2·3	0·17	0·05	0·37	0·00	0·97	Nil	0·39	—0·39	11·87	3·62	+8·25	Lohardaga.
					0·07	0·22	0·00	0·53	Nil	0·15	—0·15	3·48	2·90	+ ·58	Palamau.
—8·6	63·1	85	2·1	0·20	0·20	0·35	1·00	0·70	Nil	0·28	—0·28	12·54	3·81	+8·73	Singhbhum.
					Nil	0·23	0·00	0·40	Nil	0·15	—0·15	8·87	2·95	+5·92	Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 4th of March 1893.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 26th February.	Monday, 27th February.	Tuesday, 28th February.	Wednesday, 1st.	Thursday, 2nd.	Friday, 3rd.	Saturday, 4th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th October 1892.	Average rainfall from 16 October date.
ORISSA	Puri	Puri	0·48	...	...	...	...	...	...	1	0·48	0·29	Nil	0·06	15·32	8·21
		Khurda	0·29	...	...	...	...	...	...	1	0·29	0·19	Nil	0·06	7·36	5·61
		Banpur	1·60	...	...	...	...	...	...	1	1·60	0·14	Nil	0·07	13·71	7·03
		False Point	0·87	...	...	...	...	...	...	1	0·87	0·27	Nil	0·21	15·13	8·96
		[illegible]op										?		?		?
		Satpara	1·25	...	...	...	...	...	...	1	1·25	?	Nil	?	11·20	?
		Pipli	0·30	...	...	...	...	...	...	1	0·30	?	Nil	?	8·56	?
	Cuttack	Jagatsingpore										0·17		0·12		5·07
		Banki	0·41	...	...	...	...	...	...	1	0·41	0·70	Nil	0·60	8·02	5·53
		Cuttack	1·01	...	...	...	...	...	...	1	1·01	0·58	Nil	0·42	12·19	5·64
		Kendrapara	0·54	...	...	...	...	...	...	1	0·54	0·14	Nil	0·05	9·18	5·47
		Jajpur	0·40	...	...	...	...	...	...	1	0·40	0·27	Nil	0·13	6·92	5·30
		Dharmsala	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	9·12	?
		Salipore	0·90	...	...	...	...	...	...	1	0·90	?	Nil	?	9·02	?
		Pal Lahara										?		?		?
	Balasore	*Akhyapada*	0·69	...	...	...	...	...	...	1	0·69	?	Nil	?		?
		Chandbali	0·34	...	...	...	...	...	0·94	2	1·28	0·39	0·94	0·19	5·53	?
		Bhadrak	0·70	...	...	...	...	...	0·09	1	0·79	0·19	0·09	0·12	12·27	5·64
		Soro	...	...	...	...	...	...	0·39	1	0·39	0·27	0·39	0·27	10·08	4·77
		Balasore	0·51	...	...	...	...	...	...	1	0·51	0·33	Nil	0·27	11·90	4·16
		Jellasore										0·26		0·19		5·71
		Baripodah	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·17	12·61	3·25
SOUTH-WEST BENGAL.	Midnapore	Contai	0·28	...	...	...	...	...	...	1	0·28	0·19	Nil	0·16	14·24	6·68
		Tamluk	0·19	...	...	...	...	...	...	1	0·19	0·33	Nil	0·31	9·61	5·08
		Midnapore	0·22	...	...	...	...	...	...	1	0·22	0·27	Nil	0·31	12·68	4·36
		Ghatal	0·02	...	...	...	...	...	...	Nil	0·02	0·32	Nil	0·24	14·07	2·50
		Kukrahaty	0·52	...	...	...	...	...	...	1	0·52	?	Nil	?	9·75	?
		Garhbeta	0·35	...	...	...	...	...	...	1	0·35	?	Nil	?	8·33	?
	24-Parganas	Saugor Island	0·38	...	...	...	...	...	...	1	0·38	0·29	Nil	0·18	17·83	6·72
		Diamond Harbour	0·52	...	...	...	...	...	...	1	0·52	0·28	Nil	0·20	13·42	5·40
		Canning Town	0·33	...	...	...	...	...	...	1	0·33	?	Nil	?	14·57	?
		Alipore (Jail)	0·15	...	...	...	...	...	...	1	0·15	0·43	Nil	0·20	9·85	5·14
		Barrackpore	...	...	...	...	...	...	...	Nil	Nil	0·21	Nil	0·19	[illegible]	4·07
		Dum-Dum	0·20	...	...	...	...	...	...	1	0·20	0·35	Nil	0·21	11·25	4·24
		Barasat	0·18	...	...	...	...	...	...	1	0·18	0·30	Nil	0·19	12·22	4·33
		Basirhat	...	...	...	...	...	...	...	Nil	Nil	0·24	Nil	0·18	13·21	3·89
	Howrah	Howrah	0·16	...	...	...	...	...	...	1	0·16	0·32	Nil	0·23	7·99	4·42
		Mohesreka	0·18	...	...	...	...	...	...	1	0·18	0·10	Nil	0·15	9·52	3·53
		Ulubaria	0·18	...	...	...	...	...	...	1	0·18	?	Nil	?	7·83	?
	Hooghly	Serampore	0·14	...	...	...	...	...	...	1	0·14	0·35	Nil	0·19	15·86	3·56
		Hooghly	0·22	...	...	...	...	...	...	1	0·22	0·23	Nil	0·17	14·21	3·70
		Jahanabad	0·37	...	...	...	...	...	...	1	0·37	0·16	Nil	0·15	10·53	3·41
	Nadia	Ranaghat	0·15	...	...	...	...	...	...	1	0·15	0·17	Nil	0·13	11·73	3·50
		Krishnagar	0·14	...	...	...	...	...	...	1	0·14	0·23	Nil	0·17	12·79	2·87
		Chuadanga	0·07	...	...	...	...	...	...	Nil	0·07	0·34	Nil	0·13	?	3·72
		Meherpore	0·13	...	...	...	...	...	...	1	0·13	0·27	Nil	0·15	9·02	3·34
		Kushtia	0·08	...	...	...	...	...	...	Nil	0·08	0·22	Nil	0·13	8·13	3·59
	Khulna	Satkhira	0·12	...	...	...	...	...	...	1	0·12	0·25	Nil	0·18	11·11	4·41
		Bagerhat	0·10	...	...	...	...	...	...	1	0·10	0·51	Nil	0·26	12·95	4·69
		Khulna	0·10	...	...	...	...	...	...	1	0·10	0·31	Nil	0·24	13·30	4·89
		Nakipur	0·10	...	...	...	...	...	...	1	0·10	?	Nil	?	10·72	?
		Rampal										?		?		?
	Jessore	Narail	0·22	...	...	...	...	...	...	1	0·22	0·36	Nil	0·19	12·55	4·56
		Jessore	0·22	...	...	...	...	...	...	1	0·22	0·37	Nil	0·23	18·36	4·44
		Jhenidah	0·13	...	...	...	...	...	...	1	0·13	0·52	Nil	0·29	14·20	4·28
		Magura	0·11	...	...	...	...	...	...	1	0·11	0·41	Nil	0·31	11·94	3·37
		Bangaon	0·15	...	...	...	...	...	...	1	0·15	0·24	Nil	0·22	12·65	3·93
	Burdwan	Kalna	0·12	...	...	...	...	...	...	1	0·12	0·35	Nil	0·20	12·64	3·51
		Burdwan	0·21	...	...	...	...	...	...	1	0·21	0·45	Nil	0·24	11·38	3·38
		Katwa	0·24	...	...	...	...	...	...	1	0·24	0·34	Nil	0·20	8·60	3·54
		Raniganj	0·18	...	...	...	...	...	...	1	0·18	0·19	Nil	0·14	6·63	2·98
		Mankur	0·19	...	...	...	...	...	...	1	0·19	?	Nil	?	7·00	?
	Bankura	Bankura	0·21	...	...	...	...	...	...	1	0·21	0·49	Nil	0·32	10·03	3·53
		Vishnupur	0·24	...	...	...	...	...	...	1	0·24	0·30	Nil	0·26	11·23	3·19
		Maliara	0·22	...	...	...	...	...	...	1	0·22	0·35	Nil	0·04	6·61	2·18
		Khatra	...	...	...	...	...	...	...	Nil	Nil	0·24	Nil	0·16	12·77	3·36
		Indas	0·12	...	...	...	...	...	...	1	0·12	?	Nil	?	10·51	?
		Kotalpur	1·50	...	...	...	...	...	...	1	1·50	?	Nil	?	9·66	?
		Onda	0·43	...	...	...	...	...	...	1	0·43	?	Nil	?	16·35	?
		Gangajalghati	0·14	...	...	...	...	...	...	1	0·14	?	Nil	?	6·75	?
		Raipur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	14·77	?
		Sonamukhi	0·24	...	...	...	...	...	...	1	0·24	?	Nil	?	13·21	?
	Birbhum	Suri	0·02	...	...	...	...	...	...	Nil	0·02	0·22	Nil	0·09	8·87	[illegible]
		Hetampore	0·05	...	...	...	...	...	...	Nil	0·05	0·03	Nil	0·01	10·25	2·06
		Rampur Hat	0·04	...	...	...	...	...	...	Nil	0·04	0·22	Nil	0·16	7·64	2·50
		Bolpur	0·14	...	...	...	...	...	...	1	0·14	?	Nil	?	8·19	?
		Murarai	0·11	...	...	...	...	...	...	1	0·11	?	Nil	?	4·73	?
	Murshidabad	Kandi	0·08	...	...	...	...	...	...	Nil	0·08	0·10	Nil	0·05	9·37	2·47
		Berhampore	0·08	...	...	...	...	...	...	Nil	0·08	0·22	Nil	0·10	6·37	2·77
		Lalbagh	0·07	...	...	...	...	...	...	Nil	0·07	0·12	Nil	0·04	6·94	1·89
		Azimganj	...	...	...	...	...	...	...	Nil	Nil	0·23	Nil	0·07	5·42	2·38
		Jangipur	0·07	...	...	...	...	...	...	Nil	0·07	0·16	Nil	0·10	5·13	2·04
		Lalgola	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·11	5·87	2·18
		Akhriganj	0·07	...	...	...	...	...	...	Nil	0·07	?	Nil	?	5·23	?
		Patkabari	0·10	...	...	...	...	...	...	1	0·10	?	Nil	?	8·40	?
NORTH BENGAL	Pabna	Pabna	0·14	...	...	...	...	...	...	1	0·14	0·34	Nil	0·21	7·65	3·20
		Sirajganj	0·08	...	...	...	...	...	...	Nil	0·08	0·19	Nil	0·10	4·67	3·55
	Bogra	Sherepore	0·09	...	...	...	...	...	...	Nil	0·09	0·10	Nil	0·03	5·21	2·89
		Nowkhilla	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·02	4·84	2·67
		Bogra	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·04	4·21	2·81
		Panchbibi	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·05	2·14	1·60
	Rajshahi	Boalia	0·07	...	...	...	...	...	...	Nil	0·07	0·22	Nil	0·06	5·55	2·43
		Nator	0·16	...	...	...	...	...	...	1	0·16	0·15	Nil	0·07	5·76	2·98
		Naugaon	0·05	...	...	...	...	...	...	Nil	0·05	0·01	Nil	Nil	3·80	2·14
		Lalpore	0·14	...	...	...	...	...	...	1	0·14	?	Nil	?	5·06	?
		Manda	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·26	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 4th of March 1893—contd.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 26th February.	Monday, 27th February.	Tuesday, 28th February.	Wednesday, 1st.	Thursday, 2nd.	Friday, 3rd.	Saturday, 4th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
North Bengal—concld.	Malda	Malda	0·08	...	...	...	...	...	...	Nil	0·08	0·22	Nil	0·11	4·57	2·60
		Chanchal	0·10	...	...	...	...	...	...	1	0·10	0·07	Nil	0·02	2·71	2·00
		Gajol	0·07	...	...	...	...	...	...	Nil	0·07	?	Nil	?	2·26	?
		Sibganj	0·06	...	...	...	...	...	...	Nil	0·06	?	Nil	?	5·16	
	Dinajpur	Mohadebpore	...	...	...	...	...	0·06	...	Nil	0·06	0·07	0·06	0·04	3·23	1·56
		Churaman	0·08	...	...	...	...	...	...	Nil	0·08	0·12	Nil	0·04	2·15	1·62
		Raiganj	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·02	2·71	1·54
		Dinajpur	0·01	...	...	...	...	...	...	Nil	0·01	0·19	Nil	0·09	1·95	3·17
		Balurghat	0·07	...	...	...	...	...	...	Nil	0·07	0·06	Nil	0·01	2·47	1·51
		Thakurgaon	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	[illegible]·17	?
	Rangpur	Bhawanigunge (*Gyabanda*)	0·02	...	...	...	...	...	...	Nil	0·02	0·37	Nil	0·16	1·63	2·65
		Rangpur	...	...	...	...	...	...	...	Nil	Nil	0·36	Nil	0·12	5·15	2·92
		Kurigaon	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·06	1·23	1·93
		Baku gra (*Nilphamari*)	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·02	2·36	1·91
		Ulipore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	·	1·06	?
	Jalpaiguri	Jalpaiguri	...	...	...	...	...	...	...	Nil	Nil	0·25	Nil	0·13	2·76	3·56
		Alipore Dooar	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·87	?
		Fallacotta	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·45	?
		Debiganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·05	?
		Bhagatpore (*Nagrakatta*)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	·	8·63	?
	Kuch Bihar	Dinhatta	...	...	...	...	...	...	...	Nil	Nil	0·19	Nil	0·08	1·85	2·20
		Kuch Bihar	...	...	...	...	...	...	...	Nil	Nil	0·25	Nil	0·18	2·56	2·16
		Mekliganj	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·03	2·50	2·22
		Mathabhanga	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·08	2·34	1·99
	Darjeeling	Buxa	0·04	0·04	...	...	...	...	...	Nil	0·08	0·37	Nil	0·27	15·46	5·87
		Siliguri	...	...	...	...	...	...	...	Nil	Nil	0·42	Nil	0·30	3·83	2·25
		Darjeeling	0·04	...	...	...	...	...	...	Nil	0·04	0·28	Nil	0·22	2·79	5·45
		Kalimpong	...	...	...	...	...	...	...	Nil	Nil	0·22	Nil	0·18	3·65	3·01
		Kurseong	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·64	?
East Bengal	Chittagong	Cox's Bazar	...	...	...	...	...	...	...	Nil	Nil	0·54	Nil	0·02	13·30	8·04
		Chittagong	...	...	...	...	...	...	...	Nil	Nil	0·27	Nil	0·08	13·58	6·00
		Kutubdia	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	19·79	?
		Satkanya	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	9·41	?
		Kodala	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	??	?
		Fenoa	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?		?
		Mirsarai	0·02	...	...	...	...	...	...	Nil	0·02	?	Nil	?		?
		Chandpur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?		?
	Chittagong Hill Tracts.	Rangamati	...	...	...	...	...	...	...	Nil	Nil	0·57	Nil	0·21	10·10	6·80
		Bundarban	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	9·16	?
	Backergunge	Patuakhali	0·26	...	...	...	...	...	...	1	0·26	0·29	Nil	0·07	12·16	6·09
		Pirojpur	0·13	...	...	...	...	...	...	1	0·13	0·31	Nil	0·20	12·69	5·68
		Barisal	...	...	...	...	...	...	...			0·43	Nil	0·13	10·36	6·01
		Gournaddi	0·18	...	...	...	...	...	...	1	0·18	?	Nil	?	8·53	?
		Bhola	0·14	...	...	...	...	...	...	1	0·14	0·64	Nil	0·18	11·63	6·65
		Daulatkhan	0·17	...	...	...	...	...	...	1	0·17	?	Nil	?	14·54	?
		Bauphal	0·18	...	...	...	...	...	...	1	0·18	?	Nil	?	11·69	?
	Noakhali	Noakhali	0·15	...	...	...	...	...	...	1	0·15	0·52	Nil	0·32	18·86	6·82
		Fenny	0·18	...	...	...	...	...	...	1	0·18	0·56	Nil	0·16	17·35	8·62
		Harishpore	0·06	...	...	...	...	...	...	Nil	0·06	?	Nil	?	22·12	?
		Ramganj	0·22	...	...	...	...	...	...	1	0·22	?	Nil	?	14·50	?
	Faridpur	Madaripur	0·17	...	...	...	...	...	...	1	0·17	0·72	Nil	0·47	9·61	4·33
		Faridpur	0·16	...	...	...	...	...	...	1	0·16	0·75	Nil	0·48	16·52	4·19
		Goalundo	0·20	...	...	...	...	...	...	1	0·20	0·47	Nil	0·26	10·25	3·64
	Dacca	Munshiganj	0·15	...	...	...	...	...	...	1	0·15	1·03	Nil	0·29	10·76	5·54
		Dacca	0·18	...	...	...	...	...	...	1	0·18	0·40	Nil	0·20	15·44	3·61
		Narayanganj	0·21	...	...	...	...	...	...	1	0·21	0·18	Nil	0·02	13·57	4·92
		Manikganj	0·10	...	...	...	...	...	...	1	0·10	0·24	Nil	0·09	11·71	3·25
		Joydebpore	0·16	...	...	...	...	...	...	1	0·16	?	Nil	?	7·20	?
	Hill Tippera	Agartola	...	...	...	...	...	...	...	Nil	Nil	0·72	Nil	0·40	9·68	5·13
	Tippera	Comilla	0·19	...	...	...	...	...	...	1	0·19	0·78	Nil	0·42	11·55	5·04
		Chandpore	0·20	...	...	...	...	...	...	1	0·20	0·23	Nil	0·20	11·05	3·73
		Brahmanbaria	0·24	...	...	...	...	...	...	1	0·24	0·46	Nil	0·15	13·59	4·99
		Ramchandrapore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·71	?
		Nasirnagar	0·10	...	...	...	...	...	...	1	0·10	?	Nil	?	13·62	?
		Daudkandi	0·32	...	...	...	...	...	...	1	0·32	?	Nil	?	17·84	?
		Kasba	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	14·04	?
		Laksham	0·10	...	...	...	...	...	...	1	0·10	?	Nil	?	12·01	?
	Mymensingh	Kishorganj	...	...	...	...	...	...	...	Nil	Nil	0·53	Nil	0·34	8·54	3·76
		Atia (*Tangail*)	...	...	...	...	...	...	...	Nil	Nil	0·36	Nil	0·10	6·17	3·59
		Mymensingh	0·09	...	...	...	...	...	...	Nil	0·09	0·32	Nil	0·19	4·41	3·74
		Jamalpur	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·03	4·77	3·51
		Netrakona	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·07	7·31	3·45
		Subornakhally	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·22	?
		Durgapore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·41	?
		Sherepore Town	0·04	...	...	...	...	...	...	Nil	0·04	?	Nil	?	6·25	?
		Dewanganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·37	?
[No]rth Bihar	Purnea	Kishanganj	0·17	...	...	...	...	...	...	1	0·17	0·19	Nil	0·10	2·33	2·40
		Araria	0·32	...	...	...	...	...	...	1	0·32	0·27	Nil	0·18	2·43	2·20
		Purnea	0·07	...	...	...	...	...	...	Nil	0·07	0·14	Nil	0·08	2·75	2·07
		Gondwara (*Korah*)	...	...	...	...	...	...	...	Nil		?	Nil	?	1·23	?
		Barsoe	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·86	?
		Forbesganj	0·17	...	...	...	...	...	...	1	0·17	?	Nil	?	2·04	?
		Kaliaganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·32	?
	Bhágalpur	Madhipura	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·05	2·60	2·90
		Bongaon (*Sufabad*)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·27	?
		Supaul	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·09	2·32	1·90
		Protabganj	0·46	...	...	...	...	...	...	1	0·46	?	Nil	?	2·11	?
		Bhagalpur	0·10	...	...	...	...	...	...	1	0·10	0·16	Nil	0·04	4·02	2·19
		Banka	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·02	4·98	2·31
		Colgong	0·06	...	...	...	...	...	...	Nil	0·06	?	Nil	?	4·92	?
	Darbhanga	Tajpur	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·12	1·98	1·96
		Darbhanga	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·10	2·73	2·16
		Madhubani	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·05	3·42	2·13
		Bahera	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·34	?
		Roshera	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·62	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 4th of March 1893—concld.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 26th February.	Monday, 27th February.	Tuesday, 28th February.	Wednesday, 1st.	Thursday, 2nd.	Friday, 3rd.	Saturday, 4th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BIHAR—concluded.	Muzaffarpur...	Sitamarhi ...	0·35	...	...	...	...	...	...	1	0·35	0·26	Nil	0·22	3·40	1·92
		Muzaffarpur	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·07	2·09	2·80
		Hajipur .	0·02	...	...	...	...	...	...	Nil	0·02	0·11	Nil	0·04	2·59	1·97
		Paru ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·70	?
		Mahwa (Chitwarra.)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·40	?
		Siuhar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?		?
		Pupri ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·57	?
	Champaran	Motihari ...	...	...	...	...	...	...	...	Nil	Nil	0·26	Nil	0·19	2·58	1·76
		Bettiah ...	...	...	...	...	...	...	...	Nil	Nil	0·26	Nil	0·17	2·03	1·83
		Bagaha ...	0·13	...	...	...	...	...	...	1	0·13	?	Nil	?	2·63	?
		Burhurwa ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·78	?
	Saran	Gopalganj ...	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	Nil	2·34	1·81
		Siwan .	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·04	2·67	2·40
		Chapra ...	0·23	...	...	...	...	...	...	1	0·23	0·15	Nil	0·05	2·85	2·28
SOUTH BIHAR	Shahabad ...	Buxar ...	0·18	...	...	...	...	...	...	1	0·18	0·08	Nil	0·03	2·93	2·44
		Dehri ...	0·04	...	...	...	...	...	...	Nil	0·04	0·28	Nil	0·27	3·14	2·92
		Bhabhua ...	...	...	...	...	...	...	...	Nil	Nil	0·36	Nil	0·32	2·92	3·16
		Sasaram ...	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·12	2·29	2·63
		Arrah ...	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·06	3·29	2·28
		Mohanea ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·33	?
		Khiri ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·47	?
		Ageaon ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·39	?
		Ramagar ...	0·12	...	...	...	...	...	...	1	0·12	?	Nil	?	3·33	?
		Koath ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·01	?
		Sikroul ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·18	?
		Bassoudin ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·66	?
		Monaharpur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·90	?
	Gaya ...	Aurangabad ...	0·02	...	...	...	...	...	...	Nil	0·02	0·16	Nil	0·15	3·89	2·93
		Gaya ...	0·10	...	...	...	...	...	...	1	0·10	0·14	Nil	0·10	3·57	2·45
		Nawadah ...	0·20	...	...	...	...	...	...	1	0·20	0·13	Nil	0·09	4·07	2·39
		Jahanabad ..	0·22	...	...	...	...	...	...	1	0·22	0·15	Nil	0·07	3·30	2·26
		Arwal	0·12	...	...	...	...	...	...	1	0·12	?	Nil	?	2·54	?
		Daudnagar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·85	?
		Sherghati	...		...	...	...	...	...	Nil	Nil	?	Nil	?	5·96	?
		Rajauli ...	0·19	...	...	...	...	...	...	1	0·19	?	Nil	?	7·24	?
		Pakri Barawan	0·23	...	...	...	...	...	...	1	0·23	?	Nil	?	3·74	?
	Patna ...	Patna .	0·08	...	...	...	...	...	...	Nil	0·08	0·09	Nil	0·06	2·60	2·22
		Dinapore ...	0·06	...	...	...	...	...	...	Nil	0·06	0·05	Nil	0·04	2·23	2·06
		Bihar ...	0·14	...	...	...	...	...	...	1	0·14	0·09	Nil	0·06	3·58	2·58
		Barh ...	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·09	3·33	2·31
		Bhokram ...	0·09	...	...	...	...	...	...	Nil	0·09	?	Nil	?	3·35	?
		Hilsa .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·81	?
	Monghyr ..	Begusarai ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·05	5·73	2·68
		Monghyr ...	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·08	5·10	2·49
		Jamui ...	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·07	4·79	2·35
		Goori ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	10·86	?
		Shaikpura ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·62	?
		Chahai Bamda	0·20	0·00	...	...	...	...	...	1	0·29	?	Nil	?	5·77	?
	Sonthal Parganas.	Rajmahal ...	0·12	...	...	...	...	...	...	1	0·12	0·11	Nil	0·07	3·76	1·73
		Godda ..	0·13	...	...	...	...	...	...	1	0·13	0·10	Nil	0·08	4·20	1·83
		Pakour ...	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·04	7·45	1·50
		Naya Dumka	0·08	...	...	...	...	...	...	Nil	0·08	0·28	Nil	0·21	5·23	2·81
		Deoghur .	0·15	...	...	...	...	...	...	1	0·15	0·18	Nil	0·04	3·96	2·84
		Jamtara ...	0·04	...	...	...	...	...	...	Nil	0·04	0·21	Nil	0·10	7·37	2·36
		Belbodda ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·67	?
		Nanihat ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·95	?
CHOTA NAGPUR.	Hazaribagh ...	Pachamba (Giridih). ...	0·08	...	...	...	...	...	...	Nil	0·08	0·25	Nil	0·18	7·46	2·58
		Hazaribagh .	0·12	...	...	...	...	...	...	1	0·12	0·24	Nil	0·17	7·80	2·88
		Semtaguran .										0·53		0·51		2·79
		Mahudi Hills										0·34		0·27		2·80
		Jhumra Hill										0·33		0·30		2·89
		Parhi ...	0·03	...	...	...	...	...	...	Nil	0·03	?	Nil	?	5·36	?
		Chatra ...	0·05	...	...	...	...	...	...	Nil	0·05	?	Nil	?	6·80	?
		Karagdeha .	0·13	...	...	...	...	...	...	1	0·13	?	Nil	?	4·28	?
		Ramgar ...	0·07	...	...	...	...	...	...	Nil	0·07	?	Nil	?	9·06	?
	Lohardaga	Lohardaga ...	...	...	...	...	...	...	...	Nil	Nil	0·34	Nil	0·33	11·03	3·45
		Ranchi ...	0·09	...	...	...	...	...	...	Nil	0·09	0·40	Nil	0·27	12·66	3·76
		Silli ...										?	Nil	?		?
	Palamau ...	Palamau (Daltonganj).	0·07	...	...	...	...	...	...	Nil	0·07	0·22	Nil	0·15	3·48	2·90
		Balumath	0·03	...	...	...	...	...	...	Nil	0·03	?	Nil	?	9·16	?
		Husainabad	0·03	...	...	...	...	...	...	Nil	0·03	?	Nil	?	4·24	?
		Garhwa .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·90	?
	Singhbhum ...	Chaibassa ..	0·20	...	...	...	...	...	...	1	0·20	0·35	Nil	0·28	12·54	3·81
		Chakardharpur.	0·30	...	...	...	...	...	...	1	0·30	?	Nil	?	12·81	?
		Ghatsila	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	12·15	?
		Baharagura	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?		?
	Manbhum ...	Purulia ...	...	...	...	...	...	...	...	Nil	Nil	0·28	Nil	0·18	11·13	3·07
		Gobindpur .	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·12	6·58	2·75
		Raghunathpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·72	?
		Barahabhum	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	10·30	?
		Jhalda ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	5·94	?
		Chas .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	6·61	?
		Pandra ...	0·02	...	...	...	...	...	...	Nil	0·02	?	Nil	?	6·02	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the 7th March* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 4TH OF MARCH 1893.

AT the close of the previous week a barometric depression had passed through Orissa travelling in an easterly direction, and conditions in Bengal on the 25th of February, or the last day of that week, were unusually disturbed over practically the whole province. Skies were heavily clouded, and abnormal north-easterly winds prevailed over a considerable part of the province, but on the other hand pressure was in excess of the normal by amounts ranging up to about a tenth of an inch. On the 26th, or the first day of the present week, the pressure changes were decidedly irregular, while temperature had fallen rapidly, and fairly general rain had been received from the 25th to the 26th, the falls being as a rule not heavy. The effects of the depression had, however, to a great extent disappeared, and the sky was clearing rapidly on the 26th in all districts. On the 27th pressure had risen moderately and by nearly equal amounts in all districts, and temperature had also risen rather briskly. A steady north-westerly wind current had set in over the whole province except at one or two stations in Orissa, the sky was only lightly clouded, weather had become fine and settled, and rainfall was practically entirely absent. From this date up till the end of the week, the changes of meteorological conditions have been of comparatively little importance except as regards temperature, and fine and fairly settled weather has prevailed, while there has been a steady increase in the temperature. Thus for the 24 hours from the 27th to the 28th of February, the mean temperature of a large part of the province was from 10° to 12° below the normal, and this defect has been steadily reduced till on March 4th it only equalled from 4° to 6°. Pressure, on the other hand, fell slowly on February 28th and on March 1st and 2nd, but on the 3rd and 4th it commenced to increase again, and on the 4th it was in excess of the normal by amounts ranging generally from 0·12″ to 0·16″. Throughout the whole of the last five days of the week a steady westerly and north-westerly wind has been blowing over the greater part of the province, through towards the close of the week there was a distinct tendency for south-westerly winds to set in at the southern stations. Skies have also been generally only lightly clouded, and from the 26th of February up till March the 4th practically no rain whatever was reported over the whole of Bengal.

Pressure.—The variations of pressure during the week have been small, and the average pressure for the week has been in excess of the normal by amounts ranging from about 0·11″ at the eastern stations up to 0 15″ in the west of the province.

Temperature—As stated previously, has been rising steadily almost throughout the week, and the very abnormal conditions of temperature which obtained during the second half of February have partially disappeared, though even at the close of the week under review the mean temperature of the province was from 4° to 6° lower than usual. The mean temperature of the whole province for the week averaged 7·7° below the normal for the period, while in South-West Bengal and Chota Nagpur the defect has equalled nearly 10°.

The distribution of temperature during the week and its variation from the normal value are best seen in the table below, where the average maximum, minimum and mean temperatures for the week at nine typical stations in different districts of the province are compared with the normal values for the period. The defect, it will be seen, has been most marked in the maximum or day temperatures, which at such stations as Cuttack, Calcutta, Burdwan, Patna, Gaya and Hazaribagh have been from 10° to 13° in defect of the normal:—

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 4th March 1893.

	Normal mean maximum temperature for the week ending 4th March.	Actual mean maximum temperature for the week ending 4th March 1893.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 4th March.	Actual mean minimum temperature for the week ending 4th March 1893.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 4th March.	Actual mean daily temperature for the week ending 4th March 1893.	Variation of actual mean from the normal.
Cuttack	94·9	81·7	−13·2	69·8	66·0	−3·8	82 3	73 9	−8 4
Calcutta	86 7	76·1	−10·6	65·9	58·8	−7·1	76·3	67 5	−8 8
Dacca	87·1	77·8	−9 3	64 1	58·1	−6 0	75·6	68 0	−7 6
Burdwan	88·8	76 3	−12·5	64 0	57·9	−6 1	76·4	67 2	−9·2
Patna	84 5	74 1	−10·4	58·1	52 0	−6 1	71 3	63·1	−8 2
Gaya	88 0	75 8	−12·2	61 2	53 8	−7·4	74·6	64·8	−9 8
Purnea	84 8	76 4	−8 4	56 0	53 9	−2·1	70 4	65·1	−5 3
Hazaribagh	83 6	72 3	−11·3	59·1	52 4	−6 7	71 3	62·4	−8 9
Darjeeling	51 0	47·5	−3 5	40 3	35·4	−4·9	45 7	41 5	−4 2

Rainfall.—The rainfall during the week has been small, the heaviest falls having occurred in Orissa, where they have averaged 0 63 inch. In the other divisions the falls have generally averaged about a tenth of an inch and less. Hence the only division in which the fall has been above or even equal to the normal has been Orissa, where it has been about twice as much as usual.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 4th of March 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th Oct. 1892.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	87·6	56·5	79·8	65·4	72·6	—6·2	0·62	0·28	+0·34	1·00	0·47	+0·53	Nil	0·20	11·05	5·58
South-West Bengal ...	85·3	52·4	76·7	58·1	67·5	—9·1	0·15	0·26	—0·11	0·67	0·49	+0·18	Nil	0 18	10·96	3·66
North Bengal	82·6	49·7	76·6	52·8	64·7	—6·4	0·04	0·17	—0·13	0·12	0·33	—0·21	Nil	0·07	3·47	2·41
East Bengal	84·4	51·0	78 0	57·0	67·5	—6·4	0·11	0·47	—0·36	0·60	0·67	—0·07	Nil	0·20	11·33	5·04
North Bihar	80·8	47·9	75·2	52·0	63·6	—6·8	0·07	0·16	- 0·09	0·28	0·33	—0·05	Nil	0·09	2·78	2·13
South Bihar	83·6	40·0	75·8	53·3	64·6	—8·3	0·07	0·15	—0·08	0·36	0·32	+0·04	Nil	0·10	4·06	2·36
Chota Nagpur	84·5	47·0	73·6	54·6	64·1	—9·5	0·08	0·32	—0·24	0·30	0·66	—0·36	Ni	0·25	8·97	3·05

METEOROLOGICAL OFFICE, BENGAL,
The 7th March 1893.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

Abstract of the Results of the Barometric and Thermometric Observations taken at 10 a.m. at the Meteorological Office, Chowringhee, in the month of February 1893.

	Inches.	Date.
The mean pressure at 10 A.M. during the month	30·063	
The mean temperature at 10 A.M. during the month	° 68·9	
The highest temperature during the month	81·7	17th.
The lowest temperature during the month	47·5	2nd.
The absolute range of temperature during the month	34·2	
The mean daily range of temperature during the month ...	18·2	
The greatest range of temperature in one day during the month ...	27·8	
	°/o	
The mean 10 A.M. humidity during the month	66	
	Inches.	
The mean 10 A.M. vapour tension during the month	·469	
The total rainfall of the month	4·95	
The greatest fall in 24 hours	1·73	20th.
The number of rainy days in the month	6·	

C. LITTLE,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 6th March 1893.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 26th February to 4th March 1893.

MONTH.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	TEMPERATURE. Daily mean.	Maximum.	Range.	Minimum.	HYGROMETRY. Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	Rainfall at 10 A.M. for past 24 hours.
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
February ...	26th ...	30·109	67·1	75·9	17·7	58·2	67·6	64·8	·577	63·0	85	0·16
" ...	27th ...	·131	66·4	74·9	17·0	57·9	70·6	61·7	·432	54·8	58	"
" ...	28th ...	·140	65·5	76·9	23·0	53·9	71·1	62·2	·442	55·5	58	"
March ...	1st ...	·109	68·5	79·1	21·2	57·9	73·6	63·2	·422	54·2	54	"
" ...	2nd ...	·087	71·4	83·9	25·0	58·9	75·6	67·6	·566	62·4	64	"
" ...	3rd ...	·074	74·3	84·9	21·2	63·7	79·6	70·6	·630	65·5	62	"
" ...	4th ...	·095	74·2	83·9	19·5	64·4	78·6	64·6	·423	54·8	43	"

	Inches.
The mean 10 A.M. pressure of the seven days	30·107
	°
The mean temperature of the seven days	69·6
The extreme variation of temperature	31·0
The maximum temperature	84·9
	°/o
The mean 10 A.M. relative humidity of the seven days	61
The total fall of rain from 26th February to 4th March 1893 ...	0·16 inch.

The daily mean temperatures are the crude means of maximum and minimum temperatures.

C. LITTLE,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 6th March 1893.

Results of the Meteorological Observations taken at the Alipore Observatory from 26th February to 4th March 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Maximum.	Range.	Minimum.	Hygrometry. Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Wind. Prevailing direction.	Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches.	°	%			Inches.	
Feb.	26th	137·5	9·9	30·013	66·1	75·0	16·6	58·4	62·4	0·513	59·9	82	NNW and calm...	35	Nil	Partially cloudy, ≡.
„	27th	131·4	10·5	·035	66·5	73·7	15·1	58·6	59·8	·433	54·9	63	N, NNW and calm	71	„	Clear, ⌓.
„	28th	136·0	10·4	·043	65·2	75·7	21·8	53·9	59·3	·420	51·7	71	NNW and calm ..	59	„	Chiefly clear, ⌓.
March	1st	134·5	10·5	·018	66·8	78·1	20·1	58·0	60·4	·433	54·9	67	NNW and calm...	78	„	Clear, ⌓, ≡.
„	2nd	137·5	8·4	·000	69·1	81·7	24·2	57·5	63·2	·505	59·3	73	NNW and calm...	33	„	Partially cloudy, ⌓.
„	3rd	143·7	9·4	·002	72·6	82·8	20·1	62·7	67·7	·618	65·0	78	WSW and calm ...	62	„	Chiefly clear, ⌓.
„	4th	138·5	7·2	·033	71·6	81·5	18·6	62·9	62·4	·442	55·5	57	Variable and calm	22	„	Partially cloudy, ⌓, ⊕.

	Inches.
The mean pressure of the seven days	30·029
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	29·873
	Hours.
The total number of hours of bright sunshine	66·3
The maximum possible number of hours of sunshine	81·6
	°
The mean temperature of the seven days	68·3
The average temperature of the corresponding period for 24 years, S.-G.'s Office	77·2
The extreme variation of temperature	28·9
The maximum temperature	82·8
	Miles.
The highest velocity of the wind in one hour	14
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	71
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	66
	Inches.
The total fall of rain from 26th February to 4th March 1893	Nil
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·52
The total fall from 1st January to 4th March 1893	5·00
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	1·38

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

≡, fog; ⌓, dew; ⊕, solar corona.

C. Little,

For Meteorological Reporter to the Govt. of India.

Meteorological Office, Govt. of India;

Calcutta, the 6th March 1893.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 4th March 1893, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 4th March 1893.			Week ending Saturday, the 5th March 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	1,292	4,17,775	7,386	779	2,34,780	4,197
Jute	108	66,175	1 023	4	1,0*0	9
Firewood	119	60,300	887	87	62.775	910
Other articles	1,006	2,56,680	3,882	997	2,68,7.5	4,050
Total ...	2,525	8,00,930	13,178	1,867	5,67 330	9,195

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 25th February 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	301,600	3,49,966 7 0	28,29,3.6 3)	6,25,983 3 0	16,788 15 0	9,92,738 9 0	78,376½	108 117¼	186 493¾
Or per mile of railway	......	217 4 10	......	388 11 0	10 6 10	616 6 8	......	......	......
For previous 7 weeks of half-year	2,132,643	24.62,399 2 0	1,94,47,969 0	43,81,679 1 0	1,19,583 2 0	69,63,661 5 0	553,107	717,[illegible]	1,360,785¼
Total for 8 weeks ...	2,434,243	28,12 365 9 0	2,22,77 3.4 30	50,07,662 4 0	1,36,372 1 0	79,56,39. 14 0	631,484	855,795	1,487,279
Comparison.									
Total for corresponding week of previous year	326,991	3,51,779 4 11	29,74 317 20	6,92,898 14 9	23,270 6 3	10,67,948 0 11	76,465	114,967	1,91,432
Per mile of railway corresponding week of previous year ..	......	222 4 0	......	437 12 3	14 11 3	674 11 6	......	......	......
Total for corresponding 8½ weeks of previous year	2 377,985½	26,54,519 3 4	2,27,94,[illegible] 0	52,25,196 6 9	1,44,117 4 8	80,23,832 14 9	629,73½	842,018	1,471,782

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 25th February 1893, on 22½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ..	*18,256	*4,604 11 0	13,471 30	434 5 0	12 0 0	5,051 0 0	863	105	968
Or per mile of railway	......	206 15 3	......	19 8 4	0 8 7	227 0 2	......	......	.....
For previous 7 weeks of half-year	†162,794	†41,749 15 0	‡71,871 20	‡2,488 1 0	§69 0 0	44,307 0 0	6,177	8[illegible]	6,98[illegible]
Total for 8 weeks ...	181,050	46,354 10 0	85,343 20	2,922 6 0	81 0 0	49,358 0 0	7,040	90[illegible]	7,94[illegible]
Comparison.									
Total for corresponding week of previous year ...	33,416	9,332 0 7	27,967 20	874 4 0	14 8 6	10,220 13 1	1,069	97	1,1[illegible]
Per mile of railway corresponding week of previous year .	......	419 6 8	......	39 1 8	0 10 6	459 5 10	......	......	...
Total for corresponding 8½ weeks of previous year ...	185,412	47,083 15 10	1,60,447 20	5,335 13 9	106 5 3	52,526 2 10	7,317	891	8,228

* The decrease is due to figures for the corresponding period of 1892 having included earnings on account of "Sibaratree."
† Added number of passengers 2,0.7 and Rs. 797
‡ Deducted maunds 92 and added „ 4 } on account of difference between the approximate and audited figures for the week ended 21st January 1893.
§ Ditto „ 3 }

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 25th February 1893, *on* 161⅝ *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs A. P.			
Total traffic for the week ...	17,899	11,644 15 0	39,302 30	6,322 9 0	33 0 0	18,003 8 0	5,303½	2,988	8,291½
Or per mile of railway ...	......	72 2 5	......	39 2 9	0 3 7	111 8 9	....	......	...
For previous 7 weeks of half-year ...	*120,927	*79,965 9 0	†3,71,724 30	†57,200 7 0	‡269 0 0	1,37,435 0 0	36,543½	22,884½	59,428
Total for 8 weeks ...	138,826	91,610 8 0	4,11,027 20	63,523 0 0	305 0 0	1,55,438 8 0	41,847	25,872½	67,719½
Comparison.									
Total for corresponding week of previous year ...	14,889	10,720 14 0	42,905 20	7,735 2 0	67 0 0	18,523 0 0	5,315	2,325	7,640
Per mile of railway corresponding week of previous year ...	.....	66 6 0	......	47 14 10	0 6 8	114 12 3	......	......	......
Total for corresponding 8⅔ weeks of previous year ...	116,253½	81,473 7 4	3,65,160 30	63,570 1 0	527 0 6	1,45,570 8 10	47,783	17,478	65,261

* Added number of passengers 582 and Rs. 294 } on account of difference between the approximate and audited figures for the week ended 21st January 1893.
† Ditto maunds 177 and „ 1,142 }
‡ Deducted „ 4 }

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for the week ended 25th February 1893, *on* 777 *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	170,094	91,100 0 0	8,67,742 0	88,180 0 0	22,350 0 0	2,01,630 0 0	27,794	27,653	55,447
Or per mile of railway ...	219	117 0 0	1,117 0	113 0 0	*16 0 0	246 0 0	......	......	.....
For previous 7 weeks of half-year ...	1,308,641	6,11,760 0 0	47,86,365 0	7,36,690 0 0	1,06,710 0 0	14,55,160 0 0	193,988	206,886	400,874
Total for 8 weeks ...	1,478,735	7,02,860 0 0	56,54,107 0	8,24,870 0 0	1,29,060 0 0	16,56,790 0 0	221,782	234,539	456,321
Comparison.									
Total for corresponding week of previous year ...	160,859	88,061 0 0	8,32,544 0	85,646 0 0	24,874 0 0	1,98,581 0 0	27,130	28,980	56,110
Per mile of railway corresponding period of previous year ...	207	113 0 0	1,071 0	110 0 0	*18 0 0	241 0 0	......	......	......
Total to corresponding date of previous year ...	1,403,632	7,08,479 0 0	48,97,873 0	6,94,719 0 0	1,22,461 0 0	15,25,659 0 0	226,786	242,274	469,060

* Excluding steamer earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 25th February 1893, *on* 125 *miles open.*

	Coaching Traffic.		Merchandise and Mineral Traffic		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	30,098	10,550 0 0	72,814 0	3,980 0 0	50 0 0	14,580 0 0	3,682	2,008	5,690
Or per mile of railway ...	241	84 0 0	583 0	32 0 0	1 0 0	117 0 0	......	......	......
For previous 7 weeks of half-year ...	213,822	78,580 0 0	4,17,428 0	25,990 0 0	1,280 0 0	1,05,850 0 0	25,470	14,234	39,704
Total for 8 weeks ...	243,920	89,130 0 0	4,90,242 0	29,970 0 0	1,330 0 0	1,20,430 0 0	29,152	16,242	45,394
Comparison.									
Total for corresponding week of previous year ...	27,979	10,942 0 0	67,651 0	4,268 0 0	95 0 0	15,245 0 0	3,682	1,990	5,672
Per mile of railway corresponding week of previous year ...	224	87 0 0	541 0	34 0 0	1 0 0	122 0 0	......	......	......
Total to corresponding date of previous year ...	241,699	90,738 0 0	5,23,705 0	32,711 0 0	789 0 0	1,24,238 0 0	29,837	17,194	47,031

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended** 25th **February** 1893, **on** 86 **miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	18,431	5,830 0 0	13,511 0	1,420 0 0	120 0 0	7,370 0 0	2,504	720	3,224
Or per mile of railway	215	68 0 0	157 0	17 0 0	1 0 0	86 0 0	......	......	.....
For previous 7 weeks of half-year	127,776	40,790 0 0	1,19,222 0	10,970 0 0	1,260 0 0	53,020 0 0	17,370	5,198	22,568
Total for 8 weeks ...	146,207	46,620 0 0	1,32,733 0	12,390 0 0	1,380 0 0	60,390 0 0	19,874	5,918	25,792
Comparison.									
Total for corresponding week of previous year	16,495	5,531 0 0	19,951 0	1,481 0 0	534 0 0	7,546 0 0	2,504	720	3,224
Per mile of railway corresponding week of previous year ...	192	65 0 0	232 0	17 0 0	6 0 0	88 0 0	......	.....	....
Total to corresponding date of previous year	141,599	47,439 0 0	90,256 0	9,409 0 0	1,361 0 0	58,200 0 0	20,640	5,974	26,614

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 18th February 1893	11,052	0	0
Corresponding period of 1892	10,037	0	0
Increase	1,015	0	0
Receipts per mile for the week ending 18th February 1893	216	11	4
Corresponding period of 1892	196	12	11
Increase	19	14	5
Receipts from 1st January to 18th February 1893	67,827	0	0
Corresponding period of 1892	58,987	0	0
Increase	8,840	0	0

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No. 11 of 1893.



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CONTENTS.

Abstract of the Proceedings of the Council of the Lieutenant-Governor of Bengal, assembled for the purpose of making Laws and Regulations under the provisions of the Act of Parliament, 24 and 25 Vic., Cap. 67.

The Council met at the Council Chamber on Saturday, the 25th February, 1893.

Present:

The HON'BLE SIR CHARLES ALFRED ELLIOTT, K.C.S.I., Lieutenant-Governor of Bengal, *presiding.*
The HON'BLE J. T. WOODROFFE, *Offg. Advocate-General.*
The HON'BLE T. T. ALLEN.
The HON'BLE H. J. S. COTTON, C.S.I,
The HON'BLE H. H. RISLEY, C.I.E.
The HON'BLE J. LAMBERT, C.I.E.
The HON'BLE H. LEE.
THE HON'BLE DR. MAHENDRA LAL SIRCAR, C.I.E.
The HON'BLE A. H. WALLIS.
The HON'BLE GONESH CHUNDER CHUNDER.
The HON'BLE P. PLAYFAIR.
The HON'BLE MAHARAJAH RAVANESHWAR PROSAD SING BAHADUR.

NEW MEMBER.

The Hon'ble Maharajah Ravaneshwar Prosad Sing Bahadur took his seat in Council.

LICENSED WAREHOUSE AND FIRE-BRIGADE BILL.

The Hon'ble Mr. Cotton moved that the clauses of the Bill for the regulation of Warehouses and the maintenance of a Fire-brigade be considered for settlement in the form recommended by the Select Committee.

The Motion was put and agreed to.

The Hon'ble Mr. Woodroffe moved that, in clause (*9*) of section 3, the word "coir" be omitted.

He said:—"It is right that I should explain how, notwithstanding that the Bill as settled by the Select Committee, of which I was a member, deals with 'coir' as an inflammable substance, this amendment comes to be moved by me. At the time when the Bill was before the Select Committee, a memorial was placed before us from the Secretary to the Calcutta Trades' Association, in which it was urged that 'coir' was not inflammable; that if thrown on a live fire, it would not blaze but only smoulder; that seventy-five per cent. of the rope made in Bengal is made of imported coir yarn, and that during the eighty years these roperies had been in existence, no fire had occurred in them.

"I believe the Select Committee were much impressed by this memorial, and they would not have included 'coir' amongst the highly inflammable substances, were it not for a fire having occurred in which a considerable amount of coir had been destroyed. Under these circumstances, 'coir' was put into the clauses of the Bill when it was passing through the Select Committee. Since then a further representation has been made on the subject, not only to myself, but also, I believe, to other members of the Council, with the result that we are satisfied that the article, though inflammable, is not of that extremely inflammable character which would justify its retention in this clause. It can, however, hereafter be dealt with under section 26, clause (*a*), of the Bill, which provides that the Commissioners may, for the purpose of further providing the cost of the fire-brigade, levy a rate not exceeding two and-a-half per cent. on buildings employed for the storage of any other inflammable substance or thing not specifically mentioned in clause (*9*) of section 3. With these explanations and observations, I move this amendment."

The Hon'ble Mr. Lambert said:—"As far as I am aware, there has been only one fire in a godown in which coir and cocoanut fibre is stored, and that occurred on the 11th of January last. It was not a very important fire; and there are not many store-houses which would contribute to this tax, if coir were included amongst the inflammable articles. On these grounds, I support the amendment."

The Hon'ble Mr. Wallis said:—"Since this question was considered by the Select Committee, it has been represented to me by one or two firms interested in the coir industry that 'coir' should not be included amongst goods of a highly inflammable nature, as coir yarn of itself will not burn. I am glad to hear the Hon'ble Mr. Lambert say that he has no knowledge of any other case of fire in a coir godown. I may mention that the fire which recently took place in Ezra Street was in a very small godown about 50 feet long by 10 feet by 8 feet in measurement, which contained 3,500 bundles of coir of 30℔ each, and 50 bales of coir fibre. Out of this, 2,100 bundles coir yarn and the 50 bales of coir fibre were untouched by fire; the remaining 1,400 bundles were damaged, but half the yarn was picked out the next day and sold: not a single bundle was wholly burnt, and the damage was chiefly confined to four inches of the ends of the bundles. The fire was caused by the mats in which the fibre was

packed catching fire, and when these were burnt, the fire was deprived of fuel, and did not spread. The godown adjoining which was only separated by a wooden door was burnt through, and yet the coir yarn in that godown, though resting against the door, did not communicate the fire to the contents. The fire broke out at 7 P.M., and for two hours after the brigade arrived there was no water available, yet the fire was put out about midnight. This shows that a coir godown is not so dangerous as to justify it being classed under the definition of 'warehouse.'"

The Hon'ble MR. PLAYFAIR said:—"I support the amendment proposed by the learned Advocate-General. Coir, I understand, is not inflammable, neither is ship-chandlery as distinguished from the articles separately mentioned under section 3, nor is linseed oil; and when the vendors of these articles realize, as their more alert neighbours have done, that their godowns and yards are about to be specially taxed for the support of the fire-brigade, it is fully to be expected that they, too, will raise a protest. I would suggest, with your Honour's approval, that 'ship-chandlery' and 'linseed oil' be also omitted from clause (*9*) of section 3 of the Bill. And if your Honour will permit this amendment to be put to the Council without formal notice, I beg leave to submit it."

The Hon'ble MR. WOODROFFE's motion was put and agreed to.

The Hon'ble MR. PLAYFAIR's motions that, in clause (*5*) of section 3, the words "nor linseed oil" be inserted after the figures "1886," and that in clause (*9*) of the same section, the word "ship-chandlery" be omitted, were also put and agreed to.

The Hon'ble BABU GONESH CHUNDER CHUNDER said:—"As the amendments Nos. 2 to 6 in the List of Business standing against my name relate to the same matter, I ask permission to refer to them together as one amendment. The matters involved in these amendments relate to the power of the Commissioners to grant or refuse licenses. The Select Committee have introduced an alteration in section 6 of the original Bill, the effect of which is to withdraw the power of granting or refusing licenses from the Commissioners and to put that power in the hands of the Chairman. The system of granting licenses to warehouses was first introduced by Act IV of 1866, which provided that licenses should be obtained from the Justices. Then Act II of 1872 repealed so much of Act IV of 1866 as related to the granting and refusing of licenses to jute warehouses, and that Act provided that it should be within the discretion of the Justices at a special meeting to grant or refuse licenses; and Act V of 1879 conferred those powers on the Commissioners at a special meeting. Act IV of 1883, which repealed Act V of 1879, also retained these powers in the Commissioners at a special meeting.

"The Committee which was appointed in 1891 under the presidency of Sir Henry Harrison recommended, amongst other things, that the power of granting licenses should remain with the Municipality, and the Bill, which was introduced into this Council by the late Sir Henry Harrison, than whom I may say, without fear of contradiction, few persons can claim greater experience in these matters, left the power of the Commissioners in this behalf untouched; but the Select Committee have thought fit to withdraw this power from the Commissioners. They, however, did not assign any reason in their Report why this power has been withdrawn from the Commissioners. They merely say that this power has been reserved to the Chairman, but why it has been taken from the Commissioners and given to the Chairman does not appear. Nor do I find anything in the statement made by the Hon'ble Member in charge of the Bill when presenting the Report of the Select Committee showing why it is that the Select Committee thought fit to take away this power from the Commissioners.

"It seems to me, Sir, that this proposal of the Select Committee is opposed to the spirit of Local Self-Government, which, I take it, it is the intention of the

Government of this Province to encourage, develop and extend as far as practicable. With reference to this provision of the amended Bill, I find that the Commissioners have sent in a report in support of my amendment, in which they say:—

'Section 8 of the Bill modifying section 6 of the present Fire-Brigade Act (Act IV of 1883, B.C.)—The Commissioners must beg leave to protest against this section, which deprives them of the power which they now possess to grant licenses to jute warehouses, and vests this power in the Chairman or in a Committee appointed with the consent of the Chairman. This provision is in conflict with the principle which runs through the whole of the present Municipal Act, by which the Commissioners in meeting direct and control the proceedings of the Chairman in all matters. Nor, indeed, has any case been made out for this change in the law. For in the only instance where there has been some hesitation on the part of the Commissioners to grant a license to a jute warehouse, *viz.*, in respect of premises No. 15, Kassi Mitter's Ghat Street, belonging to Messrs. Finlay, Muir & Co., such license was eventually granted on the conditions suggested by the Commissioners being accepted by Messrs. Finlay, Muir & Co. And even if it were admitted that the Commissioners made a mistake in this case, they submit that one isolated instance like this is not sufficient ground to justify the withdrawal from them of this power, which they claim that they have on the whole satisfactorily exercised.'

"I find that the Hon'ble Mr. Lee, the Chairman of the Corporation, was a member of the Select Committee of the Council on this Bill; but whether in agreeing with the Committee he referred the matter to the Commissioners and obtained their assent to this provision or not, does not appear. We find, however, that the Commissioners themselves protest against this alteration, and ask that the power of granting licenses be restored to them. As no reason has been assigned why this power has been taken away from the Commissioners, I submit that it ought not to be taken away; and if this view is accepted by the Council, section 9 of the Bill will be unnecessary. I therefore move that in section 5, the words 'Chairman of the' be omitted, the effect of which will be to restore the power which the Commissioners have exercised for over twenty-six years."

The Hon'ble MR. PLAYFAIR said:—"The views of the mercantile community, including the Hydraulic Press Association, upon the amendment proposed by the hon'ble member, may be found in the letter addressed by the Chamber of Commerce, dated the 22nd of September last, to the Government of Bengal, and are couched in these words which I ask permission to read:—

'In dealing with the general question of the grant of a license, the Committee of the Chamber of Commerce would point out that, under the existing Act, the machinery employed is as cumbrous and unbusiness-like as it is possible to conceive. By section 6 of Act IV (B.C.) of 1883, the granting of a license rests *within the discretion of the Commissioners at a special meeting*. It is impossible that such a system should work smoothly or well. The Committee would therefore suggest that, however the questions dealt with in this letter may be settled, there should be a provision of law confining the granting, refusing, cancelling or re-granting of licenses, if licenses are to be resorted to, to a small working committee, composed of, say, the Chairman of a municipality and three or four Commissioners holding office for a given time.'

"I believe I am correct in saying that, out of respect to these views, the Select Committee drafted sections 6, 7, 8 and 9 of the Bill now before Council, conferring power upon the Chairman of the Commissioners to grant licenses. If the procedure in the granting of licenses has been 'unbusiness-like' and 'cumbrous' in the past, when only a limited number of licenses have been required in connection with jute and cotton warehouses, the inconvenience to the public under the same system is likely to be much enhanced by the additional number of licenses made compulsory on trades specified in clause (*9*) of section 3 of the Bill. It has become all the more necessary, therefore, that the routine observed in the consideration and granting of licenses should be altered. It is a general experience that large Committees impede and protract the despatch of business; and, in public estimation, the Commissioners in general meeting have not escaped from this fault. I hold that a license should be obtainable by any person whose premises are constructed in conformity with the requirements of the Act and are situated in a locality recognized as suitable for the trade. Such license should be forthcoming promptly after inspection, and the inspection should be made on application. To protect traders from inconvenience

"The principles that have hitherto guided the Legislature in respect of the imposition of taxes and the granting of licenses under the Jute Warehouses and Fire-brigade acts are now being attacked in more ways than one. The sums concerned are comparatively small; but the principles involved are important. The first principle that has been attacked has been that the sanitary funds of the Municipal Commissioners should not be whittled away. That attack was repelled last Saturday. It will have to be met again to-day. The next principle that is attacked is, that the Municipal Commissioners of Calcutta should continue to have the control of the location of the objectionable trades in the city—objectionable from whatever cause. At present the Municipal Commissioners have the power, and exercise it, of locating hide godowns, mills for the pressing of oil, for the crushing of bones, offensive and dangerous trades of all kinds; and it is suggested that they should not have that power as regards the location of jute warehouses. There is only this difference between their powers in respect of hide godowns and the like and jute warehouses that a special safeguard is added to the public as regards jute warehouses. That, I understand, was the cause of the introduction of the words 'at a Special Meeting' in the last law; that only at a special meeting can the Commissioners give sanction to the licensing of new jute warehouses. In respect of all other objectionable and offensive trades and dangerous trades, applications for licenses come to the Secretary to the Corporation. The responsible officers of the Corporation, the Health Officer and the Engineer, report, and the Chairman, as a rule, grants or refuses the licenses without any further ado. In doubtful cases, he refers the papers to the General Committee; and the proceedings of the General Committee are then confirmed or rejected in general meeting. Now, Sir, it is proposed to make jute warehouses an exception to this general rule; and not only to take away this special safeguard, that is supposed to be added to the public by means of which the fact becomes publicly known when it is proposed to open a jute warehouse in a particular spot, so that the owners of adjacent properties might protest if need be, but it is proposed to take away altogether the controlling voice of the Commissioners as a body in respect of licenses for jute warehouses.

"The general principle, as I have shown, is, that the Chairman acts in executive matters on his own responsibility, but subject to the control, in special cases, of the Commissioners. In matters of this kind, really small matters but matters of sentiment, no wise Council, and I am sure not this Council, will interfere, unless a strong case is made out to necessitate the interference. What case has been made out? I have taken the trouble to go through the instances in which the Chairman and the Commissioners have for a time differed as to whether licenses should be granted or should not be granted to jute warehouses. I find that since the 3rd of March, 1887, there have been but four such cases; and in the end, in each of those cases, a satisfactory solution has been come to and the Chairman and the Commissioners have come in accord, the Chairman's view always prevailing. I believe that the real cause for this suggested change has been the delay regarding one particular license. In that case, a license has been granted. It was a doubtful case. I myself thought that the license should have been granted from the first; Sir Henry Harrison thought the same; the voting was very close; but it was a doubtful case; there was no cart space, and frequently it has been required that there should be cart space. It was not the licensing of a new warehouse, but simply the licensing for a particular purpose, of a shed, which had already been used for the purposes of a warehouse. It was simply that a license should be granted for sorting jute in a shed where warehouse work was being conducted. So that really it was not an extremely important matter, though much has been made of it. In regard to the Report from the Municipal Commissioners, which has already been referred to twice, I must inform the learned Advocate-General that I did not sign that Report. I did not sit as a member of the Committee when it framed the report, and I have only made two marginal notes in the report. Unfortunately, the letter with which I forwarded this Report, in my capacity of Chairman, to the Secretary of the Legislative Department, has not been put before the Council, because of an accident. The letter went to the wrong Secretary; but I explained in that letter that I did not form a member

of that Special Committee. However, the remarks of that Committee, on this particular point at all events, have my entire concurrence, where they say:—

'Even if it were admitted that the Commissioners made a mistake in this case, they submit that one isolated instance like this is not sufficient ground to justify the withdrawal from them of this power, which they claim they have on the whole satisfactorily exercised.'

"Since the year 1887, there have been refused altogether 13 applications for licenses; and four were pending when the statement, I hold in my hand, was prepared. In one case the reasons given for refusing a license were that the site was unsuitable, and no passage was left convenient for the fire-brigade. That was the one case which was refused in 1887. Five cases were refused in 1888-89; two cases because no plans were supplied; two for want of cart space, and one, because the site was both unsuitable and the cart space was insufficient. In 1889-90 one application was refused for want of cart space; in 1890-91, two were refused, one because no plan was submitted, and one for want of cart space; and last year four were refused, one for want of cart space, and three because no plans were submitted. On the other hand, the number of applications sanctioned was 24.

"Without pressing on the Council in this case the wisdom of Paschal's aphorism that 'much of the mischief of this world would be avoided if men would be but content to sit quiet in their parlours,' I trust that the Council will see that it would be discreet to let well alone. I have had to listen to a certain amount of raillery aimed at the Commissioners, of whom I am Chairman. The consideration whether it is possible or impossible to inflict physical hurt on a Corporation; whether it is possible or impossible that in the hereafter the seventy-five Commissioners can be found congregated around the throne of 'imperial Satan,' is no argument. As Chairman, I recognise the compliment offered in this proposal, but I would beg respectfully to decline it, when it involves a slur on the co-adjutors with whom I have worked daily, almost hourly, in harmony for the last three years. I support the amendment of the Hon'ble Babu Gonesh Chunder Chunder if, as I understand, he accepts the suggestion of the Hon'ble Member in charge of the Bill."

The Hon'ble Mr. Allen said:—"I am at a considerable disadvantage in dealing with the amendment before us, having very partially and indistinctly heard what has fallen from the hon'ble members who last addressed the Council, the Hon'ble Mr. Lee and the Hon'ble Mr. Cotton; and therefore I must ask to be excused if, in any way, I blunder over their explanations of the subject under discussion. The case seems to me a very simple one. The Bill, having been introduced into this Council, was referred to a chosen number of its members, in order that they might examine it closely and make their report to this Council. It is to be presumed that, in selecting the members of that Committee, the Hon'ble Member in charge of the Bill selected those whom he thought most likely to be conversant with the matters which would come before them, and most competent to offer an opinion which this Council would be wise to accept. Well, Sir, this Bill was made over to those members, and after repeated meetings, discussions and consideration of the papers placed before them, and collecting all the information that could be obtained, they have submitted a Report to this Council, and they have recommended that the granting of licenses should rest with the Chairman of the Commissioners, subject to that modification which section 9 provides. The hon'ble member opposite has, however, brought forward an amendment which, as far as I can understand his reasons, has no other foundation than the fact that, in former times, the grant of licenses was not in the Chairman but in the Commissioners. That fact, no doubt, had considerable influence with the Select Committee, and was given full weight to before they recommended any departure from the previous practice; and I think it would be singularly unwise for this Council to revert to that old discredited practice, simply because it was the old practice. I do not very well understand what the suggestion of the Hon'ble Member in charge of the Bill has been. Apparently, he is going half-way to meet the amendment, and I do not see how, if that is his intention, he can at this stage propose any change. The amendment before the Council is either to be accepted or to be negatived. When a decision has been

and possible loss, it is necessary that it should be so. It has been a great hardship to jute merchants to have to wait weeks, and in some instances many months, before a license is granted, and while the Municipal Commissioners in general meeting assembled hold an academic discussion over the application. I cannot, therefore, support the amendment proposed by the hon'ble member."

The Hon'ble MR. WOODROFFE said:—"I feel bound to oppose this motion. By grouping all these motions together, the hon'ble member has not, I venture to think, a little obscured the real question at issue. As regards the proposed amendment to section 5, for instance, it is obviously unnecessary for an applicant for a license to do more than to apply in writing to the Chairman of the Commissioners. The case is the same as regards the proposed amendment of section 6. The real question is in respect of sections 7 and 8, and the suggested omission of section 9, which provides that the Commissioners can have, and in all probability will almost invariably have, in the form of a Special Committee therein provided for, the power to exercise the functions of the Chairman under this Act with his consent. It appears to me that it is not only on the ground of the delays which have taken place in the granting of licenses, as explained to us in Select Committee, but also that there has been not unfrequently something which is described on the other side of the Atlantic as 'lobbying'—various persons putting pressure on the Commissioners to vote for the grant or refusal of licenses—that it is eminently desirable that the power of granting or refusing licenses should be vested in the Chairman, and, with his consent, in a Special Committee of the Commissioners. The Select Committee in framing this section of the Bill had in view the selection of Commissioners who, from their position, knowledge and experience, would be able to exercise proper and due control in the matter of granting or refusing licenses.

"I cannot, however, sit down without referring to the observation of the hon'ble mover of these amendments that he did not know whether Mr. Lee, who was the Chairman of the Corporation and a member of the Select Committee, had the consent of the Commissioners to vote in the manner in which he did. It seems to me that there is involved in that observation a suggestion which is not tolerable. I venture to assert that hon'ble members of this Council, whether in Council or in Select Committee, do not stand in the position of delegates, and are not and cannot for one moment be supposed to be bound by any orders or any directions emanating from any source whatever."

The Hon'ble MR. COTTON said:—"I think it possible to suggest an arrangement which may meet the suggestion of the hon'ble mover of these amendments, and also, perhaps, be accepted by the gentlemen opposite who have opposed it. I do think there is considerable force in the contention of the Hon'ble Babu Gonesh Chunder Chunder that the innovation introduced in the Bill is an encroahment on the powers which have been exercised for a great many years by the Municipal Commissioners of Calcutta; and I would be exceedingly reluctant to identify myself with any such encroachment. But this is due, I think, mainly to the fact that, as the law now stands, licenses can only be granted by the Municipal Commissioners at a special meeting convened for the purpose. This means, in effect, that the whole of the Commissioners in a body deliberate on the question, and there can be no doubt whatever that, when an executive matter of this kind is entrusted to a representative body of men like the Commissioners, it is apt to be badly handled; it is apt to be greatly delayed; and, as the learned Advocate-General has pointed out, there is great risk of what he has described as 'lobbying' or backstairs influence. I certainly think that it is very undesirable that questions of this nature should be taken up at a special meeting of the Commissioners. At the same time, I do not think sufficient cause has been made out for withdrawing the power of granting these licenses from the Commissioners altogether; and I conceive that this question of granting or refusing licenses to jute warehouses is eminently a power which should be dealt with by a Select Committee of the Commissioners appointed by the Commissioners for the purpose.

"This suggestion will, I believe, meet with the Hon'ble Babu Gonesh Chunder Chunder's acceptance, and I hope that hon'ble members opposite will not object to it. It will come to this that, instead of the power resting in the Chairman and the Chairman approving of the appointment of a Select Committee for the purpose, the power will rest in the Commissioners and the Commissioners will appoint a Committee. In this way the rights of the Municipal Commissioners will not be in any way interfered with, while the matter may expect to receive as prompt and fair treatment as it would do under the present provisions of the Bill. I may add, with regard to the question of despatch in dealing with these applications, that it is dealt with by a separate section of the Bill (section 7), to which I see no objection has been taken; and if that section becomes law, I do not think there can be any reasonable grounds for apprehending unnecessary delay in the disposal of applications for the licensing of warehouses.

"If this suggestion of mine meets with the approval of the Council, the necessary verbal alterations needed in the Bill will be drafted without difficulty by the Secretary. I do not wish to commit myself to them while addressing the Council."

The Hon'ble Mr. Wallis said:—"I think the hon'ble mover of the amendment has rather overrated the danger to municipal authority and privilege from the adoption of the recommendations of the Select Committee. The object, as I understood it in Select Committee, was to appoint a Special Committee to consider these questions of granting licenses where applications are submitted; but I cannot agree with the Hon'ble Member in charge of the Bill that a Special Committee should be appointed on each occasion. [The Hon'ble Mr. Cotton said:—'My idea was that a Standing Committee should be appointed, not a Special Committee in each case.'] Then I fail to see the difference between the proposal made by the Hon'ble Mr. Cotton and the provision contained in the Bill. As I take it, the effect of the amendment proposed by the Hon'ble Babu Gonesh Chunder Chunder would be that the existing Act shall remain in its present form. It has been shown by the Hon'ble Mr. Playfair that the working of this portion of the Act has proved unsatisfactory; that it has caused endless delays, and consequent inconvenience and loss to those applying for licenses. The object, and I think the effect, of section 9 of the Bill will be the appointment, with the sanction of the Chairman of the Commissioners, of a Special Committee which would always consider all applications for jute licenses, or the licensing for places coming under the definition of warehouses; and I think such a Committee would be better able to do the work than a Committee which may be appointed from time to time. I see that the Committee of 1891 recommended that this power should be left in the hands of the several municipalities concerned; and the proposal in the Bill provides that the granting or refusal of licenses will be in the hands of a certain number of the Commissioners specially appointed by their colleagues on that behalf."

The Hon'ble Mr. Lee said:—"At the first meeting of this Council this Session, Your Honour observed, in explaining why the Fire-brigade Bill should be proceeded with while other measures should be for the present dropped, that—

'The Fire-brigade Bill is one of purely local interest, and the interests concerned in it are interests which, I understand, will be represented in much the same way in the revised Council as they are now. I believe, for instance, that it is intended that the Calcutta Municipality shall be represented in the enlarged Council; and for that reason I obtained sanction to the appointment to the Council of the Chairman of the Calcutta Corporation to represent the Municipality while the present Bill is under discussion, in order that the Municipality may not be worse of, but may be as fully represented now as hereafter.'

"Sir, an executive officer who, during the eighteen years that he has had the honour of serving Her Majesty, has steadily set his face against the manufacture of speeches, as calculated rather to hinder than to advance work, must be but an inefficient spokesman of the Municipal Commissioners. But the duty has been thrown upon me, and I must endeavour to meet it.

passed upon that amendment, it will then be open to the Hon'ble Member in charge of the Bill to consider what modification he thinks proper. But, as far as I understand his amendment, it is, I believe, nothing more than what is already provided for in section 9. He proposes that the Commissioners shall elect a few of their number as a Special Committee to deal with the matter. That is exactly what is laid down in section 9. The section runs thus:—

'With the consent of the Chairman of the Commissioners, any Special Committee of the Commissioners, not less than three or more than five in number, whom the Commissioners in meeting shall in that behalf appoint, may exercise the powers and discretion under this Act vested in the Chairman of the Commissioners.'

"That is what I understand the Hon'ble Mr. Cotton proposes, with this exception that possibly he does not require the consent of the Chairman as a preliminary. In no way is that suggestion before the Council. The question is, whether we should accept or reject the amendment of the Hon'ble Babu Gonesh Chunder Chunder.

"Frequent reference has been made to the late Sir Henry Harrison; his sayings and opinions have been dragged into this discussion, and he has been appealed to as if he were a sort of veiled prophet whose opinions are to be accepted, simply because they were his. When the Municipal Consolidation Bill was passing through this Council, I had the opportunity of sitting day after day at that table with Sir Henry Harrison; when in Select Committee we were discussing the clauses one by one, it was his repeated remark, and a point he strongly insisted upon, that such cases as these, the making of appointments, the granting of license, executive matters of that kind, were exactly the business which Municipal Commissioners are totally unfit to be entrusted with. For whenever the case of individuals came before them, they were solicited out of doors by the parties interested.

"The learned Advocate-General has also alluded to the practice of 'lobbying,' as a possible danger. I certainly consider that the people of this country have nothing to learn from those across the Atlantic, and that the art of outdoor nobbling members is as well understood here as it ever will be in America. It is urged that, if this function be left with the Municipal Commissioners of Calcutta, the trade of Calcutta will be exposed to certain inconveniences. *A priori* it would seem to anybody that an executive matter like this is not a proper thing to be discussed by some 70 or 80 men, and carried 'yea' or 'nay' simply by a majority; yet I have no doubt that those who are interested in procuring licenses, if they go about it in the right way, would never fail to obtain a majority or be refused a license. But I cannot understand how any person, who really values the principle of Local Self-Government, can desire that such temptations to divert the Commissioners from a straightforward mode of discharging public functions should be put before them. It is not wise to trust little children in sweet shops; and certainly those who value Local Self-Government should desire to keep the Commissioners to their proper functions of advising, discussing general measures, passing general resolutions and controlling their Chairman; but not of dealing in detail with matters of this nature, where private interests are so much involved.

"The hon'ble member who last sat down has spoken as if he had been singled out, and a personal compliment was paid to him by this provision in the Bill. Has the hon'ble member a life-estate in the Chairmanship of the Calcutta Corporation? But I was not aware, Sir, that when a clause of this kind is put into a law, declaring that certain duties shall be discharged by a Chairman or other public officer, that any compliment whatever is meant to the individual who for the moment happens to be Chairman or fills the office designated. I protest against such an idea. In passing Bills here, we are supposed to make provision for something more than one or two years ahead. I am aware that the Acts of this Council have a very limited life, and there is hardly one of them which has lasted above five years without amendment. But we must not assume that this will be the fate of this Bill; and even if it exists for only five years, what probability is there of the hon'ble member opposite being the Chairman of the Municipality for that period?

"But putting all these considerations aside, I will give one reason why, in my opinion, the Chairman of the Commissioners is the proper person to be trusted with this function, and not the Commissioners. When a function of this nature is thrown upon a large body of some 70 or 80 persons, it is impossible to attach the responsibility, when that function is dishonorably, or arbitrarily, or vexatiously, performed. But when we throw the duty upon the Chairman of the Commissioners, if he acts arbitrarily, the responsibility can easily be fixed; and the fact that he is acting under this sense of responsibility is no small guarantee and security for the public. I quite believe that the Chairman of the Calcutta Corporation may be as weak, as arbitrary, and as oppressive in the discharge of his functions as the Commissioners themselves; but if he is, it is perfectly plain to see where the fault lies, and the indignation aroused by such behaviour will probably lead to a change.

"For this reason, therefore, that by throwing the responsibility upon the Chairman, we know to whom to attribute any misconduct: I say that this alone is a good ground why the Report, which has been made to this Council by the Select Committee, should be accepted and the Bill should not be altered in the sense of this amendment."

The Hon'ble MR. LAMBERT said:—"I must take leave to doubt whether the amendment put forward by the hon'ble mover represents the unanimous views of the Commissioners. The Council will notice that the question has never been brought before the members of the Corporation in meeting, nor has the Report of the Special Committee been presented to the general body of Commissioners. I believe that many Commissioners agree with me in thinking that the section of the Bill, as it now stands, is a wise one. In the first place it is of great importance that applications for licenses to store jute should be dealt with promptly, but there were many instances in which this had not been the case. It was this consideration which led to the framing of the clause which it was sought to amend. Then, again, it is desirable that licenses should be granted with due regard to the convenience of the general public, and this was what the framers of the Act had in view when cart space was required. Over and over again have applications been referred to me for my opinion by the Chairman of the Corporation, and over and over again have I urged that, in the interests of the general community, licenses should not be granted when there is no cart space and when obstruction to the ordinary traffic in the streets would ensue. These remonstrances on my part have almost invariably been disregarded.

"The jute industry is a very important interest, but in dealing with applications to store jute, other considerations come in, and persons not engaged in that trades strongly object to be shut out of the use of the streets which lead to their shops and houses for hours together by a string of jute carts. The case of Messrs. Finlay, Muir and Company has been referred to. In this case, application to assort jute in a warehouse in the native part of the town was brought forward on the 18th of April, 1890; and, strange as it might seem, it was nevertheless absolutely the case, that the license was not granted until the 23rd of February, 1893, exactly two days ago. This application was frequently before the Commissioners, and was every now and then referred backwards and forwards from the General Committee to the Special Committee, and from one Sub-Committee to another, without any result, until two days before the Council met. In July, 1890, Sir Henry Harrison, when he was the Chairman, used all his eloquence at a general meeting of the Commissioners to implore the Commissioners, in the general interests of the town, to lay aside all private feelings when dealing with matters of this kind; but a very large and influential section of the Corporation voted on that application, and it was refused It was notorious that, when such applications came up, there was much canvassing and much private influence was brought to bear; and I have reason to know that a considerable number of the Commissioners are now willing to rid themselves of all responsibility in this matter, because they find that the best interests of the town will be secured by leaving the matter in the hands of their Chairman and possibly a Special Committee."

The Hon'ble BABU GONESH CHUNDER CHUNDER said in reply:—"As I understand the suggestion made by the Hon'ble Member in charge of the Bill to be, that while the power, which I ask to be restored to the Commissioners, should not be restored to them but to a Special Committee to be appointed by them for the purpose. If that is the suggestion of the hon'ble member, then I have no hesitation in accepting that suggestion."

The Hon'ble MR. ALLEN rose to order:—"The hon'ble member, who has just spoken, has an amendment on the agenda paper which he should either leave or ask leave to withdraw."

The Hon'ble THE PRESIDENT said:—"I think we are in danger of getting somewhat out of order in the course of this discussion; but considering how far things have gone, I think it will be best in the hon'ble mover of the amendment to state the form of the amendment which he wishes to be put to the Council, and on his making his statement, I shall be prepared to decide whether that amendment should be put to the Council on the present occasion; whether the original amendment should be adhered to, or whether the discussion should be deferred to the next meeting of the Council."

The Hon'ble BABU GONESH CHUNDER CHUNDER said:—"My present proposal is this, that in section 5, after the words 'application in writing,' the words 'to a Special Committee of the Commissioners to be appointed by them' be substituted for the words 'Chairman of the Commissioners.'"

The Hon'ble MR. COTTON said:—"I should like to make a brief suggestion to the Council. If we now involve ourselves in matters of detailed drafting, we shall get into difficulties. It would be a simpler plan to decide on the principle whether the Commissioners should be directed under the Act to appoint a Special Committee to grant or to refuse licenses, or whether the power should be left as drafted in the Bill to the Chairman. The exact drafting can be determined after due deliberation."

The Hon'ble THE PRESIDENT said:—"I wish to make one remark on a collateral subject, before proceeding to the particular amendment before the Council. I wish to refer to what I venture to call the weighty and statesmanlike remarks of the Advocate-General on the subject of delegation. We are now on the eve of an important reconstruction of this Council, the details of which are at present unknown. But we are aware that there will be a considerable extension and expansion of the principle of representation, and I think it very important that it should be understood to what extent and of what character the representation ought to be. I do not venture to forecast what orders we may receive from the Secretary of State or from the Government of India on this subject. But I wish most emphatically to record my agreement with what has fallen from the Advocate-General that, however much a member of this Council may be a representative of any Corporation, or of any interest, or of any body or association existing in these provinces, he will, on his appointment as a member of this Council, act according to his lights and according to his conscience. His position ought not to be that of a delegate, and he ought not to be called upon to record his vote in accordance with the views of his constituents whom he represents, unless he heartily and personally agrees with them. His position will then be that, if he disagrees with those who sent him, he will have the power either of resigning or of persisting in retaining his appointment in opposition to those whom he represents, in the belief that they will, in the course of time, come to change their minds; and their only control over him will be, unless they change their minds, that they will not re-elect him on the next occasion. I trust we shall never be in a position in this Council in which any member can be called upon to confess, or in which any insinuation can be made that he did or did not consult his constituency, or that he is or is not acting in accordance with the votes passed in the preliminary discussions in this Council.

"Now, turning to the immediate subject before us, I think what has fallen from the Legal Remembrancer is a matter well worthy of our consideration. A Council of this kind is in some danger of falling into habits of an irresponsible debating society. It is extremely important that honorary members should realize the onerous and public position in which they are placed, and that they should come to this Council thoroughly prepared to state the views they have formed, and to put them in a form in which they can be submitted for the opinion of their colleagues. The President has, under the Rules, power to receive amendments of which notice has not been previously given, and that power I have thought it right to exercise to-day in a matter which involved a very small point of detail; and even then, I felt some doubt whether it was right to have recourse to it. But I am quite sure that it is not right that any important amendment or change of any kind should be placed before the Council which may be the subject of debate and discussion and voting in this Council without having a full and sufficient opportunity of considering it beforehand. And I feel sure that what my hon'ble friend was driving at, but did not give full expression to in his speech, is worthy of our consideration; and that is the responsibility of the position occupied by a member of the Select Committee of this Council. The Select Committee sat to discuss the Bill which was drafted for submission to the Council, and to alter and amend it at their pleasure and with all the information before them. They have power to record their views in any form they liked, and any member of the minority may dissent separately or collectively from the opinion of the majority. But I do hold that, we shall find it very difficult to carry on the business of this Council if any members of the Select Committee feel themselves individually or in a body at liberty to depart from the views to which they put their signatures, unless some important new facts are brought to their notice of which they were not aware before, and which would justify them in altering their opinion, just as much as a judge may alter in review his decisions upon facts not brought to his notice at the time of trial.

"Upon this occasion, we have a definite proposal put before us by the Hon'ble Gonesh Chunder Chunder, which involves an important principle, and it is quite possible for us to vote upon it; but a subsequent amendment which was brought forward by the Hon'ble Member in charge of the Bill, and which the hon'ble mover of the first amendment is willing to accept, is one which has not been formulated and which it will be difficult to formulate, and which it will be impossible for the Council to discuss or vote upon on the present occasion. I think, therefore, that the best plan to pursue is to put the amendments of the hon'ble member separately and not collectively; it will follow, if it is determined to retain the word 'Chairman' in the manner in which the Select Committee places it in the Bill, that the principle, which is under discussion, will have been settled, and there will remain no further opportunity for proposing that a Select Committee should be appointed on behalf of the Commissioners to exercise their powers. But if the Council decides to cut out the word 'Chairman,' not perhaps in section 5, where it naturally occurs independently of the principle before us, but in sections 6, 7 and 8, then it will be open to us to alter section 9, so as to provide that the power which the preceding sections have given to the Commissioners to grant or refuse licenses shall be exercised by a Special Committee to be appointed by the Commissioners either in each case or as a standing body for that purpose. But that amendment it will be impossible to put to the vote until it has been formally and properly drawn out."

The Hon'ble BABU GONESH CHUNDER CHUNDER'S Motion that in section 5, the words "Chairman of the" be omitted, was put and negatived.

The Hon'ble Babu Gonesh Chunder Chunder's Motions that—

(1) in section 6, the words "Chairman of the" and "of the Chairman" be omitted; also that in line 20 of the same section, the words "at a special meeting" be inserted after the word "Commissioners," and that in line 21, the words "from the Commissioners" be omitted:

(2) in line 4 of section 7, the words "Chairman of the" be omitted, and that the words "by an order in writing under the hand of the Chairman of the Commissioners setting forth the grounds for such refusal" be also omitted:

(3) in section 8, the words "Chairman of the" be omitted:

being put, the Council divided:—

Ayes 4.	*Noes* 7.
The Hon'ble Babu Gonesh Chunder Chunder.	The Hon'ble Maharajah Ravaneshwar Prosad Sing Bahadur.
The Hon'ble Dr. Mahendra Lal Sircar.	The Hon'ble Mr. Playfair.
The Hon'ble Mr. Lee.	The Hon'ble Mr. Wallis.
The Hon'ble Mr. Cotton.	The Hon'ble Mr. Lambert.
	The Hon'ble Mr. Risley.
	The Hon'ble Mr. Allen.
	The Hon'ble Mr. Woodroffe.

So the Motions were negatived.

The Hon'ble Babu Gonesh Chunder Chunder's Motion that section 9 be omit tedwas also put and negatived.

The Hon'ble Mr. Woodroffe, by leave, withdrew the Motion of which he had given notice that, for the first paragraph and the first proviso of section 10, the following be substituted:—

'The annual fee payable in respect of any license shall not exceed one hundred rupees.'

The Hon'ble BABU GONESH CHUNDER CHUNDER moved that, in line 5 of section 10, the words "five per cent. on" be inserted after the word "less."

He said:—"I thought that the wording of the section, as it now stood, was perhaps an oversight on the part of the Select Committee; for I cannot conceive that the Select Committee could have seriously meant to lay down that the whole cost of the appliances for extinguishing fires should be deducted from the annual value of the warehouse. I could well understand their proposing to deduct the whole cost of these appliances against the whole value of the warehouse; but the result of the provision, as it stands in the Bill, will be, as I take it, to deduct the capital outlay on account of appliances from the income of the property, which appears to me to be absurd. Let us take a concrete case. If the annual value of a warehouse be Rs. 3,000, the capital value would perhaps be sixteen times that amount, or Rs. 48,000; and if the owner laid out, say, Rs. 3,000 in fire-extinguishing appliances, that is to say, one year's income of the warehouse, he would be exempted entirely from paying any annual fee in respect of the warehouse, because the fee would have to be fixed on the annual value of the warehouse, minus the cost of the outlay for appliances for extinguishing fires; and there would be nothing upon which to fix the annual fee to be paid by the warehouse. I do not think that that could have been intended by the Select Committee. To allow 5 per cent. on the amount of the outlay for extinguishing fires from the annual value would, I submit, be reasonable, and therefore I propose to insert the words 'five per cent. on' after the word 'less.'"

The Hon'ble MR. WOODROFFE said:—"The principle, Sir, if I may take upon myself to be in some measure the spokesman of the Select Committee which prevailed in our minds when the Bill was going through Committee, found expression in section 10. Subject to the matter which was discussed and decided at the last meeting as to the advisability of defraying the cost of the fire-brigade by a general rate, we considered that it was above all things desirable, in the language of the letter of the Government, dated the 3rd of February, 1892, to which reference has already been made in the course of the debate on this Bill, that comparatively innocent storage godowns should not have to pay the same license fee as dangerously unprotected warehouses.

"There has already been placed before the Council very full details of the important preventive measures which have been taken by various jute warehouse owners for the protection of their premises and the prevention of the

spread of fire from them to those of their neighbours. In cases of this kind, it is not possible to protect one's self without protecting one's immediate and even more remote neighbours. It was therefore thought just that, in determining the amount on which the annual license fee should be collected, there should be taken on the one hand the annual value of the warehouse as it is assessed to the payment of municipal taxes, and on the other the capitalised value of the outlay incurred in the rendering of those premises, as far as possible, free from risk of fire.

"It is obvious that, if in any warehouse there has been an outlay incurred which renders it wholely free from the risk of fire, there is no reason why it should be subject to special taxation. Such instances, however, are probably rare. But to the extent to which immunity has been secured, justice demands that the assessable value should be obtained by deducting from the rateable value of the warehouse the outlay incurred in respect of the means and appliances therein and appertaining thereto for preventing or extinguishing fires. That result will not be obtained by merely deducting 5 per cent. per annum on such outlay from the annual value. It may happen that one owner expends many thousand rupees in fire-proof floors, fire-proof divisions, increased lengths of hose, and appliances of all sorts and descriptions for preventing and extinguishing fires; while alongside there may be another jute warehouse equally large, without any fire-preventing appliances whatever. The owner of the latter has taken no means to protect himself, and in so doing, exposes his neighbour to great risk. His position is that he has protected his jute or cotton or anything else which comes within the scope of the Bill from the effects of the weather, and that he either takes the risk of fire upon himself or insures himself against it. But that leaves out of consideration the danger to which the neighbouring property is exposed by the continuance of such a state of things. And if I understand aright the views expressed by the Council, it is proposed to impose a special duty on hazardous trades even in respect of matters of general public convenience, because there is a certain special danger appertaining to them which renders them liable to be taxed for that purpose. The hon'ble mover of the amendment has, I venture to think, failed to appreciate the reasons which led the Committee to arrive at the conclusion they did, and erroneously supposes that it would be fair merely to take from the annual value 5 per cent. on the outlay for such appliances. The section deals with two matters; first, the annual value for municipal taxes, and secondly, the outlay incurred in respect of means and appliances for preventing and extinguishing fires: 10 per cent., and subject to certain limitations, makes an assessment on the differences of these two sums. That, I submit, is a fair and just mode of dealing with the annual fee payable for a license, on the supposition accepted by this Council that there shall be a special taxation on commercial industries to meet the cost of the fire-brigade. For those reasons, I am unable to assent to the proposition of the hon'ble mover of the amendment in this matter, and will record my vote against it."

The Hon'ble Mr. Cotton said:—"I am bound to say that, in my opinion, the Hon'ble Babu Gonesh Chunder Chunder has indicated a blot in this measure. I have understood the section as drafted to convey the meaning that the license fee up to 10 per cent. per annum might be levied on the annual value of a warehouse, less the annual value of the outlay incurred in respect of protecting it. But on closely examining the section, I see that that is not the meaning the words convey; and, as the learned Advocate-General has explained, the section as it stands undoubtedly means that the total outlay incurred in providing means and appliances for preventing or extinguishing fires has to be deducted from the annual value of the warehouse on which the license fee has to be calculated. If this provision is passed into law, it will, in my opinion, stultify itself. The annual value of a warehouse, as it is assessed to the payment of municipal taxes, is 5 per cent. of the total capitalised value of the warehouse; that is to say, if a warehouse is constructed at a cost or an estimated cost of one lakh of rupees, the annual value to which it is assessed by the Municipality is Rs. 5,000. Now, Sir, it may well be that in such a warehouse the proprietors have incurred an expense

of Rs. 5,000 for its protection from fire; it may be that they have incurred an expense of Rs. 10,000. In such a case the warehouse would, if this section were to become law, be entirely exempted from taxation. Now that certainly was not the meaning of the Select Committee.

"The suggestion that a deduction should be made from the annual value on account of costs incurred for the protection of warehouses from fire was made by my friend the learned Advocate-General, and it commended itself to the unanimous sense of the Committee on the ground that it was only fair and reasonable that a deduction should be made on account of expenditure so incurred; but I, for one, and I believe I speak on behalf of other hon'ble members of the Committee, never understood that the whole value should be deducted from the annual value of the warehouse. If the section of the Bill, as it now stands, be passed, it will mean this, that wherever an expense of 5 or 10 per cent. on the total value of the warehouse is incurred for fire-preventing appliances, there the warehouse will be entirely exempted from the payment of any special license-fee. The hon'ble mover of the amendment has conveyed the meaning I had in my mind when I assented to the provision of the Bill by inserting the words 'less 5 per cent. of the outlay.' We might have more correctly said less the annual value of the outlay, which I thought the words meant. But I see that the words in the section do not convey that meaning, and therefore I accept the amendment of the Hon'ble Babu Gonesh Chunder Chunder."

The Hon'ble Mr. Playfair said:—"I do not agree with the Hon'ble Member in charge of the Bill. I understood that the cost of private fire-engines and other appliances was to be deducted from the annual value of the warehouse. If these amendments were carried, it would be a departure from the principle on which the Bill is drafted. I do not think a building would be entirely free from taxation. It will come in for taxation under clause (*a*) of section 26; so that it will not be entirely exempt."

The Hon'ble Mr. Wallis said:—"As a member of the Select Committee, Sir, I understood that if the cost of a warehouse is shown to be a lakh of rupees, and the cost of appliances provided for extinguishing and preventing fire was put down at a cost of Rs. 5,000, the value of the property for the purposes of assessment would be Rs. 95,000, and upon that value the fees under the Act would be levied."

The Hon'ble Mr. Lee said:—"My understanding of the intention of the Select Committee is the same as that of the Hon'ble Mr. Wallis."

The Hon'ble Mr. Lambert said:—"I also understood the intention of the Select Committee to be the same as explained by the Hon'ble Mr. Wallis."

The Hon'ble Mr. Allen said:—"It appears to me that the mistake has arisen from the use of the words 'annual value' instead of 'capitalised value' by the members of the Select Committee. On the other hand, it is necessary to notice that some of the outlay for the prevention and extinguishing of fire may be of a recurring character, as, for instance, the expenditure on the employment of chaukidars and the establishment for working fire-engines, while the outlay on the engines and other appliances themselves will be incurred once for all. The principle of the amendment would be fair if 10 per cent. of the capitalised value of the appliances were taken, but the recurring items would form an annual charge."

The Hon'ble Babu Gonesh Chunder Chunder in reply said:—"The learned Advocate-General's amendment to my amendment amounts to this: that if all the warehouses in Calcutta and the Suburbs only spent a sum equivalent to the annual value of the warehouses, they would all be exempted from the payment of taxation on this account; and the provision of the Bill that 50 per cent. of the expenditure on the fire-brigade should be contributed by certain trades

would be nullified. I do not think it was ever intended that a house in which a hazardous trade is to be carried on would be exempted from the payment of any license fee, if a certain amount of money were expended in providing certain appliances."

"The Hon'ble Mr. Allen's objection amounts to this: he says that, instead of the 5 per cent. being taken from the annual value, the same should be taken from the capitalised value of the warehouse. [The Hon'ble Mr. Allen said:—'I take no objection to the principle of your amendment.'] As the Hon'ble Mr. Cotton has told you, the principle upon which the warehouse is assessed is by taking 5 per cent. of the cost of the building. If that be so, it is only fair that, on the outlay for appliances, the same rate should be taken. When you have to deduct the outlay for the expenditure on account of certain appliances of a warehouse, it is only fair to deduct 5 per cent. upon the outlay for those appliances. If the assessment were to be fixed upon the whole value of the warehouse, then, no doubt, the whole expense of the outlay for appliances would be deducted. But when you are dealing with the income of the property, which the annual value represents, you can set against that only the annual value of the outlay for appliances. On no principle can you deduct the capital value of the outlay for appliances from the income of the property. Therefore, I submit that 5 per cent. on the annual value is a reasonable sum to allow for such outlay."

The Hon'ble THE PRESIDENT said:—"It appears that the majority of the Select Committee meant to apply to the words a different meaning from what the Advocate-General understood them to mean; and as we are dealing with a matter which is a question of words, it behoves us to be extremely careful in drawing up an amendment. It is suggested by the Hon'ble the Legal Remembrancer that the sum to be deducted should be not only a proportion of the capital outlay, but also the recurring cost of the establishment kept up for working the appliances and for keeping watch; and in order that this may be properly considered and the necessary amendments be formulated, the consideration of the question will be postponed to the next meeting of the Council."

The further consideration of the Motion was postponed.

The Hon'ble BABU GONESH CHUNDER CHUNDER also moved that, in the first proviso to section 10, the words "that the annual fee payable by any owner or occupier in respect of any license shall not exceed seven hundred and fifty rupees and" be omitted.

He said:—"Under this Act we have to raise a specified amount by imposing a percentage rate on the annual value of warehouses. That being so, the provision which I am seeking to amend is opposed to one of the fundamental principles of political economy, namely, equality of taxation. The effect would be to make warehouses of larger value bear a less share of the burden to the loss and detriment of less valuable property. I think I shall best express my meaning by putting certain figures before the Council. Let us say that there are 100 warehouses to be assessed of the total annual value of 5 lakhs, and that the sum required to be raised for the purposes of this Act is Rs. 30,000 a year; that five of these houses are of the annual value of Rs. 15,000. If we assess these 100 houses, which I have already stated to be of the total annual value of 5 lakhs at a uniform rate of 6 per cent., we will get Rs. 30,000, the amount required for the purposes of the fire-brigade. But if five of these houses are of the annual value of Rs. 15,000, the tax on each of these houses, taking it at 6 per cent., will be Rs. 900, and if a maximum limit of Rs. 750 is prescribed in the Bill, these five warehouses will pay Rs. 150 a year, less than what a rate of 6 per cent. will produce. Therefore, the less amount of Rs. 750, which these five warehouses will pay under that limit must be borne and paid by the other 95 houses. Because all the warehouses together will have to pay Rs. 30,000 towards the fund, and the amount which these five warehouses will not pay, calculating the rate at 6 per cent., will have to be levied from the other 95 warehouses; that is to say, they will have to pay 3 annas per cent. more than 6 per cent.; so that these 95 warehouses will have to pay Rs. 6-3 per cent., whereas the

other five warehouses of the assessments of Rs. 15,000 each will get off by paying merely at the rate of 5 per cent. Therefore, it will be unreasonable and inequitable to assess the more valuable warehouses at a less rate than the less valuable warehouses, and this will surely be the result if this maximum limit were allowed. I therefore move that the words indicated in my amendment be omitted from section 10."

The Hon'ble MR. WOODROFFE said:—"I think it desirable that there should be no misunderstanding in this matter. When the Bill was in Committee, detailed statements were laid before us—statements showing the deficiency which would arise from making Rs. 500 the maximum, the limit which was first suggested. After consideration, we adopted the limit of Rs. 750. There must in some instances be some inequality in the incidence of this tax; but that is only one of the many difficulties which must be encountered in any attempt to impose differential taxation. From the figured statement in which the Rs. 750 limit was adopted and upon which this section was based, the sum required for the maintenance of the fire-brigade would be met if the rates therein mentioned were imposed to the extent therein allowed. We were assured by the Commissioner of Police, who from his intimate acquaintance of the matter could speak with authority, that the expenses of the fire-brigade are now ascertained, and that there is no room for any great alteration. The Select Committee was assured that, with a maximum limit of Rs. 750 on warehouses, and the levy of a quarter per cent. on bastis and one-and-a-half anna per cent. on pucca buildings, the expenses of the fire-brigade would be met. If the statements which had been submitted were correct, there will be a surplus over the expenses of the fire-brigade, and there will be no necessity of taxing these industries to the uttermost."

The Hon'ble MR. LEE said:—"As a member of the Select Committee, I was opposed to any limit, and if I had correctly understood the responsibility attaching to a member who signed the Report, I would have recorded a dissent on this and other matters. It was as representing the views of the majority, and because I did not wish to obtrude in a separate note of dissent my opinions in every point on which I disagreed with that majority that I refrained from writing a note of dissent. I thought that Rs. 750 was a very much better limit than Rs 500; but I could not but say, and say to the end, that, in my opinion, it is hardly fair to relieve the rich at the expense of the poor. The calculation which I have now heard from the hon'ble mover of the amendment seems to be quite clear that the owners of small warehouses, whether of jute, hide, wood or coal, would pay; under the present drafting of the Bill, over 6 per cent. on the annual value, whilst the owners of exceptionally valuable warehouses, would pay less than 5 per cent. on the annual value. The maximum that can be levied on warehouses is to be at the rate of 10 per cent. on the annual value, and it is not to exceed altogether one-half of the cost of the fire-brigade. As it is, we find that jute warehouses yielding 10 per cent. on the valuation are in themselves able to meet the whole cost of the fire-brigade. Here, as has been observed, they are not to pay more than half the cost, and it results that nobody could pay more than 5 per cent. unless you bring some other controlling influence, such as that which is brought in here. If the proposal of the learned Advocate-General, which was the first suggested, that no one should pay more than Rs. 100, then the poorer class of warehouses would have been, as the hon'ble member (Mr. Playfair) pointed out at the last meeting, most grossly and unfairly assessed in comparison with the rich. This limit of Rs. 750 would only lessen the unfairness, but will not remove it. I therefore hope I may be considered to have the liberty of voting with the hon'ble mover of the amendment."

The Hon'ble MR. PLAYFAIR said:—"I endorse the views expressed by the learned Advocate-General. I think the speech of the hon'ble member, the Chairman of the Corporation, is somewhat in accord with the views expressed by the minority at the meeting of this Council a week ago. We have already got a differential tax, and, as I said at the last meeting, we shall be taxing the owners of small warehouses more than the rich."

The Hon'ble MR. ALLEN said:—"The mover of this amendment has appealed to political economy and principles of taxation in support of his proposal; but the Chairman of the Corporation endorses this amendment on a new principle. It is this: that having got the jute industry, which hitherto has provided all the funds required for the fire-brigade, under their thumb, it should be kept there. But, Sir, the measure is in no sense one of taxation, and the only reason why I voted against the Advocate-General at the last meeting was that the principle underlying this Bill is that men who introduce a special danger into a community are bound to contribute towards neutralising that danger. The measure of contribution should be determined by the extent of the danger. So far from large jute warehouses and mills causing danger in proportion to their size and value, probably the exact opposite takes place, because the more valuable are better provided with means against the danger more or less incident to all jute warehouses. Therefore, it is not fair that the more valuable properties should pay an unlimited rate to the full extent of their value. The value of a property should not enter into consideration, except to a limited extent. It is perfectly fair that the more dangerous class of warehouses, from which there is greater probability of fires, should pay as much. What has taken place in some municipalities where jute mills and factories are located is possibly known to more than one member of the Council present. If the 10 per cent. rate be allowed to run up according to the value without any limit, the effect will be simply to throw the whole charge on a few valuable warehouses and to exempt small ones."

The Hon'ble BABU GONESH CHUNDER CHUNDER in reply said: "It seems to me that the argument of the learned Advocate-General in opposing the present amendment would apply very well if the question were one between inflammable trades on the one hand and other trades on the other which would have to pay the tax. But these arguments cannot apply as between inflammable trades themselves. The question involved in this amendment is whether or not there should be equality of taxation between those persons. If all the most valuable warehouses were provided with appliances for the prevention of fires, it would no doubt be a good ground for asking that they should not be taxed more than a certain amount; but as the Council understood from the learned Advocate-General, when the last amendment was under consideration, that it so happens that one warehouse provides itself with all kinds of appliances against fire while the adjoining warehouse has nothing of the kind. It would therefore be inequitable not to tax small and large warehouses on the same scale, or to limit the tax on large warehouses to a certain amount only. The Hon'ble Mr. Allen seems to think that an unlimited rate of taxation would be imposed on the large warehouses, but it was not so because the rate would be uniform. What is wanted is that the same rate should be put upon all warehouses irrespective of its value or condition. But to impose a less rate of taxation on warehouses of large value and a higher rate on smaller warehouses would be wrong principle."

The Motion being put, the Council divided:—

Ayes 5.	*Noes* 6.
The Hon'ble Maharajah Ravaneshwar Prosad Sing Bahadur.	The Hon'ble Mr. Playfair.
The Hon'ble Babu Gonesh Chunder Chunder.	The Hon'ble Mr. Wallis.
The Hon'ble Dr. Mahendra Lal Sircar.	The Hon'ble Mr. Lambert.
The Hon'ble Mr. Lee.	The Hon'ble Mr. Risley.
The Hon'ble Mr. Cotton.	The Hon'ble Mr. Allen.
	The Hon'ble Mr. Woodroffe.

So the Motion was negatived.

The Hon'ble BABU GONESH CHUNDER CHUNDER also moved that, in line 5 of section 10, the word "seventy-five" be substituted for "fifty."

He said:—"As this amendment of mine is based upon the figures furnished to me by the Hon'ble Mr. Lee, I shall expect him to explain to the

Council in detail those figures. I shall only content myself by pointing out to the Council that the Committee of 1891 recommended that the whole of the expense of the fire-brigade should be met in this way, namely, 40 per cent. by jute warehouses; 20 per cent. by other inflammable articles, except hay, straw, wood and coal; 10 per cent. by hay, straw, wood and coal, and 30 per cent by the Municipality. That was the recommendation of the Committee. The original Bill, which was based on those recommendations, provided that 60 per cent. should be paid by jute, cotton and other inflammable articles, not including hay, straw, wood and coal, and that the remaining 40 per cent. be paid by the Municipality; the Municipality being entitled to recoup itself to the extent of 10 per cent. from hay, straw, wood and coal. The Select Committee, by their amended Bill, have taken away hay, straw, wood and coal from the Municipality, and included them within the hazardous articles coming under the Act; and they have fixed the liability upon those articles at 50 per cent., leaving the other 50 per cent. to be recovered from the Municipality; so that, in lieu of 70 per cent., the trade in hazardous goods will have to pay only 50 per cent.

"According to the figures in the Hon'ble Mr. Lee's statement, if jute and other hazardous articles enumerated in the Bill were made to pay 70 per cent. instead of 50 per cent., jute alone would pay Rs. 30,000 instead of Rs. 68,900, which they are now paying. I submit, therefore, that it would not be unreasonable to raise the rate from 50 per cent. to 75 per cent. to the relief of persons who are owners of other properties."

The Hon'ble MR. LEE said:—"None of us who had the pleasure of listening to the lucid speech with which the Hon'ble Member in charge of the Bill opened the proceedings last Saturday week but must have been struck by the great discrepancy between his speech and the figured statement that accompanied it. The speech represented the views of the Select Committee. The figures, as I shall presently show, are at variance with the prevailing note that runs through the speech. Mr. Cotton says:—

'It appeared to us that, in imposing a tax for the maintenance of a particular object, the fair and reasonable principle would be to apportion that tax on different members of the community in proportion to the advantages which it is estimated they will gain from that object.'

"And later on, after explaining that the fire-brigade at its present strength is entirely due to that industry, he observed:—

'In the Report which I now have the honour to lay on the table, we have stated that we think that it is unfair to levy the whole rate on any one industry. At the same time I must distinctly affirm that the fire-brigade was established in Calcutta in order to meet the requirements of the jute trade; and that the great majority of important fires occur, and always have occurred, in jute warehouses. If it were not for these jute warehouses, I do not hesitate to say that the maintenance of the fire-brigade on anything like its present scale would be unnecessary. I do not know whether I am justified in saying that this city would be in a position to go back to the state of things which existed twenty years ago; but certain it is that the brigade, in its present state of efficiency and completeness, would not be required. It is on account of the jute warehouses that the brigade is maintained in its present organisation. For these reasons, the majority of the Committee considered that the jute industry should still continue to pay a large proportion of the funds required for the maintenance of the fire-brigade.'

"And then, in dealing with the contributions from other persons assessed to the fund, he observed:—

'The individual risk which any individual house-owner may run in this city may be infinitesimal. Residential house-owners in Calcutta do not insure their houses, either in the north of the town, where the permanent residents of Calcutta mostly dwell, or in the south, where European residents live; and I believe I am well within the truth in saying that the insurance of houses and furniture in this city is practically unknown.'

"After a few more remarks, he observed:—

'The circumstances are amply sufficient to justify the Legislature in imposing a very low rate on the rate-payers at large to assist in meeting any deficit which the other means of taxation placed in the hands of the Municipality may fail to supply. The protection which

ordinary householders derive from fires not being allowed to spread may be inappreciable in any particular case. but it is obvious that such a general risk exists, and that it is at all times within possibility that fires may break out in residential houses.'

"Now, with such a statement as this, why is it that the demand made from the general fund to the account of the brigade is so heavy? If a considerable proportion is to be borne by the jute industry, it is of the same value as the water in the Irishman's peg—a thimbleful of the Rs. 41,600 to be levied in Calcutta: the jute trade is to pay but Rs. 8,600! Taxes on other property are to pay Rs. 25,000, and Rs. 8,000 are to be drawn from warehouses of hay, straw, wood and coal.

"These latter now pay the Commissioners annually about Rs. 13,000, and we are to lose the odd Rs. 5,000—for what reason, I know not. Nobody asks for the reduction. Thus it will be seen that the Commissioners suffer a loss of Rs. 38,000, for the general ratepayer, whether basti-owner or the owner of other property, is to pay Rs. 25,000, and the Rs. 13,000 now realised from hay, wood, straw, &c., depôts is to be withdrawn from the Commissioners; Rs. 8,000 of it being paid to the fire-brigade fund, and the remainder dropped altogether. I say, therefore, that the speech of the hon'ble member is not in accord with his figures. Therefore, I feel myself entitled to oppose this provision of the Bill, though my name is to be found affixed to the Report which accompanied it.

"There is another reason why I am entitled to press the amendment of the Hon'ble Babu Gonesh Chunder Chunder. I was under the impression, which impression turns out to be wrong, that the sum levied now from jute warehouses was pressing so hardly on them that it had the effect of driving them from the city. That, I thought, would be an important fact. I should be extremely sorry to see any portion of the industry put out of an area which it otherwise would have chosen for itself. But I find that since the year 1872 there were in Calcutta 114 warehouses, and in the Suburbs 52. They did diminish up to a certain point, but since the year 1888-89, I find that the numbers have been these:—In Calcutta proper in 1888, there were 69 licensed warehouses; at the present moment there are 80 in the town proper. In the suburban area in 1888, there were 112 warehouses. There came 25 of them to Calcutta at the time of the amalgamation. They have increased to 31. There were 73 of the 112 at Cossipur-Chitpur, and these have increased to 85; the balance (except one) are at Manicktollah; so that the pressure on the jute industry of the existing taxation has not been oppressive to any perceptible degree, and it has not repressed the natural expansion of trade in Calcutta.

"As regards the figures which have been quoted by the hon'ble mover of the amendment, I would say that the sum of Rs. 68,900, levied from jute under the existing law, is perhaps comparable with Rs. 30,000 which his amendment would produce from jute. But I would prefer to compare the Rs. 30,000 with Rs. 66,550, which is the amount of the direct license fees now levied. There are other extra assets of the jute fund, which go to make up the Rs. 68,900, which is leviable and is being paid by jute. This will show that if the Hon'ble Babu Gonesh Chunder Chunder's amendment be carried, the relief to the jute trade will be over 50 per cent. of the tax they are now paying; and that, I think, will be sufficient.

"But there is a further fact to bear in mind in connection with other warehouses. The fees shown, as leviable from these warehouses are now over Rs. 14,000. The amount actually collected—and here I would draw the attention of the Hon'ble Mr. Playfair to the fact that you must not confuse the amount leviable, whether by taxation on the general rate or from special industries, with the amount which actually comes into the coffers of the Corporation—is about Rs. 13,000; and if these rates now recommended be fixed, it will bring in from them about Rs. 12,000. The remainder will be a relief to those industries. But I know of no necessity for affording them any greater relief at the expense of the general rate-payer.

"I have claimed the support of the majority of the Select Committee to the present amendment on the ground of true consistency with their views. The mere fact that the Bill, as it has been amended, will result in certain figures which

the Hon'ble Member in charge of the Bill has laid before the Council, does not compel them to sanction those figures. We have seen, in respect of the last motion but one, that the Bill did not express the views of the majority of the Select Committee; and, similarly—I can speak of only one member of the majority—I venture to urge that the Bill as now drafted does not really represent the views of the majority."

The Hon'ble MR. COTTON said:—"I am not surprised at the speech of my hon'ble friend the Chairman of the Corporation. I am not surprised that he should support the amendment moved by the Hon'ble Babu Gonesh Chunder Chunder. But I am somewhat surprised that he considers that the opinion of the majority of the Select Committee coincide with his view on this subject. There was no question more discussed, more disputed in Select Committee than the proportion, the maximum proportion of the expenses of the fire-brigade, which should be leviable on account of licenses for warehouses; and, as I thought, it was unanimously agreed that the amount should not exceed half, or as the Bill puts it, 50 per cent. of the total amount. The Hon'ble Mr. Lee and the Hon'ble Babu Gonesh Chunder Chunder represent, as in my humble judgment they are entitled if not bound to do, the opinions of the Calcutta Municipality. That Municipality is very largely interested in the discussions now going on in this Council, as well as the mercantile community so ably represented by the Hon'ble Mr. Playfair and the learned Advocate-General.

"I was obliged, as it appeared to me in the interests of fairness, to oppose the hon'ble members who represent the mercantile community in the proposal which was brought forward last week that the whole burden of the fire-brigade should be borne by the general rate-payers; and to-day I feel myself equally bound to oppose the motion brought forward on behalf of the general rate-payers, that is to say, that an unduly large proportion of the cost of the fire-brigade should be borne by certain special industries. When I find myself as it were between two fires—when I find that the line I have endeavoured to take up is attacked by the mercantile community on the one hand and by the Corporation on the other—I am more and more confirmed in the belief that the middle course I have endeavoured to steer throughout these discussions is the safe and fair one. Certain it is that one of the main objects we have always had before us in our deliberations is to relieve the jute industry from the undue burden which has been cast upon it in the past. The more I reflect over it the more I feel that the jute trade has been unfairly taxed by the burden which it has borne for so many years, by not only maintaining the whole of the fire-brigade but the cost of the establishment maintained by the Municipality, of which a very considerable share has gone into the coffers of the Municipality; and also by the appropriation of considerable surplus funds paid by the the jute industry, which have been devoted to local improvements in the town. Something like Rs. 1,26,000 has, as you have been told, been diverted from the Fire-brigade Fund in this way; and I do think the mercantile community have some cause for complaint; and this being so, I understand that the unanimous opinion of the Select Committee, which considered very carefully how far we could readjust and alleviate the burden now borne by the jute industry, was that fees from warehouses should not exceed 50 per cent. of the funds required.

"We thought, and I hope you will by a decisive majority confirm our recommendation, that the license fees from warehouses, not only jute and cotton, but also all those specially inflammable materials mentioned in clause (9) of section 3 of the Bill taken together, should not contribute more than one-half the amount required for the maintenance of the fire-brigade. This is one of the most important principles in the Bill. If that is abrogated and set aside, and it is decided that such fees should be maintained at the larger proportion of 75 per cent., then I hope the community, which have been so long agitating in this matter, will justly renew the complaints so often made. They are not, I am aware, satisfied with the particular proposals made in this Bill. No one, as I said before, will ever be satisfied when he is called upon to pay a rate, or tax, or fee, or whatever it may be called. It devolves on the Legislature to impose these rates and fees with the greatest possible amount of fairness, and that is what we have endeavoured to do. The best proof of our

success is that both sides object. I attach very great importance to that fact. It is not at this stage of the Bill that I deem it necessary to detain you to show how largely the fire-brigade is used in extinguishing other fires than those from jute warehouses. My remarks under this head may be postponed until we discuss the rates proposed to be levied on bastis and on the general community. I confine my remarks now to what I consider to be the injustice of raising the proposed fees to be levied on account of licenses from warehouses."

The Hon'ble MR. WOODROFFE said: "Sir, it is with great pleasure I find myself at one with the Hon'ble Member in charge of the Bill on this occasion. The only point I take exception to is that I do not claim the honour of representing the mercantile community. I was hitherto under the impression that I occupied an entirely different position. But I would desire to add my voice to the observation which has fallen from the Hon'ble Mr. Cotton as to the suggestion that the adoption of 75 per cent. would be in accordance with the principle which guided the Select Committee is without the slightest foundation. The matter was long and carefully discussed, and we arrived at the conclusion, which is enunciated in the Bill, subject to the principle which was raised by the dissentient minority of the Select Committee. But once that principle was negatived in the Select Committee as it was negatived here, we proceeded on the principle which the Hon'ble Mr. Cotton has affirmed that a contribution not exceeding 50 per cent. from warehouses would be fair. In this particular instance the mercantile community has adopted that middle course which so commends itself to the Hon'ble Member in charge of the Bill. The Hon'ble Mr. Playfair has not, I observe, moved any amendment to reduce the rate from 50 per cent. The principle once being accepted, I think it would be well, in any case in which the Select Committee has come to a unanimous conclusion, that we should, as far as possible, avoid accepting any principle of a different character.

"The hon'ble mover of the amendment has referred to certain figures which he says were laid before us by the Hon'ble Mr. Lee. I can only say that I have not seen them. Those figures have not been, so far as I am aware, placed before the Council. I therefore support the Hon'ble Mr. Cotton in the view he has taken. The Hon'ble Mr. Lee spoke as if there had been a deprivation of the income the Corporation was entitled to in the shape of fees from hay, straw, wood and coal depôts. It has been conceded that these trades are not noxious trades. The only ground upon which fees upon them were levied was the inflammable nature of those materials; and yet these fees which were imposed year after year by the Corporation were not devoted to the fire-brigade. For these reasons I shall vote against the amendment."

The Motion was also put and negatived.

The Hon'ble BABU GONESH CHUNDER CHUNDER also moved that section 20 be omitted.

He said:—"It seems to me that the provisions of this section will be very hard and oppressive on the owners and occupiers of warehouses. Before I put forward any argument of my own, I would lay before the Council the Memorial of the National Chamber of Commerce. They said:—

'*Section* 20.—This is altogether new. It will be a fearful instrument of oppression in the hands of subordinate police officers and constables, and lead to frivolous prosecutions. It is an admitted fact that the whole length of the Strand Road, from the Bonded Warehouse to Hatkholla, the whole of Burra Bazar, Jorabagan and Hatkholla, Komertolly, Chitpore and Belliaghatta, and other busy centres of trade and commerce, and all thorougfares near godowns are more or less blocked up with carts, and the right of public traffic is thereby obstructed. This is a necessary evil incidental to a large place of business like Calcutta; but no one has ever complained of such obstruction or ever entertained the idea of prosecuting any member of the mercantile community for such an offence.'

"We all know that most of the existing jute warehouses have no separate places for loading and unloading carts, and that notwithstanding this licenses are given, and the result will be that they will be subject to daily prosecutions because they will not be able to help themselves; and furthermore

I say that the provisions of this law will clash against the provisions of the Calcutta Police Act IV of 1866, section 66, clause 7, which provides that 'whoever causes any cart or truck, with or without horses or cattle, to remain or stand longer than may be necessary for loading or unloading, except at places lawfully appointed for the purpose, shall be liable, on summary conviction, to punishment.' So that, under the provisions of this Act, people are allowed to keep their carts in public thoroughfares for the purpose of loading and unloading. It appears to me that the provisions of section 20 of this Bill clash with the provisions of the Police Act; for the Police Act allows carts to be on the streets for the purpose of loading and unloading, whereas the present Bill would prohibit it. I therefore submit that, having regard to the fact that the Merchants represented by the National Chamber of Commerce raise the objection, this section ought to be omitted."

The Hon'ble Mr. Lambert said:—"That the Council has heard from the Hon'ble Babu Gonesh Chunder Chunder that he brings this motion forward chiefly on behalf of the Bengal National Chamber of Commerce, but I cannot ascertain that any other public body has objected to this section. The letter of the Honorary Secretary of that Association says that the section is altogether new. This is hardly a correct way of putting it. Clause 3, section 6, of Act IV of 1883, requires that space be reserved for carts, and by section 14 of the Act, whoever breaks any conditions of the license renders himself liable to prosecution and fine up to Rs. 50. In the present Bill also, obstruction of a thoroughfare is made punishable, but the penalty is reduced to Rs. 10.

"Next it is said that 'it will be a fearful instrument of oppression in the hands of subordinate police officers and lead to frivolous prosecutions.' But this is not so. All that the subordinate police will be able to do will be to report whether obstruction has been caused. Enquiry will follow, and no summons will be asked for unless, in the opinion of the Commissioner or Deputy Commissioner, a case is established. The section confers no power of summary arrest. At present the unfortunate cartman, and not the man for whose benefit the obstruction is caused, is punishable.

"Further, the letter says that no one has complained of the want of any such provision. That is a mistake. Complaints are frequent, and have been so for many years past. They come in from various sources, generally from the residents of the locality and from tradesmen, and in some cases from the Municipality. I have in my hand a list of cases of obstruction during the last six months from the Koomartolee Section. It shews from August 1892 to January 1893 that 103 cartmen have been prosecuted, and six owners of jute warehouses were also successfully prosecuted for the same offence. Further, in his letter the Honorary Secretary says that in all the busy parts of the town, streets are congested by traffic. This is true, but it is only in the locality of jute warehouses that one or two owners appropriate a whole street for hours together by a long string of carts. The persons who are responsible for these obstructions ought to be easily reached, and that is the aim of section 20 of the Bill. If this section becomes law, rules will be provided for each locality, by which the owners or occupiers of jute warehouses will know how to conduct their business without interference from the police; and the convenience of the public will also be recognized.

"It has been suggested that this section of the Bill will clash with the Police Act; but it merely cannot be the intention of the Police Act that whole strings of carts shall be allowed to stand on a street for hours together while loading and unloading. I apprehend it refers to one or two carts and not to a long line of carts. I think that this section is wanted to show the owners of jute warehouses that they have a special liability, and that they should conform to such regulations as are required for each locality. As I said before, if this section becomes law, special regulations will be drawn up for each locality, and no punishment will be awarded so long as they comply with those regulations."

The Hon'ble Mr. Woodroffe said:—"The question which is involved in this amendment commends itself to me. The words used in this section are

'whoever impairs or causes to be impaired the right of public traffic.' I do not read those words in the sense in which the hon'ble member the Commissioner of Police, does. I take it that roads are made for the public; nor am I aware that any person who has occasion to use carts on the roads in Calcutta is restricted to the use of one cart at a time. All members of the public have a right to use any public road, subject to the use thereof by all other members of the public.

"The Bill provides that space shall be reserved for the loading and unloading of carts on land appertaining to warehouses. That does not mean that the public roads shall not be used by more than one cart at a time. Section 66, sub-section 7, of Act IV of 1866, imposes a fine upon any person who causes any cart to remain or stand longer than is necessary for loading or unloading, except in a place lawfully appointed for the purpose so as to cause obstruction in a thoroughfare. From the difference in opinion between the hon'ble mover of the amendment and the hon'ble member, the Commissioner of Police, it is evident that this clause (section 20) is read in a different light from what I understood in Committee. But seeing that the section is capable of the construction which the Commissioner of Police puts upon it, I shall support the hon'ble mover of the amendment. It was never understood that the business of a warehouse should be stopped after each cart was unloaded and another cart fetched."

The Hon'ble Mr. Cotton said:—"I think this question is by no means free from difficulty, and for my own part I am much influenced by the opinion expressed in the letter of the National Chamber of Commerce. It is true that the Municipal Commissioners were, in the early days of the Municipality, in the habit of granting licenses very freely for jute warehouses; and that in a very large number of cases no provision whatever was made for cart space, that is to say, there was no space whatever within the premises where carts could enter and turn round. I conceive that the Municipal Commissioners erred in their discretion in the interests of jute and commerce, and granted licenses more freely than was prudent. I have inspected some of these warehouses, and have found the bulk of the carts loaded with jute waiting outside. That is a serious matter. I confess that the representation of the National Chamber of Commerce has influenced me very much on this point. I had not realised until I read their memorial and received a deputation of their members how keenly this question would be felt; and I do think that the power of prosecuting the owners or occupiers of warehouses, under such an exceptional provision as this, should not be conferred without further deliberation. I can understand that a carriage or cart which blocks the way, and will not move on when ordered by the police, may be run in; but I do not know whether it will be wise or whether it could be justifiable to prosecute the owner or occupier of a warehouse under a penal provision of this kind.

"The section found its place in the Bill in this way. Under the old law it was a condition of granting a license that there should be sufficient space for the loading and unloading of carts. We have struck that out, and this penalty clause was put in, under which the owner or occupier of a warehouse may be fined if his carts block the way. I doubt whether it was wise to omit the provision about cart space and provide this penalty clause instead. On a full consideration of the objections taken by the National Chamber of Commerce, I think this Council would do well to accept the amendment of the Hon'ble Babu Gonesh Chunder Chunder and omit this provision, leaving all necessary action to clear away and maintain the thoroughfares to the police under the existing law."

The Hon'ble Mr. Woodroffe explained, in reference to what had fallen from the Hon'ble Mr. Cotton, that in section 6 a sub-section *(c)* was inserted, which required to be set forth in the application license "the space, if any, which has been reserved for the loading and unloading of carts," in order to show what space was left in the premises for carts to be brought in.

The Hon'ble Mr. Allen said:—"I think that as this section has been inserted in the Bill, it will be much wiser to let it stand. The learned Advocate-General's principle seems to be that any one who has a large business is at liberty to monopolise the streets. But there are individuals who have no business, and they are just as well entitled to pass through the streets. It is not the fact that a continuous string of carts is allowed in a street, for there is a bye-law in Calcutta, which requires an open space to be left after a certain number of carts. The only persons who disregard this bye-law are the Government carts, and they apparently pay no respect to it. I understand, however, this section has rather reference to carts leaving the line and blocking the traffic while unloading. It will be for the Magistrate to construe its true meaning, and it may be as well to let it remain in the Bill."

The Hon'ble Mr. Playfair said:—"This is a section in regard to which there was considerable discussion in the Select Committee. The traffic which is referred to is principally jute, and I think it will operate with hardship to the native jute merchants whose warehouses abut on the streets, and therefore I would support the amendment."

The Hon'ble the President said:—"So far as the main principles of the Bill are concerned, that is, as regards the incidence and distribution of the taxation which is to supply the funds for keeping up the fire-brigade, I have declared my intention of not intervening in the debate or attempting to influence the decisions of the Council, and I adhere to that view. This, however, is a different question relating to the administration of the Police regulations of the town; and although I desire fully to recognise what the Hon'ble Mr. Allen has said that, as a rule, the views of the Select Committee ought to be supported, yet as the matter had not been fully considered in the light put forward by the National Chamber of Commerce, the members of which would be chiefly affected by this provision, it comes under the category of a case upon which new light has been thrown since the redrafting of the Bill by the Select Committee; and as it is now pointed out that police power already exists to maintain the proper regulation of the traffic in streets, it seems to me unnecessary that any special clause should be included in this Bill, with the view of giving special powers for the regulation of any particular class of traffic. Therefore, I should advise the Council to support the amendment of the Hon'ble Babu Gonesh Chunder Chunder."

The Motion was put and agreed to.

The Council adjourned to Saturday, the 4th March, 1893.

Calcutta; } C. H. REILY,

The 11*th March,* 1893. } *Assistant Secretary to the Govt. of Bengal,*

Legislative Department.

Abstract of the Proceedings of the Council of the Lieutenant-Governor of Bengal, assembled for the purpose of making Laws and Regulations under the provisions of the Act of Parliament, 24 and 25 Vic., Cap. 67.

THE Council met at the Council Chamber on Saturday, the 4th March, 1893.

Present:

The HON'BLE SIR CHARLES ALFRED ELLIOTT, K.C.S.I., Lieutenant-Governor of Bengal, *presiding.*

THE HON'BLE J. T. WOODROFFE, *Offg. Advocate-General.*

The HON'BLE T. T. ALLEN.

The HON'BLE H. J. S. COTTON, C.S.I.

The HON'BLE H. H. RISLEY, C.I.E.

The HON'BLE J. LAMBERT, C.I.E.

The HON'BLE H. LEE.

THE HON'BLE DR. MAHENDRA LAL SIRCAR, C.I.E.

The HON'BLE A. H. WALLIS.

The HON'BLE GONESH CHUNDER CHUNDER.

The HON'BLE P. PLAYFAIR.

The HON'BLE MAULVI SYED FAZL IMAM, KHAN BAHADUR.

The HON'BLE MAHARAJAH RAVANESHWAR PROSAD SING, BAHADUR.

LICENSED WAREHOUSE AND FIRE-BRIGADE BILL.

The Hon'ble MR. COTTON moved that the clauses of the Bill for the regulation of Warehouses and the maintenance of a Fire-brigade be further considered for settlement in the form recommended by the Select Committee.

The Motion was put and agreed to.

The Hon'ble BABU GONESH CHUNDER CHUNDER said:—"As section 3 of the Bill was passed at the last meeting of the Council, I ask for special leave to move the following amendment:—

'That in clause (5) of section 3, the words *or mustard* be inserted after the word *linseed.*'

The Hon'ble the President said:—"As this is an amendment to remedy an oversight in a section already passed, sanction is given."

The Hon'ble BABU GONESH CHUNDER CHUNDER continued:—"At the last meeting it was unanimously agreed that linseed-oil should be taken out of the operation of this Act. I move that mustard-oil be also taken out of it on the ground that mustard-oil is less inflammable than linseed-oil. The Hon'ble Dr. Mahendra Lal Sircar will, I am confident, support the ground I have ventured to urge, and I do not think there are many places in this City in which mustard-oil is stored in large quantities. There is not much of an export trade in it, and the quantity of oil imported and made here is substantially less than the quantity of other oils brought here for the purposes of the export trade. Furthermore, mustard oil is very largely used, especially by the poorer classes in these Provinces, in the preparation of their food, and an additional tax upon it will enhance its value and will ultimately have to be borne by its consumers."

The Hon'ble DR. MAHENDRA LAL SIRCAR said:—"I have no hesitation in stating that mustard-oil is no more inflammable than linseed-oil, and I go further and say that neither is castor-oil nor cocoanut-oil more inflammable than linseed-oil. They are, if at all, less inflammable than linseed-oil. It will require a very little amount of consideration to say that their character is not inflammable.

For these reasons I do not see why the word 'oil' should be retained in the Bill, and I ask the permission of the President to move that clause (*5*) of section 3 be omitted, and that in clause (*9*) of the same section, the word 'oil' be also omitted."

The Hon'ble MR. COTTON said:—"I concur in the proposal to add the word 'mustard-oil' to linseed-oil, as being an article exempted from the operation of this Bill. But when cocoanut-oil and castor-oil are mentioned as being non-inflammable materials, I can only express my surprise. I was always under the impression that cocoanut-oil was largely used in the whole of this country in lighting *cherags* and *buttees*, which form the universal means of illumination in houses over the greater part of this country. It was certainly universal until petroleum was, in a great measure, substituted for cocoanut-oil. I should say that cocoanut-oil is, strictly speaking, inflammable and should be included among the substances to be kept in warehouses under the Bill, but I do not desire to oppose the Hon'ble Babu Gonesh Chunder Chunder's motion that 'mustard-oil' should be excluded."

The Hon'ble MR. LAMBERT said:—"I know of no large godown in the city which is used exclusively for the storage of mustard-oil, nor in my recollection has there been any fire in which the storing of mustard-oil in small quantities has caused any serious difficulty. No doubt, whenever fire breaks out in premises where oil of any kind is stored, the fire burns more fiercely and is much more difficult to extinguish. But as regards mustard-oil, I see no special reason why it should not be excluded from the operation of the Bill."

The Hon'ble Maulvi SYED FAZL IMAM, KHAN BAHADUR, said:—"In my capacity of Vice-Chairman of the Patna Municipality, I have had long personal experience of places in which the oils which have been referred to are manufactured and stored in large quantities. There is no doubt, as has been observed by the Hon'ble Mr. Lee, that oils when once ignited prove a source of great danger, and that the flames do not admit of prompt extinguishing. Yet oils cannot possibly be compared to jute, cotton, straw, wood, &c., in the matter of inflammability; and when the Council has agreed to exempt linseed-oil from the operation of the Bill, I think there can be no objection to place mustard-oil on the same footing. For these reasons I will support the amendment of the Hon'ble Babu Gonesh Chunder Chunder."

The Hon'ble THE PRESIDENT said:—"The Hon'ble Dr. Mahendra Lal Sircar has asked permission to move as an amendment that the whole of clause (*5*) of section 3, the definition of 'oil,' be omitted, and that the word 'oil' be omitted from clause (*9*). As we have already admitted a cognate amendment which was not strictly in order, I see no objection to this further amendment being put."

The Hon'ble DR. MAHENDRA LAL SIRCAR said:—"My reason for proposing this amendment is, that in simple fairness we cannot retain castor-oil and cocoanut-oil among the articles which are to be subject to the operation of this Bill, if we exclude mustard-oil and linseed-oil. They are on the same footing as far as the risk of fire is concerned, and if we exclude the latter, why should not we exclude the former also?"

The Hon'ble MR. LEE said:—"I believe, Sir, that the Commissioner of Police will be able to support me in saying that it makes very little difference what the oil stored be once the building catches fire. I think that if linseed-oil and mustard-oil are left out of the Bill, all oils should be left out—not only on the general principle which has been suggested, but also because it would be very inconvenient in working to have exceptions. It would be most inconvenient to have the different classes of oil divided, some as taxable and some as not taxable under this Act. An oil vendor has all kinds of oil. We are to exclude small quantities of assessable articles, and it would therefore be

necessary for the officer appointed by the Commissioner of Police to inspect these warehouses, and see what is taxable and what is not taxable; that he should make out a list showing so many canisters of linseed-oil, so much of mustard-oil, and so much of cocoanut-oil, and unless he counts up the number of canisters of each kind of oil he would be unable to say whether it was taxable or not. The quantities of each kind of oil would vary from day to day, and it would be very difficult to say in each case whether it was a warehouse under the Act or it was not. I think it should be laid down in a manner clear and understandable. I therefore agree with the Hon'ble Dr. Mahendra Lal Sircar that oil should be altogether omitted from clauses 5 and 9 of section 3."

The Hon'ble MR. LAMBERT said:—"It is very difficult to make out a stronger case against castor-oil and cocoanut-oil than as regards mustard-oil and linseed-oil; and, as far as I am aware, there are no large warehouses in this City used exclusively for the storage of any of these oils. Therefore, I agree to the proposed amendment."

The Motions were put and agreed to.

The Hon'ble MR. LEE said:—"Before the business next on the list is proceeded with I wish, with the permission of the President, to ask whether the amendment left undecided in the first part of section 10, which was moved by the Hon'ble Babu Gonesh Chunder Chunder at the last meeting of the Council, has been withdrawn."

The Hon'ble THE PRESIDENT said:—"The Council has not yet reached the amendment to which the hon'ble member has referred. The Hon'ble Mr. Woodroffe has asked leave to introduce an amendment to section 9, by the addition of the words 'the proceedings of such Committee shall not be submitted to the Commissioners in meeting, or be subject to revision by them.' This is an amendment of which notice has not been given. But considering that it appears that, by an oversight, the section as it stands may have an effect which the Select Committee had not foreseen, and possibly the Council may not have foreseen, I will allow the amendment proposed by the Hon'ble Mr. Woodroffe to be brought on now."

The Hon'ble MR. WOODROFFE said:—"When section 9 was before them, the majority of the Council was in favour of vesting in a Special Committee, to be appointed by the Commissioners in meeting with the consent of the Chairman the powers and discretion vested in the Chairman in regard to granting or withholding licenses for warehouses under this Act; that is to say, the Council considered it desirable that this matter should be placed in the hands of a small body of persons and should not be brought up for debate before a large unwieldy tribunal, such as the whole body of the Commissioners. Since that discussion, my attention has been called to the wording of section 66 of Act II of 1888, the Calcutta Municipal Consolidation Act, and it has been suggested that the proceedings of this Special Committee might thereunder be subject to revision by the Commissioners in meeting. For my own part, I do not think so, nor do I consider that the Committee appointed under this Act would be bound by any Resolution passed by the Commissioners in the matter. But however the decisions of the Special Committee appointed under section 9 of this Act, with the consent of the Chairman, be thought to be subject to revision, and to be brought up for discussion and debate, prolonged it may be for a very considerable period of time, it is desirable so to amend this section that there shall be no room for a contention which, if successful, would, in some cases at least, render the investigations which might be made and the decision which might be arrived at by the Special Committee, simply labour lost. I therefore move that section 9 be amended by the addition of the words 'the proceedings of such Committee shall not be submitted to the Commissioners in meeting, or be subject to revision by them.'"

The Hon'ble Mr. Cotton said :—"I think this is emphatically a proposal of which notice should have been given. It appears to me to be a matter of very great importance that a proposal should be sprung upon us at the eleventh hour, setting aside a principle which has been definitely established by an Act of the Legislature. By section 56 of Act II of 1888, it is laid down that the action of Committees is subject to confirmation by a general meeting of the Commissioners. This is emphatically one of those principles which establishes the principle of Local Self-Government, dealing with local affairs in this Metropolis. The proposal of the learned Advocate-General entirely sets aside this important principle, and if it is to be adequately discussed at a meeting of this Council, I think we should have received notice of it beforehand. The Bill, as it is before the Council, places the grant of licenses in the hands of the Chairman of the Commissioners. It removes this power from the Commissioners in whose hands the power was formerly vested; but it authorises the Commissioners with the consent of the Chairman to appoint a small Committee to consider applications for licenses. The law, as it now stands in the Bill before you, whittles away the power of the Commissioners to the very smallest possible extent—to a far larger extent than I think is wise or proper. The learned Advocate-General informs you that by a large majority this revision in the law was carried. I think myself that it was a comparatively small majority. But be that as it may, there is no doubt that the Bill, as drafted, deprives the Municipal Commissioners of Calcutta of a very valuable privilege. The proposal led to a very unmerited and unjust attack upon the Commissioners by a member of this Council. [The President said :—"I must ask the hon'ble member to withdraw the word 'unjust.' It appears to me to be a term which should not be applied by one member of this Council to another."] In deference to the President, I withdraw the word "unjust," although it expresses no more than my own personal feelings on the subject. The Hon'ble Mr. Allen is a Master of flouts and gibes, and loses no opportunity of girding at one time at the High Court; at another time at the Calcutta Commissioners, and at another time at this Hon'ble Council itself. [The President said:—"I must ask the hon'ble member to confine himself to what is before the Council. I think it very undesirable and a very unfortunate thing if occasion is taken in proceedings like these to bring forward occurrences which took place two years ago, and which we all wish to forget. We are not here for personal debate; we are deciding the question whether an amendment should be agreed to or not, and I must again ask the hon'ble member to confine himself to the question before us."] The Hon'ble Mr. Allen indulged in a long diatribe upon the conduct of the Municipal Commissioners of Calcutta. [The President said:—"I must again point out to the hon'ble member that we are not discussing what the Hon'ble Mr. Allen said, but we are discussing a particular question, whether a particular amendment should be made in a particular section of the Bill before the House."] If this provision is added to the Bill, it will materially impair the powers of the Commissioners. I think that time should be allowed to the Council to consider the effect of the proposal."

The Hon'ble the President said :—"The President has, under the Rules, the power of admitting amendments of which notice has not been given, and I have admitted this amendment under the impression that it corrects a mistake which had occurred, and will set things practically in the position in which they were supposed to be placed when the Select Committee passed the draft of the Bill which we are now considering. If it is a fact that the Select Committee had, before them, when this section was considered and agreed to by them, the possibility that the decision of the Special Committee under section 9 might be subject to the general consideration of the Commissioners in meeting and to revision by them, and if it was their intention that it should be so subject, then it is obvious that what has fallen from my hon'ble friend, Mr. Cotton, is a matter of very considerable importance, and therefore time should be allowed for the consideration of an amendment which would alter the intention of the Select Committee. But if the Select Committee did not anticipate or intend such a result, then the amendment merely carries out their objects and involves no change in principle. I think, therefore, under such

circumstances, that it will be better to put the question to the House. The Council knows how far they understood that the Special Committee were to be authorised under section 9 to give a final decision, and how far they were under the impression that the decision of the Special Committee would be subject to revision under section 66 of the Municipal Act by the Commissioners at large. Those who understood the ninth section to imply a final decision on the part of the Special Committee would perhaps consider that we might proceed at once to the consideration of the amendment, which only clears away any doubt as to that intention. Those who consider that a new principle has been introduced will probably desire that it should be deferred for the next meeting of the Council. I therefore ask the Council whether they will consider this amendment to-day or postpone it to the next meeting of the Council."

The Hon'ble Mr. Lee said:—"I had two reasons for voting that the consideration of this matter had better stand over till next Saturday. One was that there seems to be some heat in the atmosphere, and the other that I had a proposal which I hoped would have met the wishes of all, and that therefore this particular amendment might have been withdrawn in favour of another. The Bill if passed now would have an effect that was not wanted by those who advocated the passing of section 9 in its present form. It is more or less by an accident, I consider, that it was passed. It was rather, I think, in opposition to the amendment which was moved by the Hon'ble Babu Gonesh Chunder Chunder, and in disapproval of my remarks thereon, than by way of expression of their own views, that the votes were recorded by a small majority last Saturday. I am sure it was not the wish of that majority that licenses for hay, wood, straw, and coal should form the subjects of debate before a Standing Committee, that in all these cases opinions should be recorded in shorthand and the proceedings reported to the Commissioners as they would have to be and published. There are no less than 343 woodyards in Calcutta, and every one of these has to take out a license. The power of licensing wood godowns is vested in the Commissioners; and as I tried to explain last Saturday, but failed to convey to hon'ble members, the result is that the licensing of these warehouses for wood, hay, straw, coal, rags, bamboos, tallow, and wax is dealt with as routine work by the Chairman. There is a section of the Act, which I thought would have been present in the minds of hon'ble members, that vests in the Chairman the powers of the Commissioners subject to control in meeting; therefore the business is done with expedition when routine matters are left to the "Commissioners." But if such routine matters are to be made over to the Standing Committee, I say surely that you will waste a great deal of time. The fact was remarked upon by Your Honour in the Resolution on last year's Administration Report of the Calcutta Municipality that there are no less than 280 meetings of the Commissioners either in Committee or in general or special meeting last year—more meetings than there are working days or as many. It is now proposed to add another Committee, which would have to deal with the licenses of 343 wood warehouses, 86 straw warehouses, 20 bamboo warehouses, 26 coal warehouses and 10 tallow and wax warehouses, and 111 jute warehouses. Therefore, I regret, Sir, that this motion, which has been somewhat suddenly brought forward, could not have been postponed until next Saturday. I venture to hope that, if this motion be lost now, it will not be a bar to a proposal being brought forward next Saturday which will restore the work to a reasonable groove. For these reasons I must record my opinion against the amendment."

The Hon'ble Mr. Allen said:—"It appears to me that there is some misapprehension about the learned Advocate-General's amendment, and that it is absolutely unnecessary. It is perfectly true that the Commissioners, acting under the powers conferred upon them by Act II of 1888, have the right of controlling in meeting all special Committees, and also their Chairman, when they deal with matters provided for in that Act; but surely this Bill is quite outside anything covered by Act II of 1888. It provides for a special service for a special purpose, and it throws the responsibility of granting certain licenses on the Chairman of the Commissioners of Calcutta. I cannot conceive that under those general powers of Act II of 1888, the Commissioners would have any power to interfere with their Chairman when he acts under the authority of this Bill on a business totally outside anything

dealt with in Act II of 1888. Then we have a section, No. 9, allowing the Commissioners, with the consent of the Chairman, to appoint a Special Committee to exercise the powers which by this Bill are given to the Chairman. Suppose that an Act for the prevention of contagious diseases throws on the Chairman the functions of visitor to a lock hospital, could it be pretended that the Commissioners in meeting were entitled to control their Chairman in the discharge of his duty as visitor? Just as little right have they to control him in the discharge of his functions under this Act. Such being the case, the proceedings of the Special Committee appointed with the consent of the Chairman, and called into existence to discharge the functions thrown upon him, are just as much beyond the control of the Commissioners as the Chairman himself would be in the exercise of those powers. The Special Committee merely takes the place of the Chairman. Therefore, it appears to me, and I understand that the learned Advocate-General is disposed to hold the same opinion, that the amendment which he has now brought forward in no way alters the law, and that it is merely brought forward for the sake of obviating a baseless claim which might otherwise be made."

The Hon'ble MR. WOODROFFE in reply said:—"Sir, the Hon'ble Mr. Allen has correctly appreciated the motives which led me to propose this amendment, and I regret to find myself in this matter not in accord with the Hon'ble Member in charge of the Bill. I think he has not correctly appreciated the position. As far as I understand the Bill now before the Council, there are special duties imposed on the Chairman of the Commissioners under sections 5, 6, 7, and 8. These are, as it appears to me, outside the powers which the Chairman of the Commissioners exercises under the Calcutta Municipal Consolidation Act. But coming to know that there is a contention, which has now been emphasized in this Council, that these powers are to be taken to be subject to the general provisions of the Municipal Act, it occurred to me that it is desirable to place before the Council such an amendment as should prevent such a question being raised. In my opinion there will not be taken away by my amendment any of the powers which the Municipal Commissioners now possess. It does not appear to me that they could contend, regard being had to the language of the Municipal Act, that by exercising the powers vested in him by this Bill for the granting or refusal of licenses, the Chairman would be exercising the powers of the Commissioners as defined in the Municipal Act; or that the Special Committee appointed under section 9, with the consent of the Chairman, to exercise the powers and the discretion of the Chairman under this Act, would be a Committee within the meaning of the Municipal Act. But I think it is desirable, when one finds that such questions may arise and may cause debate, to set the matter at rest by positive enactment. The proposed amendment in this view makes no reference to Act II of 1888 or to the Mufassal Municipal Act. I move it simply to give effect to what I for one understand to be the view taken by this Council that, when a Special Committee exercises the powers of the Chairman under this Act, their action is not a matter which can or ought to be brought before the Commissioners in meeting. Had I thought that the matter stood as the Hon'ble Member in charge of the Bill has suggested, namely, the removal of powers possessed by the Commissioners in meeting, I should myself have postponed this amendment until the matter had been placed before hon'ble members of Council. It is because I understood, and still understand, that there is not that question involved in this amendment, that I now bring forward this amendment."

The Motion being put, the Council divided:—

Ayes 6.	*Noes* 6.
The Hon'ble Mr. Playfair.	The Hon'ble Maharajah Raveneshwar Prosad Sing Bahadur.
The Hon'ble Mr. Wallis.	The Hon'ble Maulvi Syed Fazl Imam, Khan Bahadur.
The Hon'ble Mr. Lambert.	The Hon'ble Babu Gonesh Chunder Chunder.
The Hon'ble Mr Risley.	The Hon'ble Dr. Mahendra Lal Sircar.
The Hon'ble Mr. Allen.	The Hon'ble Mr. Lee.
The Hon'ble Mr. Woodroffe.	The Hon'ble Mr. Cotton.

The Hon'ble THE PRESIDENT said:—"The votes of the Council, excluding myself, are equal. It is therefore incumbent on me to vote. The reason why I give my vote with the ayes is that it seems quite clear from what has fallen from the Hon'ble the Legal Remembrancer and the Hon'ble the Advocate-General that the effect of the amendment is merely to set at rest a possible interpretation of the law which is not the right interpretation; and we thereby save the public and the municipality from unnecessary legal proceedings and contentions."

The Hon'ble President having recorded his vote with the *Ayes*, the Motion was carried.

The HON'BLE MR. LEE said:—The question I wish to ask is, has the notice of amendment moved by the Hon'ble Babu Gonesh Chunder Chunder with reference to section 10, concerning which the Hon'ble Advocate-General and the Hon'ble the Legal Remembrancer have notices of motion on the paper, been withdrawn? I ask this, because I do not find it in the list of business, and without that amendment being before us, the Council is in a position in which it cannot, if so minded, express an opinion that the intentions of the Select Committee should be carried out. If both the Hon'ble Mr. Woodroffe and the Hon'ble Mr. Allen's amendments are lost, what would be the result? Can we then vote on the proposal of the Hon'ble Babu Gonesh Chunder Chunder, which is not in the list of business, and which was not voted upon at the last meeting, and of the withdrawal of which we have not received notice?

The Hon'ble THE PRESIDENT said:—"I understand from the Secretary that the Hon'ble Babu Gonesh Chunder Chunder's motion, which was postponed at the last meeting for consideration of an amendment which the Hon'ble Mr. Allen adumbrated, and which he had not formulated, has not been withdrawn. Therefore, if the amendments of the Hon'ble Mr. Allen and the Hon'ble the Advocate-General are lost, I shall be prepared to put the amendment of the Hon'ble Babu Gonesh Chunder Chunder."

The Hon'ble MR. WOODROFFE, by leave of the Council, withdrew the motion of which he had given notice that for the first paragraph of section 10, the following be substituted:—

'The annual fee payable in respect of any license shall not exceed ten per centum per annum on the value of the warehouse as it is assessed to the payment of the municipal taxes, less five per centum on the original outlay incurred in respect of the means and appliances therein or appertaining thereto for preventing or extinguishing fire, and less the annual expenditure incurred in or about the repairing, adding to, maintaining and working the same. Such annual expenditure to be taken to be the expenditure incurred in or about such repairing, adding to, maintaining and working during the preceding years.'

He said:—"I was induced by some observations which fell from hon'ble members opposite on the last occasion to bring forward this amendment, but I have since discovered from figures laid before me that there would be no relief whatever given to those proprietors of warehouses who have expended money on fire-extinguishing appliances, if only 5 per cent. were allowed on such expenditure."

The Hon'ble MR. ALLEN said:—"From what has fallen from the Hon'ble the Advocate-General, and from what I learn from the gentleman who represents the commercial interests of Calcutta, I understand that the practical effect of this amendment will be almost nothing, and it is therefore only on the ground of theoretical propriety that I bring forward the proposal which stands in my name. The hon'ble member opposite, on the last occasion, proposed to make 5 per cent. the allowance to be deducted from the outlay on appliances for extinguishing fires with which jute presses and warehouses are furnished. But as some expense may be incurred of a recurring nature in keeping the original block in repair, and also in providing the means of working those appliances, I then draw a distinction between fixed outlay and recurring

expenses, and in accordance with your suggestion, Sir, this amendment has been formulated, and I now leave it to the Council. The following is the amendment I propose:—

'The annual fee payable in respect of any license shall not exceed ten per centum per annum on the annual value of the warehouse as it is assessed to the payment of the municipal taxes, less the annual outlay (including five per centum on the first cost of all fire-engines, pumps and other appliances) incurred in respect of the means for preventing and extinguishing fires.'

The Hon'ble MR. PLAYFAIR said:—"I think some misconception exists regarding the cost of private fire extinguishing appliances in relation to the municipal assessment of properties; and that, if the providing of such appliances is to be encouraged, section 10 must stand as it had been drafted by the Select Committee.

"I find that 14 of the more important press-houses, representing a capital valuation of about 62½ lakhs of rupees, and with a municipal assessment of Rs. 3,12,050, are equipped with fire-extinguishing appliances costing Rs. 99,006. If this latter sum of Rs. 99,006 is to be deducted from the municipal assessment, it is probable that three of the smaller press-houses might be reduced in taxation to the extent of Rs. 480 per annum. The remainder and larger press-houses would receive no benefit. But if the value of the fire-extinguishing appliances is to be deducted from the capital valuation of 62½ lakhs of rupees, as we suggested at the last meeting of the Council, not one of the 14 press-houses will obtain any relief in taxation on account of having fire-extinguishing appliances of its own, and each may be taxed Rs. 750, making a total of Rs. 10,020. Likewise, as 5 per cent. of the value of these appliances would represent a very small sum, the deduction of this amount from the municipal assessment before ascertaining the tax to be levied for the fire-brigade, would be of no advantage. The amendments before the Council would therefore do away with the benefit intended to be obtainable by those who protect themselves and their neighbours in having appliances of their own for the purpose of controlling fires. On the other hand, if the cost of the fire-extinguishing appliances were to be deducted from the municipal assessment, some of the smaller press companies might reap some benefit; for, in instances, such cost represents a larger percentage on the municipal assessment of these smaller works than is the cost of appliances at the larger works in relation to the municipal assessment of the larger works.

It is probable that some of the smaller press-house companies having appliances of their own may be relieved of taxation to the extent of 1 to 1½ per cent. of the municipal assessment by the provisions of section 10 as it stands. These are the persons to whom I referred on a previous occasion as likely to be taxed to the extent of 6 per cent. of the municipal assessment; while their more influential neighbours in the trade may be called upon to pay only one and a half per cent. under the proposed system of differential taxation. The claims of the smaller trader may, in this respect, merit the consideration of the Council. I understand it to be the intention of the Legislature that all traders in hazardous goods should be encouraged to minimise the risk of fire within their premises, by adopting methods for the prevention and the control of fires, and that section 10 was drafted by the Select Committee with this object. The amendments now before the Council would stultify this intention. The hon'ble member, who proposed a similar amendment at the last sitting of the Council, feared lest an owner of a hazardous article might become exempt from taxation in having fire-extinguishing appliances of greater capital value than the municipal assessment of his premises, and I ask why should he not be exempt? Why should the owner of a large work having a small godown holding, for instance, tar, or tallow, or resin, or any other article specified in clause *(9)* of section 3, be troubled and further burdened with the fire-brigade tax, when he keeps on his premises fire-brigade appliances capable of protecting the whole of his works, and fit to douse this single godown at a moment's notice?

"It is evident to my mind, Sir, that if the provision of private fire-extinguishing appliances is to merit reduction in taxation, section 10 must stand as it has been presented by the Select Committee."

The Hon'ble BABU GONESH CHUNDER CHUNDER said:—"I cannot support the amendment which has been proposed by the Hon'ble Mr. Allen, for if it is carried, it will add a great deal to the complications which already exist in the working of the Bill. In addressing the Council on the last occasion, I stated that it would be reasonable to allow such warehouses deductions from the annual assessment of their premises of 5 per cent. on the cost of the outlay for appliances for extinguishing fires. It is now sought to add to that 5 per cent. the outlay incurred in respect of the means of preventing and extinguishing fires. If this amendment is allowed to be introduced in the Bill, the result will certainly be this: somebody would have to decide what is reasonable and what is not reasonable outlay for the particular warehouse. There is nothing in the Bill to indicate who would decide that. Suppose a particular house chooses to expend Rs. 100 a month, or Rs. 1,200 a year, for the expenses of keeping up the appliances, who will decide whether such expenses are reasonable or not reasonable for the purpose? Then, again, there would be nothing in the Act to give the Commissioners power to enquire into the subject of the outlay by each warehouse. The result would be that the Commissioners would be placed in a position which would compel them to accept whatever statement of outlay may be furnished to them by the owners of warehouses, and to deduct whatever amount they may choose to pay from the annual assessment. I venture to think, Sir, that it will be complicating the Act to a very great extent if a general provision like this be introduced, namely, that in addition to 5 per cent. on the cost of all fittings, &c., the owners of warehouses shall be allowed to deduct the annual outlay which they will incur in keeping up the appliances. I cannot therefore support the amendment of the Hon'ble Mr. Allen; and when the proper time comes I will bring in my original motion, the further consideration of which was postponed at the last meeting."

The Hon'ble Mr. LEE said:—I should have much pleasure in supporting the amendment of the hon'ble Mr. Allen's motion were it not that a better one is coming forward in that of the hon'ble Babu Gonesh Chunder Chunder. I understand that the only difference between the two is that the hon'ble Mr. Allen's amendment will allow a deduction for what are called recurring expenses of an uncertain nature and amount. The result of passing this amendment would be the reverse of what was intended when the idea was adumbrated. It will have the effect of throwing more taxation on jute warehouses than they have now. That is my opinion as to how it would actually work out. That, as the Council is aware, I do not think would be in itself inequitable, but it would be at the cost of a greater inequity. Difficulties would occur in respect of straw depôts, hay depôts, and wood depôts, when the calculation came to be made regarding the license fee payable, as to what deduction should be allowed for recurring expenses for the prevention of fires. In jute warehouses it would doubtless be decided that a portion of their establishment engaged in the general work of the warehouse should be charged to the maintenance and supervision of the fire-appliances A certain percentage of the establishment would be so charged. The same principle would have to be applied when we come to timber yards and straw depôts. It is the practice in almost all straw depôts and timber yards to keep a certain number of ghurrahs of water. Somebody has to keep them filled with water, and it will be urged before the Standing Committee with considerable force that a share of the establishment of each timber yard and straw depôt should be debited to recurring expenses for the prevention of fire. Now under the Bill a sum of Rs. 5,679 will be collected from 343 depôts, and that comes to about Rs. 17 a year from each on the average. One chaukidar or other servant will get from Rs. 6 to Rs. 10 a month, the least amount, and it will be a very small proportion of his pay that will have to be debited to the prevention of fire to wipe out the whole of these fees now recovered or recoverable under the Bill from wood depôts. The same would be the result as to straw depôts, and the same result as regards other warehouses; and what could not be recovered from them would have to be recovered from jute warehouses up to 50 per cent. of the cost of the fire-brigade. The hon'ble the Advocate-General shakes his head, and I am at a loss to see why. The Bill says distinctly that the

Municipal Commissioners can recover from warehouses of all kinds 50 per cent. of the cost of the fire-brigade. If, then, hay, wood, straw and other warehouses contribute nothing, it seems to follow as a matter of course that the 50 per cent. will all be subscribed by jute warehouses. I think that would not in itself be inequitable, but I see no reason why other warehouses, which were before paying Rs. 13,000 a year, should only pay Rs. 8,000 under this Bill, while it would be more inequitable still that they should be exempted altogether. So that for practical reasons I would much prefer the amendment which is about to be moved by the hon'ble Babu Gonesh Chunder Chunder, and for that reason I shall vote against the amendment of the hon'ble Mr. Allen.

The Hon'ble Mr. Woodroffe said :—"As already indicated from what I said when I asked for leave to withdraw the amendment which stood in my name, I find myself unable to support the Hon'ble Mr. Allen's amendment; and I wish to explain a little more in detail why I do so. I believe it will be found that when this section came before the Council on the last occasion, the proceedings which then took place, and which led to the Hon'ble Mr. Allen's formulating this amendment, showed that there was some considerable misunderstanding as to what the meaning of the section is. I gathered that some of the hon'ble members opposite supposed that from the amount of the annual license-fee it was intended to take the whole of the value incurred in respect of the appliances for preventing and extinguishing fires; whereas the section does not do so. Section 10, as I read it, provides that, from the annual value, as it is assessed to municipal rates, there shall be taken the outlay incurred on such appliances, and that upon the difference there shall be assessed a rate not exceeding 10 per cent.

"I have in my hand the details of the largest press-houses which were referred to by the Hon'ble Mr. Playfair, and from a perusal of these it will be seen that if, as suggested by the Hon'ble Mr. Allen in this amendment, there be only taken from the amount of the license-fee 5 per cent. on the first cost of all the fire-engines, &c., incurred in respect of preventing or extinguishing fires, not one large press-house or warehouse in this City will derive any advantage from the cost incurred in providing such appliances for protecting his premises from fire, and in so doing, protecting his neighbours; whereas if the Bill stands as it does at present, and as it left the hands of the Select Committee, there will be an advantage given to the smaller warehouses. I will illustrate my meaning by the figures to which I referred. Messrs. Ralli Brothers are one of the largest press-owners in this City, and the municipal assessment on their premises is Rs. 45,000. That is the annual value, and on that the rate is struck; and but for the fact that this Council has fixed the limit of Rs. 750 than which there shall not be a larger license-fee paid, they would have to pay a fee of Rs. 4,500 a year. Those Merchants have, however, laid out on fire-extinguishing appliances no less a sum than Rs. 36,640. Deducting that sum of Rs. 36,640 from Rs. 45,000, there remains Rs. 8,360; and if the Rs. 750 limit had not been passed, they would have had to pay a fee of Rs. 830. The consequence is that this firm does not gain one single anna by the great service which they have rendered to the community at large in protecting themselves from the risk of fire. Practically, they have expended a sum equal to the annual value of the premises, and yet they gain no advantage. The next on the list is the Union Press Company, whose municipal assessment is Rs. 34,100. They have laid out Rs. 9,000 in fire-extinguishing appliances, the balance is Rs. 25,100, and they also are only to be protected by the Rs. 750 limit. The Strand Bank Press Company has laid out in fire-extinguishing appliances Rs. 7,500 upon an annual assessment of Rs. 33,500, leaving a balance of Rs. 26,000; they therefore also gain nothing. The Golabarry Press, which is in the hands of Messrs. Finlay, Muir and Company, have expended Rs. 3,500 as against a valuation of Rs. 24,000; they, therefore, also would gain nothing. It is not until you come to the smaller presses that any advantage is gained by leaving the Bill as it is; and consequently no advantage will be secured if the Hon'ble Mr. Allen's amendment were carried.

"Take, for instance, Watson's Press, the assessment upon which is Rs. 12,800, and the fire-extinguishing appliances cost Rs. 7,000. That reduces the assessable value to Rs. 5,800, and they would therefore gain an advantag of Rs. 170 per annum. The Canal Press has a municipal assessment of Rs. 12,400, with an outlay of Rs. 7,500, thus reducing the assessable value to Rs. 4,900, and they would therefore only pay Rs. 490 for the fire-brigade, and gain Rs. 260. Nasmith's Press, with an assessment of Rs. 12,000, has laid out Rs. 5,000, thereby reducing the assessable value to Rs. 7,000; they, therefore, obtain relief to the extent of Rs. 50. Similarly, as I understand, when you go down lower in the grade, the advantage of the Bill as it left the Select Committee will be felt by those to whom I understand hon'ble members generally are in favour of granting relief, namely the smaller men.

"There is not a man out of the fourteen largest press owners who gains the sum of one rupee even by the deduction from the total assessable value of the total amount laid out on appliances. It is only when you come down to the smaller men that any advantage is obtained. If you demolish the provision of section 10 as it stands in the Bill, and deduct instead 5 per cent. on the annual outlay and recurring expenses, there will be no relief gained at all; and it will come to this that, in the opinion of this Council, there is a premium held out to those who lay out nothing in self-protection, and by self-protection protect also their neighbours; whereas every encouragement should be given to persons in this City who, by protection of their own property from fire, afford protection to their neighbours. I would therefore ask the Hon'ble Member in charge of the Bill to consider the figures which have been submitted to me.

"It is for these reasons that I find myself unable to support the Hon'ble Mr. Allen's amendment. It is conceived with the best intentions, and I doubt not that to a certain extent it is due to the imperfect information laid before the Council, which gave it the idea that under the Bill, as it stands, the larger presses would get off scott-free. Whereas, I find that such will by no means be the case, and if 5 per cent. upon the outlay only be allowed, even the smaller presses will gain nothing from any expenditure which they may have made upon fire-extinguishing appliances.

"With reference to what has fallen from the Hon'ble Babu Gonesh Chunder Chunder, it does not seem a reasonable construction of the Bill that the Chairman of the Commissioners or the Special Committee are bound to admit the claim made in regard to the cost of appliances."

The Hon'ble MR. COTTON said:—"I have considered the statement which has been placed in my hands by the learned Advocate-General, but I regret to say it does not impress me so strongly as it has done my hon'ble friend. The reason why this proposed amendment in the Bill would practically have no effect, in the case of these large warehouses, is that they have already gained so enormously by the decision to which the Council arrived at the last meeting of limiting the maximum to be paid by any warehouse to Rs. 750. A warehouse which is now paying Rs. 4,500 a year will, under this Bill, not be liable to pay more than Rs. 750. It is difficult to conceive a greater gain than that short of remitting them from the payment of all license fees altogether. Hon'ble Members will remember that an amendment to strike out of the Bill the limit of Rs. 750 was rejected. If it had been carried, there might have been more cogency in the learned Advocate-General's arguments; but as the Bill stands, they have no effect whatever, because the larger warehouses on behalf of which they were urged are already amply protected by limiting the maximum to Rs. 750. But when we are dealing with the somewhat smaller warehouses. it is then that the provision now proposed would act so unfairly. Assuming a small warehouse to be worth the annual value of Rs. 500, that is to say, that its capitalised value is Rs. 10,000 and the annual value Rs. 500, the assessment upon it would be one-tenth, or Rs. 50 a year. The owner of that warehouse would, if the provision now put forward be passed into law, merely have to spend Rs. 50 towards protection from fire to be exempted from all taxation under the Act. As I read the meaning of the provision, that

would be the effect of such an outlay. It is to prevent anomalies of this kind that the Hon'ble Babu Gonesh Chunder Chunder moved his amendment that 5 per cent. upon the outlay incurred in respect of fire-extinguishing appliances should be deducted, and not that the capital outlay incurred should be deducted. It seems to me that that amendment is a very fair and reasonable one, and I hope the Council will accept it."

The Hon'ble MR. ALLEN in reply said:—"I think it unnecessary for me to take up any time with a reply. The whole discussion is entirely academical; it has travelled so utterly into cloud land that one would think it was in the island of Laputa it was being held. Practically, the charge on the larger warehouses is a flea-bite. They are so amply protected by the Rs. 750 limit that even if a much larger percentage were deducted, it would have no effect. In the Hon'ble Advocate-General's speech there was a constant confusion between the value which is subject to assessment and the capitalised value. The annual value of Messrs. Ralli Brothers' Press-house, for instance, is Rs. 45,000; the cost of appliances Rs. 35,000, which should be deducted not from the annual value, but from the capitalised value. So that even if ten, twenty or a much larger percentage is allowed, there will be no result to any of the fifteen large European Press-houses."

The Motion was put and negatived.

The Hon'ble THE PRESIDENT called upon the Hon'ble Babu Gonesh Chunder Chunder to move the amendment, the further consideration of which was postponed at the last meeting of the Council, and at the same time mentioned that the Hon'ble the Advocate-General, with His Honour's permission, proposed to bring forward an alternative amendment by substituting the words '10 per cent.' for the words '5 per cent.' in the Hon'ble Babu Gonesh Chunder Chunder's amendment.

The Hon'ble BABU GONESH CHUNDER CHUNDER moved that, in line 5 of section 10, the words "five per cent. on" be inserted after the word "less."

He said:—"The reasons for this amendment I laid before the Council on the last occasion, and I do not think there is any necessity for repeating them. I shall only make one remark, namely, that from the discussions which have taken place to-day on the amendment of the Hon'ble Mr. Allen, it appears quite clear that by reason of the maximum limit of Rs. 750, the provisions of this section, if it is amended as suggested by me, would have no application to those warehouses which would, but for that limit, have to pay a license fee of more than Rs. 750 on a 10 per cent. rate on the annual value; because in their case, whatever deductions might be made on account of the provision of fire-extinguishing appliances, the result would make no difference to them; as in the case put by the learned Advocate-General, of Messrs. Ralli Brothers, where their press-house is assessed at the annual value of Rs. 45,000, and the entire cost of the outlay for appliances is Rs. 36,640. There, whether you deduct 5 per cent., or 20 per cent., or 30 per cent., it would make no difference, because, under the maximum limit, they would not have to pay more than Rs. 750. According to my amendment, if a limit of Rs. 750 was not fixed, the result in their case would be this: five per cent. on Rs. 36,640 would be in round numbers Rs. 1,830, the amount to be deducted from Rs. 45,000, and on the balance of Rs. 43,170, a tax at 10 per cent. would have to be paid, amounting to Rs. 4,317; but under the maximum rule they would not be taxed more than Rs. 750. Therefore, whether you take a percentage upon the value of the fire-appliances, or allow a deduction of the whole of that value, it would make no difference to them. But in other cases, where the amount of the tax to be paid would be under the limit of Rs. 750, there, whether you deduct a percentage on the cost of fire-extinguishing appliances, or the whole of such cost, it would make every difference.

"For, as in the case put by the Hon'ble Mr. Cotton, suppose the annual value of a warehouse were Rs. 500, its capitalised value being Rs. 10,000, it would not be too much to spend Rs. 500 on the appliances, and if the whole of such sum were deducted from the annual value, there

would be no tax to pay. It would be against all principle to deduct the whole sum from the annual value, because you would have to do it year after year, and so, by spending the sum of Rs. 500 once, the warehouse would be exempted from all payment of tax whatever; not that he would be allowed to deduct it once, but you would have to do it year after year. I do not think it was ever the intention that a person who spent in providing fire-extinguishing appliances a sum equal to the value of the annual assessment should be exempted from the payment of all tax for ever. It would make no difference on the larger warehouses whose license fee exceeds Rs. 750, but it would certainly make a great deal of difference to those whose fees were less than that maximum sum. Therefore, a percentage only can be taken, and I do not think 5 per cent. is a very unreasonable percentage to allow. In the case of the small warehouse put by the Hon'ble Mr. Cotton, a reasonable reduction, which the proprietor can expect, is 5 per cent. on Rs. 500, that is Rs. 25; and the tax would have to be assessed on Rs. 500 minus Rs. 25, which would be Rs. 475."

The Hon'ble MR. WOODROFFE said :—"There is no doubt that, as the matter stands, it has been made clear, from what has fallen in the preceding debate, that large jute presses will gain no advantage whatever from large sums of money spent in providing fire-extinguishing appliances, and for that reason I shall be obliged to record my vote against the amendment before the Council. I do not know whether I shall be in order, in reference to what has fallen from the President, in bringing forward an alternative amendment that, instead of 5 per cent., a deduction be made of 10 per cent. on the cost of fire-extinguishing appliances."

The Hon'ble THE PRESIDENT said :—"I will ask the Hon'ble the Advocate-General to bring forward the amendment which he proposes, and I would ask the House to vote on both the amendments simultaneously, unless hon'ble members consider that course inconvenient."

The Hon'ble MR. WOODROFFE then moved by way of amendment that "ten per cent." be substituted for "five per cent."

He said :—"I hold in my hands a statement which was furnished to the Select Committee either by the Hon'ble Mr. Lee, or the Hon'ble Member in charge of the Bill, showing what would be the reduction on account of fire-appliances if the reduction were taken at 5 per cent. upon the cost, and what does the Council suppose this extraordinary concession amounts to? In the whole of Calcutta it will amount to Rs. 620, and if baled jute were further excluded, there would be an additional Rs. 758-8-9. Therefore, if the amendment of the hon'ble member is carried, then it comes to the question whether the deduction should be 5 per cent. or 10 per cent. Ten per cent. would give a certain measure of relief—and, as I understand, a material measure of relief—to the smaller warehouses, but nothing whatever to the larger warehouses and presses; still, in the interests of those smaller warehouses, I venture to put it to the Council that it will be proper to make an allowance of 10 per cent. on the outlay for appliances for preventing and extinguishing fires and not 5 per cent."

The Hon'ble MR. LEE said :—I will vote with the Hon'ble the Advocate-General, as I think his amendment will have the effect of relieving the smaller rather than the larger warehouses.

The Hon'ble DR. MAHENDRA LAL SIRCAR said :—"In my opinion every encouragement should be given to warehouses for making provision for extinguishing fires, and as I myself intended to bring forward the amendment which has been moved by the learned Advocate-General, I will support his motion."

The Hon'ble BABU GONESH CHUNDER CHUNDER withdrew his Motion.

The Hon'ble MR. WOODROFFE'S Motion was put and agreed to.

The Hon'ble Mr. Cotton said:—"Sir, with your permission obtained at the last meeting of the Council, I have the honour to move the amendment which stands against my name in respect of section 12 of the Bill. It is necessary for me briefly to explain the history of this section. As the law now stands, and as the Council are aware, licenses are granted by the Municipal Commissioners, and the same law which we are now repealing empowers the Municipal Commissioners to cancel or suspend the licenses of any warehouses. The complete power of cancelling and suspending licenses as well as of granting them, rests under the existing law with the Municipal Commissioners. The power of granting licenses has been modified in accordance with the provisions of this Bill. The Bill proposes a further modification in respect of the procedure to be followed in suspending or cancelling such licenses—a very much less important matter, I may say. As a fact, I do not believe that during the many years the Municipal Commissioners have administered this provision of the law, there has been any case in which they have cancelled a license. If there have been any such cases, they have been very few and far between, and this I know cannot be one of the matters in which the members of the Council would allege that the Commissioners have abused their powers. But as the power of granting licenses has been taken from them, it follows that the procedure for cancelling and suspending licenses must also be modified.

'Under the existing law' the Commissioners have the power of cancelling or suspending licenses in respect of which one or more of the conditions under which the license is held appear to have been broken, and also if the owner of a warehouse neglects to give notice of a change of occupation. And so it came to pass that, when the present Bill was being drafted and modifications in the procedure were agreed on, it was enacted that, whenever the Chairman of the Commissioners receives credible information that any of the conditions to which the license of a warehouse may be subject has been broken, he may apply in writing to the Magistrate, and, after proving his case and satisfying the Magistrate that such cancelment or suspension is necessary to prevent danger or injury, the Magistrate will then try the case judicially and decide whether the license shall be suspended or cancelled or not. But, Sir, I apprehend that in the Select Committee the fact was lost sight of that the conditions of the license are materially changed. Under the existing law a number of conditions are imposed which find no place in the present Bill, with the exception of two only: one is that a warehouse shall be liable to inspection; the other is that the annual fee shall be payable in respect of it. The other conditions have found their place as substantive offences to which penalties are attached under Chapter III of the Act; while one or two of the conditions have been relegated to the category of details to be specified in the application for a license, and if they are furnished in a way considered unsatisfactory by the Chairman, the application may be refused. There is no doubt that the first of the two conditions which remain in the Bill, namely, that the warehouses should be open to inspection, is a very important one; and that, if broken, it should render the license liable to be suspended or cancelled, as the case may be. But there are also other offences which may be committed by the owners of warehouses, such, for instance, as the offence specified in section 19 of the Bill, which imposes a penalty for preparing inflammable substances and exposing them on the roof of a building—one of the principal causes of fires in jute warehouses. If an offence of that character is committed, then it is eminently desirable that the license should be cancelled. This was one of the conditions under the old Act. It is no longer a condition, but is provided for as an offence with a penalty; and it seems to me that, in respect of this and other offences which may be committed by the owner of a warehouse, the Chairman of the Commissioners should be competent to move the Magistrate to adopt the procedure laid down in the Bill under this Act for offences committed under Chapter III.

"I may take this opportunity of drawing the attention of the Council to the fact that the duty of instituting prosecutions under the law is one which no longer rests with the Chairman of the Commissioners, or with the Commissioners in meeting. At present, under the existing law, the Inspector of Jute Warehouses is a servant of the Corporation. He is the executive officer responsible for seeing that the conditions of the license are complied

with, and for bringing to notice offences committed under this Act, and for instituting prosecutions before the Magistrate. At present, therefore, prosecutions are instituted by a subordinate of the Commissioners and with their authority. Under the Bill, as it is drafted by the Select Committee, the Inspecting Officer will be an officer to be appointed by the Commissioner of Police. He shall be a member of the Fire-brigade, but shall not be a member of any Police Force. He will, however, be under the orders and at the disposal of the Commissioner of Police. The executive control of warehouses passes from the Chairman of the Corporation to the Commissioner of Police. And therefore it is that this section 12, as proposed to be amended by me, is so drafted that, whenever the Chairman of the Commissioners receives credible information that a condition of the license has been broken, or that an offence is committed, he is authorised to lay this information before a Magistrate with a view to applying for the cancelment or suspension of the license. This information would, in the first instance, be communicated to the Chairman by the Commissioner of Police through the Jute Inspector, and the Chairman will then be in a position to move the Magistrate to take the judicial procedure contemplated by section 12 for suspending or cancelling a license.

"With this explanation, Sir, I have the honour to move that in sub-section (*1*) of section 12, after the words 'has been broken by the holder thereof' the words 'or that any offence for which a penalty is prescribed under Chapter III of this Act has been committed by any holder of a license' be inserted."

The Hon'ble Mr. Woodroffe said:—"I rise to support the Bill as it left the hands of the Select Committee. The conclusion at which they arrived was not obtained without considerable discussion and as much consideration as the members of the Select Committee could bring to bear upon it; and the conclusion to which they arrived was that the matters and things dealt with in the clauses relating to procedure are not matters which justified the suspension or cancellation of licenses, but are properly and sufficiently dealt with by imposing pecuniary penalties. The penalties, if hon'ble members will take the trouble to look at the Bill, are by no means light In truth, the Hon'ble Member in charge of the Bill desires to impose a double punishment; so that persons who commit any of the offences for which penalties are prescribed would be liable, in addition to those very serious pecuniary results, to cancellation or suspension of their licenses. The hon'ble member's proposed amendment is, I take it, intended to include offences under section 17, neglecting to notify change in occupation of warehouse; under section 18, giving false information respecting a license; under section 19, to which the hon'ble member referred, where the owner or occupier of a warehouse preparing or causing to be prepared or dried any inflammable substance on the roof of a warehouse is liable to Rs. 50; under section 21, using warehouse as a residence; under section 22, for bringing or using matches or artificial lights, and under section 23, smoking in a warehouse—offences which were liable to a penalty of Rs. 10. Persons committing any of the above offences would not only be liable to the very serious penalties provided in the Bill, but under the hon'ble member's amendment, be liable to have their licenses cancelled or suspended.

"I venture to submit to the Council that the conclusion arrived at by the Select Committee should not be so materially altered as the hon'ble member proposes to do by his motion. I ask therefore that the Council should uphold the clause as it left the Select Committee. That clause deals with matters in respect of which licenses may be cancelled or suspended. The conditions on which they are held are set out in the license. They are (*1*) the non-payment of the license fee, and (2) that which goes to the root of the whole matter, namely, the slightest attempt to prevent due and proper inspection by the officer appointed for the purpose. For the breach of these conditions, the Select Committee thought more severe measures should be resorted to, namely, the suspension or cancellation of the license."

The Hon'ble Mr. Lee said:—While I think, sir, that there ought to be some such power as exists now under the Fire-Brigade Act for the revocations of the licenses of habitual offenders, I cannot agree with the hon'ble members

in charge of the Bill that the duty of conducting prosecutions should be thrown on the Chairman of the Commissioners. There is no provision in this Bill to enable him to meet the expenses of criminal proceedings, and I don't know why they should be met from the general sanitary funds of this city."

The Hon'ble MR. WOODROFFE, rose to order, and asked the Hon'ble the President whether it was relevant to the motion whether the expenses of criminal proceedings should fall on the Corporation.

The Hon'ble MR. LEE said that was the reason why he was unable to support the hon'ble mover of the amendment, that it threw upon the Chairman of the Corporation the duty of prosecuting offenders with the view of cancelling their licenses. It has been explained by the hon'ble member in charge of the Bill that the inspection of warehouses has been removed from the hands of the Commissioner to those of the Commissioner of Police. If, then, any prosecutions are to be undertaken, let the Commissioner of Police pay for them.

The Hon'ble THE PRESIDENT said:—"With regard to the call to order by the Hon'ble the Advocate-General, the objection which the Hon'ble Mr. Lee has taken, seems to me to be an objection which he has a right to take, though I hardly see that it applies. If in his opinion the amendment would throw extra expenditure on the Chairman of the Corporation, it seems to me that he is not out of order in taking that objection."

The Hon'ble MR. LEE, continuing, said:—"Yes, Sir, this amendment if passed would throw extra expenses upon the Chairman of the Corporation, the expenses of the law Courts. It would be necessary for him to proceed when offences are committed under Chapter 3 of the Bill. It would occasionally be incumbent upon him to take proceedings under section 12 which he would not have to take as the Bill now reads. I think there is some slight misapprehension, for I am not sure whether I understand the learned Advocate-General right in saying that any person who commits the offences mentioned in sections 17, 18, 19, 21, 22 or 23 will be liable to have his license revoked or suspended. I do not find it so provided anywhere. [The Advocate-General:—"I did not suggest that. I said that if the hon'ble member's amendment be carried it might have that effect."] For this pecuniary reason, then, I record my vote against the motion."

The Hon'ble MR. LAMBERT said:—"It seems to me, as regards the matter which has fallen from the Hon'ble Mr. Lee regarding the cost of prosecutions, that no such cost will fall on the Commissioners. Section 12 merely applies to occasions in which the Chairman of the Commissioners may receive credible information, and that credible information will, I apprehend, be given to him generally by the Inspector of Warehouses. All that would be required of the Chairman of the Commissioners would be to determine, on receipt of information from the Inspector, whether he found it necessary to apply to the Magistrate for an order to suspend or cancel a license. If the information seemed to him to be sufficient, he would instruct the Inspector to apply to the Magistrate, and then the case would be proceeded with. If he considered the information insufficient, no further action would take place.

"As regards the motion now before the Council, it seems to me that section 2 as it now stands limits the class of offences for which a license may be cancelled, to a refusal to admit the Inspecting officer or for declining to pay the annual fee. The probability of the institution of prosecutions on either of these grounds is hardly worth considering. Regarding offences under the penalty clauses, by clause (2) of section 12 it is provided that the Magistrate shall not make an order suspending such license unless he is satisfied that it is necessary to prevent or obviate immediate danger or injury of a serious character. Even the discretion of the Magistrate is fettered by this clause. And it certainly seems to me that the offence for which a penalty is provided in section 19, which has been referred to, may possibly be of so dangerous a character that on a proper representation to the Chairman he might think it necessary that

the license be suspended, and the Magistrate in exercising his discretion under clause (2) of section 12 might think it necessary to pass an order to prevent immediate danger. On these grounds I shall support the amendment of the Hon'ble Member in charge of the Bill."

The Hon'ble MR. PLAYFAIR said:—"This is a section which was very carefully considered by the Select Committee; and I support the section as amended by the Select Committee, and the views set forth by the learned Advocate-General."

The Hon'ble MR. COTTON in reply said:—"I have only a word or two to say in reply. I can sympathise with the feelings of the learnd Advocate-General and of the Hon'ble Mr. Playfair, in desiring to give every protection to the owners of warehouses against having their licenses arbitrarily cancelled. I think, however, that there is very little risk of that in any case, because, as I observed to you just now, I doubt whether there is a record of any license having been cancelled by the Commissioners, but it is possible that the Chairman of the Corporation might desire to cancel a license. In such a case it will obviously be impossible for him to act in an improper way, owing to the extremely elaborate procedure which this Bill lays down. He must make a written statement which is laid before a Magistrate; the Magistrate would then issue a summons to the owner of a warehouse and would then try the case judicially, and even then he would not grant the order applied for by the Chairman unless he is satisfied that it is necessary to do so to prevent immediate danger or injury. I can hardly conceive of a procedure which is more elaborate and more calculated to prevent the arbitrary cancellation or suspension of a license.

"With regard to the financial difficulty to which the Hon'ble Mr. Lee referred, I must say it seems to me to be visionary. Under section 27 of the Bill, which is so drafted as to cover any legitimate charge against the funds of the fire-brigade, if any expense is incurred by the Chairman of the Commissioners in instituting cases under section 12 of the Act, it would legitimately fall on such funds. But I agree with the hon'ble the Commissioner of Police that such charges would be infinitesimal.

"At the suggestion of the President, I will propose a verbal amendment in the Motion I am laying before the Council, by specifying the sections of Chapter III referred to. I would add the words 'or to any offence for which a penalty is prescribed under sections 17, 19, 21, 22 and 23 of this Act has been committed by any holder of a license.'"

The Hon'ble THE PRESIDENT said:—"This is a motion which affects a question belonging to the police or the judicial side of the business, and therefore the restriction I imposed upon myself of not expressing my views as regards any question of imposition or distribution of taxation, does not apply, and I think it well that I should make one or two remarks on the subject. The proposal is, that the penalty which the Select Committee imposed on certain offences, should be considerably enhanced by the addition of the possible suspension or cancellation of the license. In one of these cases (section 17) I observe that the penalty which is provided by the existing law has been reduced from Rs. 100 to Rs. 10, and therefore it would seem as if an enhancement of the penalty would be contrary to the intention of the Select Committee. If, in its discretion, the Select Committee, in addition to the provision that the Magistrate may impose a penalty of so many rupees a day as long as the offence continues, had added a clause that, in the event of the offence being continued or repeated on (say) three occasions, the license may be suspended or cancelled, I should have seen no objection to that legislation. But as the Select Committee have not done that, and as no new or strong reason has been given in favour of the amendment, I fall back on the canon that the general rule we should follow is, that where no new light or no new considerations have been brought forward, it is well to support the Bill as it has been amended by the Select Committee; and therefore I am opposed to the Motion."

The original Motion being put, the Council divided:—

Ayes 2.	*Noes 10.*
The Hon'ble Mr. Lambert.	The Hon'ble Maharajah Ravaneshwar Prosad Sing Bahadur.
The Hon'ble Mr. Cotton.	The Hon'ble Maulvi Syed Fazl Imam, Khan Bahadur.
	The Hon'ble Mr. Playfair.
	The Hon'ble Babu Gonesh Chunder Chunder.
	The Hon'ble Mr. Wallis.
	The Hon'ble Dr. Mahendra Lal Sircar.
	The Hon'ble Mr. Lee.
	The Hon'ble Mr. Risley.
	The Hon'ble Mr. Allen.
	The Hon'ble Mr. Woodroffe.

So the Motion was negatived.

The Hon'ble Mr. Woodroffe, by leave of the Council, withdrew the motions of which he had given notice, that in subsection *(1)* of section 12 after the words "upon the holder of the license," the words "and in the case of an alleged breach of any of the conditions of the license" be inserted; also that after the words "be cancelled or suspended" the words "and in the case of the alleged commission by such holder of any such offence to show cause why the penalty prescribed for such offence should not be imposed upon him" be inserted, and that after the words "and may also" the words "in the first of the cases above mentioned" be also inserted.

The Hon'ble Babu Gonesh Chunder Chunder moved that in sections 22 and 23, after the word "warehouse" the words "used for the pressing or screwing of jute or cotton" be inserted.

He said:—"If you read sections 22 and 23 with section 21, it would appear that there is a prohibition against using as a residence a warehouse for jute or cotton only. The question is, whether it is possible to use a warehouse as a human residence without taking therein matches or artificial lights, unless duly and thoroughly protected, or without smoking therein. I submit that, if it is intended that a warehouse other than a jute or cotton warehouse should be allowed to be used as a human residence, then those restrictions should not be put upon them. But if that is not the intention, then the words which I propose should be inserted in this section."

The Hon'ble Mr. Woodroffe said:—"As a matter of fact I believe the words to which the hon'ble member has referred were omitted by mistake, and it appears to me that there is full reason for the suggestion he has made. But the question arises whether the omission is covered by the definition of 'warehouse' in section 3, clause 9, which is as follows:—'Warehouse means any building or place used for the storing or pressing or keeping of jute, cotton, oil, resin, varnish, pitch, tar, coir, hay, straw, rags, tallow, ship-chandlery, wood, or other inflammable substance or thing for the time being subject to the operation of this Act.' And there may be a question whether a warehouse which is used for nine months of a year only as a warehouse should be subject to any penalties. I would suggest that the words of section 21 be used in sections 22 and 23, by which a penalty can only be levied if at the time of the commission of the act jute or cotton be stored therein."

The Hon'ble Dr. Mahendra Lal Sircar said:—"If this Bill is passed, then hay and straw depôts will become warehouses. I know for certain, that the abominable *hookah* has been the cause of many dangerous fires, and I think that *hookahs* should not be allowed to be introduced into warehouses."

The Hon'ble Babu Gonesh Chunder Chunder in reply said:—"There is no law to prevent artificial lights and matches from being used in hay and straw godowns, and it will be very hard to introduce such a provision into the

Bill. Probably the owners do not live in them; but other people live there. The number of warehouses under the Act has been increased to a great extent, and it will be hard not to allow their being used as residences."

The Hon'ble MR LEE asked if he would be out of order if he proposed to add "straw and hay" to the motion. It would be in accordance with the precedent followed in the case of 'oil.'

The Hon'ble THE PRESIDENT said:—"I wish to point out to the Council the extreme inconvenience of springing upon the Council motions of this kind. I think I shall not be going beyond my proper position if I ask the Council seriously to consider, before coming to this Chamber, what they are going to move, so that it should be possible for them to hand in in writing the motion which they intend to propose before the discussion begins. In this case, two of the speakers have generally declared their unwillingness to include hay and straw depôts in these punitive provisions, and now one member desires that they should be included. I think it very inconvenient that such amendments should be brought forward in the middle of the discussion, when it was in the power of hon'ble members to bring them forward earlier, so that they might be placed on the List. I think it right to decline to allow this motion to be put before the House."

The Motions were put and agreed to.

The Hon'ble MR. WOODROFFE, by leave of the Council, withdrew the motions of which he had given notice, that in section 25 the words "shall rateably impose the annual fees payable for licenses under section 10 of this Act upon all warehouses, and" be omitted; also that in line 7, for the word "such" the word "the" be substituted, and that after the word "fees" the words "payable for a license under section 10 of this Act" be inserted.

The Hon'ble MR. WALLIS moved that in line 1 of section 26, for the word "may" the word "shall" be substituted.

He said:—"Although Rule 42 provides that 'amendments shall ordinarily be considered in the order of the clauses to which they respectively relate', I would beg, in moving the first amendment which stands in my name, to be allowed to refer to the other two amendments which I am to move, and which appear in the same section of the Bill. The object which it is desired to attain, is identical in each case; and the amendments will of course only be put to the Council in the order in which they appear on the List of Business.

"The first amendment, which I have the honour to move, is in line 1 of section 26, that for the word 'may' the word 'shall' be substituted.

"The objects which is desired to attain by the amendments, which I have the honour to move, are that the half per cent. rate on bastis and the one-eighth per cent. rate on the annual value of all houses and lands assessed under the provisions of the Bengal Municipal Act of 1884 and the Calcutta Municipal Consolidation Act II of 1888, as provided in the Bill, shall be levied in full, and shall form the basis of taxation for the up-keep of the fire-brigade.

"In support of this view I would like to refer to the Report of the Select Committee, in which the following remarks occur:—

'In view of the primary responsibility imposed upon the Commissioners, we have, by section 26 of the amended Bill, while exempting the owners or occupiers of a warehouse licensed under the Bill from further liability, empowered the Commissioners to levy the three following rates:—

(a) a two-and-a-half per cent. rate assessed on buildings or places used for the storage of inflammable substances, which the Government may declare liable to the payment of this rate; the amount, however, to be levied in any one case not to exceed Rs. 100:

(b) a half per cent. rate assessed on basti lands:

(c) a general one-eighth per cent. rate on all houses and lands assessed under the Municipal Acts affecting the Municipalities concerned.'

"It will be remembered by the Hon'ble Member in charge of this Bill, and also by the other members of the Select Committee, that at the several meetings

when this question of apportioning the mode of differential taxation was considered, on each occasion I pressed that the proper way to proceed was to first decide what portion of the cost of the brigade should be met by the general tax-payer ; this, I urged; would give a known quantity, as it would be levied on the rates and taxes, and any balance required should be rateably imposed on the industries coming under the definition of warehouses and other buildings, for the storage of goods of a less inflammable class.

"I hold in my hand, Sir, a paper in original, which I took to several of the meetings of the Select Committee, and which I handed to the Hon'ble Mr. Cotton and to the learned Advocate-General. This paper shows, Sir, that I assumed the cost of the brigade to be a maximum of Rs. 75,000. It suggests:—

	Rs.
'1st.—That a rate of ⅛ or 2 annas per cent. should be levied on all houses and lands as they are assessed for municipal taxation, and I took roughly the value of such houses and lands as Rs. 1,80,00,000 which would realize about	22,500
'2nd.—That a rate of ½ or 8 annas per cent. should be levied on all basti lands, which, taken at Rs. 31,16,563, the valuation given by the Hon'ble Mr. Lee on the 19th of December, would realize about	15,000
Total ...	37,500'

"I think, Sir, I may venture to say that it was very much on the lines suggested that the Committee came to a decision as to the form of taxation which should be adopted, and in agreeing to the section of the Bill, which is numbered 26, and to the clauses (*b*) and (*c*) of that section, I certainly thought that they could not possibly be construed in any other way; but I find from the statement which was handed to hon'ble members at the meeting of the 4th of February that at the foot of that statement the rate on bastis is taken at 4 annas per cent., and that on pucca buildings at one-and-a-half annas per cent. According to my views, and I think some of my colleagues are of the same opinion, this is wholly contrary to what we anticipated, as we were under the impression that the basis of taxation was to be the charging of a rate of 8 annas per cent. on bastis and a two-anna per cent. rate on the general tax-payer.

"As shown in my original paper, the sum which would be realised from this form of taxation amounted to Rs. 37,500, and this works out very closely if the valuation of bastis and houses given us by the Hon'ble Mr. Cotton are taken. I find the statement shows that bastis are—

	Rs.
Valued at Rs. 31,14,616, which at 8 annas per cent. would realize	15,572
That the valuation of pucca buildings is given at Rs. 1,51,39,953, which at 2 annas per cent. would realize	18,924
To this was added receipts under section 26, clause 1(*a*) ...	750
Then we have to take receipts from rates levied from Cossipur-Chitpur	500
Ditto ditto from Manicktolla ...	100
Ditto ditto from Howrah ...	1,000
or a total of ...	36,846

as against Rs. 37,500, estimated by me some time ago when the question of taxation was being considered in Select Committee.

"I have taken all the figures given in the statement as correct, and I think the closeness of my estimate and that of the figures just stated shows clearly what was the intention of the Committee; but the statement referred to reverses the order of things, and proposes that only a certain portion of the rate leviable under the Bill on bastis and on the general tax-payer shall be taken, and still leaves the larger share to be borne by the industries coming under the definition of warehouses.

"One of the main objects for which legislation has been resorted to in this instance was the reduction of existing taxation on the jute industry, and for the more equitable distribution of taxation for the upkeep of the brigade. I do not anticipate that the rate of 2 annas per cent. to be levied on the general tax-payer will be objected to by any of the members of this Council, as it has been admitted on all sides that the general public do undoubtedly derive considerable benefit from the brigade. The tax of 8 annas per cent. on bastis is not excessive, considering the danger these places offer, and the difficulty which is experienced in preventing fires occurring in these places from spreading.

"It is perfectly true that the residents of such places belong to the poorest classes, but the proposed taxation is small; and it is better that they should pay a small sum annually for the upkeep of an institution which may some day be the means of saving all the property they possess in the world.

"I was glad to learn from the speech made by my colleague the Hon'ble Babu Gonesh Chunder Chunder, at the meeting of the Council held on 18th February last, that he, too, read the clauses (*b*) and (*c*), as I take them, for, if I understand him rightly, he gave us his reason for voting for an all-round rate that the inhabitants of bastis would only, under that proposal, be called upon to pay a tax equal to a quarter per cent., instead of half per cent., as provided in the Bill. For the reasons stated, I beg to move that in line 1 of section 26, for the word 'may' the word 'shall' be substituted."

The Hon'ble MR. COTTON said:—"It appears to me that this amendment is open to objection on the principle which you yourself, Sir, prominently brought to the notice of the Council a few minutes ago, namely, that it introduces a radical change in the Bill as approved by the Select Committee, and has been introduced into this Council without any new considerations having been urged on behalf of it. If there were no other reason than this, I would ask you to use your influence in rejecting this amendment; for I think, as it is now put by the hon'ble member, this amendment deals very hardly and unfairly by the rate-payers of this city. There is a very wide difference between 'may' and 'shall.'

"The intention of the Select Committee (I speak for myself only, but I understood it to be their general opinion) was that the rates introduced into this Bill should be the maximum rates which might be worked up to on an emergency. I never understood that it was to be compulsory on the Municipal Commissioners to impose these rates either on basti owners or on the general community; and I think it is desirable that the votes of the Council on a matter vitally affecting the interests of the rate-payers of this Metropolis and materially affecting the Municipal Commissioners of the city should not be taken until the Commissioners themselves have had an opportunity of expressing their views on this compulsory taxation or proposed compulsory taxation. They have had every opportunity of commenting on the form of taxation which is proposed by the Bill as drafted by the Select Committee, that is to say, levying a sum up to this rate as a maximum; and it is well known that they are not in favour of it. On that point, I have no sympathy with their objections; but I think that the Commissioners and the rate-payers of this City may strongly object that at a meeting of this Council, without their being aware of the fact, a provision should be passed into law imposing compulsory taxation according to certain limits, which, as I shall show, would effect a very material increase in the burden thrown upon the town. If a half per cent rate is levied on bastis, and one-eighth per cent. on the general community at a maximum, the total will be about Rs. 35,500 in Calcutta alone. I have no data before me to say what the amount will be in Howrah or the Suburbs, but it may reasonably be assumed that it would amount to about Rs. 5,000 more. In other words, the hon'ble member's amendment would impose a compulsory rate of Rs. 40,000 for the maintenance of the fire-brigade, leaving jute and cotton and other warehouses and all miscellaneous receipts to make up the remaining Rs. 20,000 or less required for maintaining the brigade.

"The proposal, in fact, entirely reverses the policy on which this Council has hitherto proceeded. It has hitherto been assumed that the nucleus of the fire-brigade fund should be the fees levied from warehouses as defined in the Bill,

which, under the law at present in force, pay a total taxation of more than Rs. 80,000; Rs. 68,900 being levied from jute and cotton warehouses only, and the sum of Rs. 13,000 or Rs. 14,000 from wood, hay, straw, &c., which are now brought under the Act. The Bill, as it at present stands, will greatly relieve both jute warehouses as well as hay and straw depôts which are highly assessed under the present law. The new law, so far as we have approved of this Bill, declares that the fees on such warehouses should not exceed one-half of the total cost of the fire-brigade, that is to say, it would not exceed more than Rs. 50,000 as a maximum. If the change you are now asked to accept is accepted by the Council, it would arbitrarily reduce the amount so levied to about Rs. 15,000 or Rs. 16,000, and there is no reason whatever that I can see why this large reduction should be made.

"This is, by far, the most important amendment which has been proposed in the Bill during the course of this discussion. It radically affects the principle upon which we have hitherto gone. That principle is that the nucleus of the fire-brigade fund is made up by the fees on and licenses on warehouses, and that what more is wanted to meet the cost of the fire-brigade is to be supplied by taxation on the general public; whereas what is proposed by the hon'ble member is that the nucleus should be made up from general taxation, and what remains over should be supplied by fees on warehouses. That entirely reverses the principle of the Bill. It illustrates no doubt the great difficulty there is in passing a Bill of this nature through a Council where interests are so conflicting. It indicates also the wide difference of opinion which existed while the Bill was under discussion in the Select Committee. No one who was present at the meetings of the Select Committee can be surprised at the wide differences of opinion expressed by hon'ble members when they afterwards met in Council to discuss the clauses of the Bill. That Bill, as it left the hands of the Select Committee was, however, I understood, except in details, generally accepted by the majority of that Committee. It was at least accepted in its main point—the main principle of the Bill which relates to the incidence of taxation. If the Hon'ble Mr. Wallis's amendment is carried, it will revolutionize the Bill as it at present stands; and I hope the members of this Council will think twice and three times before they commit themselves by accepting this amendment."

The HON'BLE MR. WOODROFFE said:—"If the motion of the Hon'ble Mr. Wallis was in opposition to the views of the Select Committee, guiding myself by the observations that have fallen from the President during the course of these debates, I should have felt great hesitation in supporting it. But the amendment is not, as I understand it, in opposition to that view. Before the report of the Select Committee was made, we were furnished with details showing what the annual cost of the fire-brigade was. We further received the assurance of the hon'ble member, the Commissioner of Police, that the cost of maintaining the fire-brigade was practically of a stationary character, and that there was no ground for anticipating that it was likely materially to vary in the time to come. Proceeding on the principle which commended itself to the majority of the Select Committee, namely, that there should not be a general rate, and the Hon'ble Mr. Playfair and myself accepted as securing the largest measure of relief thus obtainable, the principle which the majority of the Select Committee arrived at that it would not be fair or just, in view of the reasons which led to the adoption of this and other matters which were before the Committee, to subject jute and other industries to a tax exceeding 50 per cent. I was at one with the hon'ble mover in this matter. Speaking for myself, I in accord with the hon'ble mover understood that it was as an accepted thing that the taxes leviable under section 26, clauses (*b*) and (*c*), were to be imposed, and figures were laid before us which showed that if they were so imposed, then that which the Bill aimed at would be effected, namely, that there would not be imposed on the jute industry a liability exceeding 50 per cent. We were given to understand that, as expressed in section 24, the Commissioners were, in the first instance, to pay the whole cost of the fire-brigade, and that they were, for the purpose of providing the cost of the fire-brigade, over and above the amount

recoverable as license fees, and with the view of keeping down those fees to the limit proposed to impose certain rates. But to my utter surprise, at the first meeting in this Council, there was handed a statement by the Hon'ble Member in charge of the Bill, showing that the principle adopted by the Select Committee was to be departed from, namely, that the main portion of the expenditure incidental to the fire-brigade was to be taken from the jute and other industries, and that there was to be a much smaller amount taken from those other sources provided in the Bill. Now, Sir, the Select Committee presented their Report, and the views of the Select Committee are embodied, I presume, in that Report; and they deal with this matter in this way. In paragraph 3 they say—

'We were unanimous in the opinion that the Commissioners should be made primarily responsible for the cost of the fire-brigade, and by a majority have decided that the owners or occupiers of warehouses should be liable to contribute, in the shape of license fees, an amount which shall not exceed one-half of the charges.'

"I remember well the discussion which took place on that part and of the Report and which led to the alteration of the draft by the insertion of the words 'shall be liable to contribute half the charges' to the shape in which it now is, namely, 'shall not exceed one-half of the charges.' Then the Report went on to say in paragraph 4:—

'In view of the primary responsibility imposed upon the Commissioners, we have by section 26 of the amended Bill, while exempting the owners or occupiers of a warehouse licensed under the Bill from further liability, empowered the Commissioners to levy the three following rates:—

(a) a two and-a half per cent. rate assessed on buildings or places used for the storage of inflammable substances, which the Government may declare liable to the payment of this rate; the amount, however, to be levied in any one case not to exceed Rs. 100;
(b) a half per cent. rate assessed on basti lands;
(c) a general one-eighth per cent. rate on all houses and lands assessed under the Municipal Acts affecting the municipalities concerned.'

"That that was the plain and obvious meaning of the section of the Bill now under consideration is manifest from the observations of the Hon'ble Babu Gonesh Chunder Chunder, who was not a member of the Select Committee, to which the Hon'ble Mr. Wallis has referred. [The Hon'ble Mr. Cotton said:—"Does the learned Advocate-General interpret the word 'empowered' to mean 'bound?'"] I do not. The words are of an enabling character. 'May' is, however, not frequently read as 'shall.' But when to my astonishment I found from the statement put into my hands that, instead of a rate of 8 annas per cent., only 4 annas per cent. was taken as the rate on bastis valued at Rs. 31,14,616, and one-and-a-half anna per cent. rate was taken on pucca buildings, valued at Rs. 1,51,39,953, and by so doing to shew that the amounts obtainable from these rates was, when taken with the receipts from license fees, insufficient to meet the sum of Rs. 60,000 put down as the estimated cost of the fire-brigade. The consequence was that by reducing the percentage on basti rates by one-half, and by taking the general rate at 1½ annas per cent. instead of 2 annas per cent. on pucca buildings, there is a most serious difference shown. The proceeds of the two totals come to only Rs. 24,250, and the argument was then put forward in Council that there was only Rs. 24,250 available, and that the license fees on warehouses, &c., in Calcutta, Cossipur-Chitpur, &c., would only amount to Rs. 29,000, and so there would not be sufficient to provide for the cost of the fire-brigade. When, as a matter of fact, if the principle of the Bill be taken, and it were made obligatory on the Commissioners to impose the taxes specified in the Bill, then there would certainly not be imposed on the jute and other industries a sum exceeding 50 per cent. of the cost of the fire-brigade. I am in accord with the Hon'ble Mr. Wallis in considering that the basis on which we proceeded was that there was to be this taxation on bastis and pucca buildings, and I for one was not prepared for this mode of dealing with it. It seems therefore to be advisable that the Bill should be amended in the way proposed by the hon'ble mover of the amendment. I accordingly support the motion of the Hon'ble Mr. Wallis."

The Hon'ble Babu Gonesh Chunder Chunder said:—"I think that both my hon'ble friend Mr. Wallis and the learned Advocate-General are under a mis-

apprehension in supposing that I said that in construing section 26 the word 'may' should be read 'shall' in the speech which I made the other day regarding basti owners; what I meant to say was that, under the provisions of this Bill, hut-owners were liable to pay to the extent of 8 annas per cent., and the learned Advocate-General's motion if carried would limit their liability to the extent of 4 annas only: it was better that we should support a measure which would reduce the liability of hut-owners. But I never, by what I said on that occasion, intended to convey the idea that I read the word 'may' in this section as 'shall.'

"As regards the principle of raising this tax, although I was not a member of the Select Committee, I understood the principle to be this: that the jute trade should not be made to pay the whole cost of the fire-brigade as it had hitherto done, but that the Commissioners, who had hitherto had charge of the payment of the expenses of the fire-brigade, should retain that power in their hands; that is to say, they should be primarily responsible to pay the cost to the Commissioner of Police, and they should recoup the expense which they had incurred not in the first instance by raising the taxation provided for in the Bill, but by raising funds according to the directions in the Act from jute-owners, and then by supplementing it by a tax on the general community. That I take to be the principle of the Bill. What the Hon'ble Mr. Wallis now proposes seems to be a new principle, and I therefore cannot support his amendment."

The Hon'ble Mr. Lee said:—As a Member of the Select Committee I wish to say that my remembrance of the views expressed at the meeting of the Select Committee are in strict accord with the memory of the hon'ble member in charge of the Bill, that is to say, I thought it was clearly understood that the maximum rate which we fixed as leviable upon warehouses would be in practice levied up to one-half of the cost of the fire-brigade. The majority said let it be not more than one-half. Let jute, which has now been paying 120 per cent. of the cost, have hay, straw, wood, &c. to assist it, and then let them contribute up to one-half the cost, and let the rest be distributed among the general rates. If this motion were carried it would be worse than if the original motion of the Hon'ble the Advocate-General had received the approval of the Council. The figures quoted by the Hon'ble Mr. Wallis are quite correct. They show as liabilities and charges at maximum rates on buildings and lands in Calcutta alone the sum of Rs. 34,500, and adding what would be received from the other municipalities, it would make a total of Rs. 37,300, leaving out of Rs. 60,000 (which is the cost of maintaining the fire-brigade) the sum of Rs. 22,700 to be collected from all warehouses, and of that sum nearly one-half would be paid by other warehouses than jute; so that we have about Rs. 11,000 to be paid by jute warehouses which last year paid over Rs. 68,000.

As regards Calcutta, I have said that it would have been better if the original proposal of the learned Advocate-General had been carried than if this amendment is carried, because we should then not have lost the whole or even up to Rs. 8,000 which we will now lose from hay, straw, wood, &c. We should have collected from them Rs. 13,000 as before, and we should have been able to apportion the rates in a way that would have been least oppressive. If the proposal had been that Cossipore and Chitpur should pay for the cost of its branch of the fire-brigade which is for yearly maintenance alone about Rs. 7,000, and that Howrah should similarly pay its branch, which also amounts to about Rs. 7,000 (and these figures in each case omit the cost of the capital outlay and charges at head-quarters), and that Calcutta should pay the rest, then the incidence of taxation on Calcutta would not have been so heavy as it would be if the Hon'ble Mr. Wallis's motion were carried.

But there is one point which has been omitted from view, and that is that the assessable value of Calcutta is an increasing value, and therefore in a few years the contribution from warehouses would decrease. The warehouses undoubtedly would be increasing in number, and we should have the absurdity of their contributions being in inverse ratio to the expense and trouble thrown upon the fire-brigade by such warehouses. I have not the least doubt that we should stand by the report of the Select Committee in this case."

The Hon'ble Mr. Playfair said:—"I endorse the views expressed by the hon'ble member who moved this amendment. I understood the sense of the Select Committee to be that the municipalities should levy a rate of one-eighth per cent. on the annual value of houses and lands, and half per cent. on bastis. The Hon'ble Mr. Cotton has remarked that there is a wide difference between the words 'may' and 'shall,' but I was informed when serving on the Select Committee that the legal value of the two words, as applied to section 26 of the Bill, is the same; otherwise I should have made an energetic protest at the time against the use of the word 'may.' It was not until the issue of statement A to members of the Council by the Hon'ble Member in charge of the Bill that his personal ideas of the permissive character of section 26 became known to me. I beg leave to confirm what was said by the learned Advocate-General that that statement formed no part of the papers considered by the Select Committee. I therefore support the amendment, as it correctly embodies what I understood to be the decision of the Select Committee. I feel bound, however, again to express my regret that the Bill does not level up taxation upon the richer for the benefit of the poorer classes of the communities protected by the imposition of an infinitesimal all-round rate, which would not be more than a quarter per cent. on buildings and bastis alike."

The Hon'b'e Mr. Lambert said:—"As a member of the Select Committee I desire to say that it was not present to my mind that there should be afforded to the owners of warehouses, and especially to the jute trade, the measure of relief which is now contemplated by the amendment of the Hon'ble Mr. Wallis. Under the existing law the jute trade paid 120 or 125 per cent. of the expenses of the fire-brigade, amounting to Rs. 68,000 or Rs. 70,000. The cost of the fire-brigade is now about Rs. 58,000, and I informed the Select Committee that it was not likely largely to increase. I stated that it would in all probablity be about Rs. 60,000, and certainly it was present to my mind that the jute industry, aided by the other industries which are called dangerous, should bear one-half the cost of the brigade. By the words "primarily responsible" which appear in the Report of the Select Committee, all that I understood was that the Commissioners would be bound to pay to the Commissioner of Police when he presented his budget the means to meet the cost of the fire-brigade I did not understand that the Commissioners would first levy maximum rates, and then that whatever deficit existed would be made up by fees from warehouses. On these grounds I will certainly vote as I understood the intention of the Bill to be."

The Hon'ble Dr. Mahendra Lal Sircar said:—"That not having been on the Select Committee, I cannot say what was the policy which guided their deliberations, nor is it at all necessary to ascertain whether the amendment of the Hon'ble Mr. Wallis is in accordance with, or in opposition to, that policy, whatever that might have been. The simple question before the Council is, do lands, other than basti lands and houses, other than warehouses, require the protection of the fire-brigade? I think it has been admitted by every one in this Council that they do not; and therefore the owners of these lands and houses should not be taxed at all, if possible, or, if taxed, they should be taxed in the smallest degree. The Bill places the tax on these at one-eighth per cent.; but even if you make it one-and-a-half annas per cent., it will not be fair, and, therefore, so far oppressive. For these reasons I am entirely opposed to the amendment of the Hon'ble Mr. Wallis, and I cannot see why the Council should go beyond what the Select Committee has provided."

The Hon'ble Mr. Wallis said:—"With reference to what has fallen from the last speaker, I think he is mistaken when he states that it is admitted by every member of this Council that bastis and houses other than warehouses in no way require the protection of the fire-brigade; the history of the case is very different, for it is admitted that the general public do derive considerable benefit from the brigade, and especially so the residents in bastis. I hold in my hand a letter from the Commissioner of Police to the Government of Bengal, dated the 26th of December 1890, in which he clearly shows

the danger bastis offer to the town and the difficulty which is experienced in preventing fires in such places from spreading. It is not necessary for me to read this letter as it was referred to by one of the hon'ble members in a previous debate on this question, but I only put it forward to show how necessary a fire-brigade is for affording security to the town from conflagrations in bastis."

The Motion being put, the Council divided:—

Ayes 4.	*Noes* 8.
The Hon'ble Mr. Playfair.	The Hon'ble Maharaja Ravaneshwar Prosad Sing Bahadur.
The Hon'ble Mr. Wallis.	The Hon'ble Maulvi Syed Fazl Imam, Khan Bahadur.
The Hon'ble Mr. Risley.	The Hon'ble Babu Gonesh Chunder Chunder.
The Hon'ble Mr. Woodroffe.	The Hon'ble Dr. Mahendra Lal Sircar.
	The Hon'ble Mr. Lee.
	The Hon'ble Mr. Lambert.
	The Hon'ble Mr. Cotton.
	The Hon'ble Mr. Allen.

So the Motion was negatived.

The Hon'ble Dr. Mahendra Lal Sircar moved that clause (*a*) [with its proviso] of section 26 be omitted.

He said:—"I have deemed it my duty to move the omission of clause (*a*) of section 26, as not only unnecessary, but also as undesirable. The clause had no place in the Draft Bill, and the Select Committee have given no justification for its insertion in the amended Bill. The ostensible object of the clause is to create a source of raising funds. Now, Sir, we have provision for funds in specifically defined sources of revenue, and these are license fees from warehouses and rates from bastis and dwelling-houses. And particular care has been taken to see that these sources are competent to meet the requirements of the fire-brigade. Hence, Sir, I maintain that an additional source of revenue is unnecessary, especially when that source is undefined and uncertain. We must remember that when we are legislating for the taxation of special trades, it should be our duty to define the limits of taxation with the utmost clearness and precision; and it has been well said that that duty becomes imperative when the taxation is for a single particular purpose.

"It may be urged that the clause is intended not so much for the purpose of raising funds as for the purpose of enabling Government to discover inflammable substances not defined in section 3. But, Sir, there is a section, viz., section 41, under which 'the Local Government may, on the recommendation of the Commissioners in meeting, declare any building or place used for the storing, pressing or keeping of any substance or thing other than those specified in section 3, clause (*9*), of this Act, shall be a warehouse within the meaning of, and be subject to the operation of, this Act.' In this section we have provision for the detection of substances other than those specified in section 3. Where, then, is the necessity of making another provision for the same purpose?

"It may be contended that, if discretionary power is given to the Commissioners for discovering inflammable substances other than those already specified, why should not the same power be given to the Local Government in addition? What harm is there in doing so? To this my reply is, why then legislate at all? Why encumber the Act with definitions of inflammable substances? Why not leave these things to the discretion of the Commissioners, or, best of all, to that of the Local Government?

"For my part, I must confess that I am not for giving discretionary power even to the Commissioners. But if that cannot be avoided, I must beg leave

to point out that the power given to the Commissioners has been very wisely restricted to one of recommendation only, the final decision resting with the Local Government. Besides, even this power of recommendation is given to the Commissioners in meeting, which makes a world of difference between absolute power and power so modified. In meeting, the Commissioners will have to discuss any recommendations they may think of making. The representatives of the citizens of Calcutta and the public of Calcutta will have ample opportunity of judging for themselves, before any recommendation can be sent in. Hence the chances of abusing this discretionary power will be infinitesimal.

"But of quite a different character, is the power which the Bill proposes to give to the Local Government. Here the power is absolute; and speaking with the utmost deference before the head of the Government, I may ask what guarantee is there that that power may not develop or rather degenerate into arbitrary power? And when such is the case, then, in addition to the Act which this Bill will become when passed, we may have no end of Acts of a different nature altogether. In fact, in my humble judgment, the clause in question, if retained, would virtually give to the Local Government power to make law without the legislature, which the instinct of modern times feels to be far from desirable.

"Lastly, Sir, I beg to point out that while we have in the clause under consideration provision of an undefined, uncertain, and therefore arbitrary character, for widening the area of taxation, there is no provision whatever for reducing the amounts of the taxes actually defined; and this, it must be admitted, is far from equitable.

"For these reasons, Sir, I look upon clause (*a*) of section 26 as not only unnecessary, but undesirable and objectionable. I would, therefore, move for its omission."

The Hon'ble MR. COTTON said:—"This clause finds its way in the Bill owing to my instrumentality. Under the law as it at present stands, 'jute' and 'cotton' are defined to mean jute and cotton which have not been pressed or screwed as if for shipment. Under the Bill, 'jute' means raw jute, and 'cotton' means raw cotton. Absolutely all forms of pressed jute are excluded from the operation of the present Bill. Now it seems to me very fair and reasonable that pressed jute should be excluded from the category of jute kept in warehouses. But I was not satisfied and I am not satisfied that pressed jute as it comes to Calcutta is not in many cases an inflammable material, of such nature that the buildings in which it is stored should not be specially assessed to a tax for the maintenance of a fire-brigade. There are also many other commodities of a very doubtful character which are not of the eminently inflammable character specified in clause (*9*) of section 3, or which could properly be included by the Lieutenant-Governor in that clause according to the powers vested in him, on the recommendation of the Commissioners in meeting, by a subsequent section of the Bill. It seems to me very possible that oil, of which we have heard so much to-day and which I am far from satisfied is of a non-inflammable character, would appropriately come under clause (*a*) of section 26; and there are many other materials which, although not so inflammable as jute or cotton, or hay, straw, &c., are sufficiently inflammable to make them liable to the payment of a special tax. That is why this provision found its way in the Bill. The rate leviable in such cases would be two and-a-half per cent. only on the assessable annual value, and the limit of taxation in any case is fixed at Rs. 100 in order to prevent an excessive rate being levied. It was intended to draw a distinction between commodities of an eminently inflammable character and those which are less inflammable, and therefore power is reserved, in the hands of the Government, to meet special cases."

The Hon'ble MR. WOODROFFE said:—"This matter of baled jute, to which the hon'ble member in charge of the Bill has referred, was considered by the Select

Committee, who reported to the Council that they had considered the advisability of bringing baled jute within the provisions of section 26 of the amended Bill, but had determined not to do so."

The Motion was put and negatived.

The Hon'ble Mr. Wallis, by leave of the Council, withdrew the motion of which he had given notice, that in clauses (*b*) and (*c*) of section 26, for the words "not exceeding" the word "of" be substituted.

The Hon'ble Babu Gonesh Chunder Chunder, by leave of the Council, withdrew the motion of which he had given notice, that clause (*c*) and sub-section (2) of section 26 be omitted.

The following notices of amendment were by leave withdrawn:—

The Hon'ble Mr. Wallis to move that in clause (*b*) of section 26, for the words "not exceeding" the word "of" be substituted.

The Hon'ble Babu Gonesh Chunder Chunder to move that clause (*c*) and sub-section (2) of section 26 be omitted.

The Hon'ble Mr. Wallis to move that in clause (*c*) of section 26, for the words "not exceeding" the words "of" be substituted.

The Council was adjourned to Saturday, the 11th instant.

Calcutta;
The 14th March, 1893.

C. H. REILY,
Assistant Secretary to the Government of Bengal,
Legislative Department.

RESOLUTION ON THE REPORT ON THE WORKING OF THE EDEN SANITARIUM FOR THE YEAR 1892.

MUNICIPAL DEPARTMENT—MEDICAL.

No. 947Med.

Calcutta, the 14th March 1893.

RESOLUTION.

READ—

The report on the working of the Eden Sanitarium for the year 1892.

Read also—

Report for the year 1891 and the Resolution recorded upon it.

The following table compares the admissions into the Institution during the past eight years:—

	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
Patients ...	192	273	344	336	370	316	356	370
Relatives and attendants	68	120	84	107	122	86	151	44
Total ...	260	393	428	443	492	402	507	414

The number of patients admitted in 1892 was the same as in 1889, which had been the highest on record, but there was a considerable falling off in the number of relatives and attendants. The number of these latter is said to vary according to the nature of the cases admitted, and it is further explained that the unattractiveness of the past season operated to reduce the number of visitors other than invalids. The increase in the number of the sick testifies that the benefits which the Institution is capable of conferring on invalids are becoming more fully appreciated. Orders have recently been issued sanctioning a grant of Rs. 2,000 to the Inspector-General of Civil Hospitals to meet the cost of sending convalescent European sailors from the Calcutta and Howrah Hospitals to the Sanitarium, and if this amount is properly utilized, the Lieutenant-Governor trusts that it will add materially to the usefulness of the Institution.

2. Of the four classes into which patients are divided in the Sanitarium, the second is the most popular, judging from the results of the past four years which are exhibited in the following table:—

	1889.	1890.	1891.	1892.
First class	93	57	75	59
Intermediate class	103	79	123	90
Second class	171	164	169	146
Third "	125	102	140	119
Total	492	402	507	414

3. The Sanitarium, as usual, was open from the 1st March to 30th November. Of the 370 persons treated, 298 were adults—172 males and 126 females. The number of children treated has steadily increased from 46 in 1890 and 58 in 1891 to 72 in 1892. The daily average number of persons residing in the Institution, including 12 patients from the Calcutta hospitals, who occupy free beds, was 35·8, against 44·18 in 1891 and 36·03 in 1890. The average number of days spent in the institution by each patient was 34·24, against 39·08 in 1891 and 27·3 in 1890. By far the largest number of persons admitted into the Sanitarium were suffering from malarial fever or its effects, more

than 50 per cent. of the total admissions being due either directly or indirectly to this cause. Forty surgical operations were performed during the year, against 35 in the preceding year, all of which were successful. There were 8 deaths during the year—2 due to dysentery, 1 to cancer, 1 to disease of the liver, 3 to diseases of the nervous system, and 1 to bronchitis. Most of these cases were in an advanced stage of disease when admitted.

4. The total income of the year amounted to Rs. 31,524 (against Rs. 38,665 in 1891), but this amount apparently includes a sum of Rs. 150 due from patients still outstanding. The details of receipts are Rs. 30,047 received from patients, Rs. 1,060 subscriptions, Rs. 207 interest, and Rs. 59 miscellaneous receipts. The falling off in receipts was due to the smaller number of friends and attendants admitted during the year. The total expenditure amounted to Rs. 31,307 (against Rs. 34,249 in the previous year), and the year closed with a credit balance of Rs. 7,918.

5. A fund was started during the year with the object of providing a free cot for children needing a change to the hills, but the amount raised was not sufficient to form a permanent endowment. The Lieutenant-Governor hopes that the effort will not be abandoned, as the known suitablity of the Darjeeling climate for sick children would render such an institution most useful. The cot was occupied from 23rd June to 4th November.

6. The Lieutenant-Governor has noticed with satisfaction that the superior establishment attached to the Sanitarium worked well during the year. His thanks are due to the Superintendent and to the Committee of Management for the very efficient administration of the Institution.

By order of the Lieutenant-Governor of Bengal,

J. A. BOURDILLON,

Offg. Secretary to the Government of Bengal.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 11th March, 1893.

Division	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.					
Burdwan Divn.	1	Burdwan Kalna Katwa Raniganj	March 11, '93	1·16 0·44 0·65 0·15	Weather—very cloudy and cool. Considerable damage done to potato and *rabi* crops. Lands being ploughed. Prices of common rice:— Srs. Sadar ... ... 11 to 13 } per rupee. Kalna ... ... 10 to 13 } Katwa ... ... 13 } Raniganj ... ... 13 }
	2	Bankura Vishnupur	,, 11, '93 ...	0·31 0·45	Weather—cloudy. Lands are being ploughed. Sugarcane pressing going on. Fodder and water sufficient. No cattle disease reported. Rice selling at 11¼ seers per rupee both at Sadar and Vishnupur.
	3	Birbhum Rampur Hát	,, 11, '93 ...	0·63 0·31	The few crops on ground are doing well. Recent rain will assist early ploughing. Fodder and water plentiful.
	4	Midnapore	,, 11, '93	0·15	Weather—hotter and occasionally there is a little rain. Ploughing is being done everywhere. Prices of common rice:— Srs. Sadar ... ... 12½ } per rupee. Contai ... ... 13 } Tamluk ... ... 12 } Garhbeta ... ... 11 }
	5	Hooghly Serampore Jahanabad	,, 11, '93	0·29 0·19 0·13	Weather—cool and cloudy. *Rabi* crops and potatoes considerably damaged by the late rain. Outturn of potatoes at the Sadar is expected to be about 8 annas. There is difficulty in getting fodder and water in Pandua and Dwarbasini. Cattle-disease reported from Dwarbasini, Dadpur, Magra, Pandua, Palva and Balagarh. Prices of common rice:— Srs. Sadar ... ... 11 } per rupee. Serampore ... ... 10 to 11½ } Jahanabad ... ... 11½ to 12½ }
	6	Howrah Ulubaria	,, 11, '93 ...	0·10 0·16	Weather— warmer than before. Wet towards the end of the week. Reaping of *khesari* finished. Condition of cattle good. Fodder and water-supply sufficient. Price of rice 11 to 11½ seers per rupee.
Presidency Divn.	7	24-Parganas	,, 11, '93	0·24	Weather—cloudy. Prospects fair. Ploughing going on. No cattle-disease. Water and fodder sufficient. Prices of rice:— Srs. c. Sadar ... ... 10 to 14 8 } per rupee. Basirhat ... ... 11 7 } Dum-Dum ... ... 12 0 } Barrackpore ... ... 12 0 } Diamond Harbour ... ... 13 0 } Barasat ... ... 10 5 }
	8	Nadia Kushtia Meherpur Chuadanga Ranaghat	,, 11, '93	1·24 0·77 0·55 0·35 0·33	Weather—hot and close during first half of week. Now cool. Fresh rain has fallen and damaged crops to some extent. Harvest of *rabi* proceeding. Price of rice stationary. Fodder and water sufficient.
	9	Khulna Bagerhat Satkhira	,, 11, '93	Nil Nil 0·10	Weather—occasionally cloudy. *Rabi* harvest nearly over. *Boro* doing well. Coarse rice selling at 11 to 14 seers per rupee. Supply of fodder and water sufficient.
	10	Jessore Jhenida Magura Narail Bangaon	,, 11, '93	0·08 0·31 0·85 0·03 0·12	Weather—days getting hot. The rainfall of the week has done injury to some of the *rabi* crops, specially to *matar*, and has damaged the mango blossoms. Lands are being prepared for sowing paddy and jute. Indigo and *til* are being sown. Planting of *boro* paddy going on. Cattle-disease continues in parts of Bongaon. Plenty of fodder and water. Prices of rice slightly risen.
	11	Murshidabad	,, 11, '93	0·42	Weather—seasonable; at times cloudy. Harvesting of *matar*, *musuri* and rye has commenced. The late rain has caused much damage to gram, linseed, *matar* and *musuri*, but has done some good to wheat, barley, indigo, mulberry and sugarcane. Lands are being prepared for *aus* and *aman* paddy. Transplantation of *boro* paddy also going on. Common rice sells at 12¼ seers per rupee. Fodder sufficient for cattle.

	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and State and prospects of the crops.
BENGAL—*concld.*					
CHITTAGONG DIVN.	12	Chittagong	Mar. 11, '93	Nil	Weather—seasonable. Prospects of crops good. Prices stationary. Condition of cattle generally good. Supply of fodder sufficient.
	13	Noakhali	" 11, '93	Nil	Weather—seasonable. State of *rabi* crops good. Lands being ploughed for *aus* paddy. Fodder and water available. Cattle-disease reported from Begumganj and Senbag. Price of rice 12 to 15 seers per rupee.
	14	Tippera	" 11, '93	Nil	Heat rapidly increasing. Standing crops good. Preparation of land for summer crops universal. Price of rice rising.
	15	Chittagong Hill Tracts.	" 10, '93	Nil	Weather—seasonable, but getting distinctly warmer. Condition of chillies, tobacco and other vegetables fair. *Jum* cutting commenced. No cattle-disease reported. Common rice selling at 10 seers per rupee.
DACCA DIVN.	16	Dacca	" 11, '93	Nil	Weather—seasonable; slight rain fell in Narayanganj subdivision. *Rabi* crops being gathered. *Aman* and *aus* paddy being sown. Fodder available. No cattle-disease. Common rice selling at from 11 to 14 seers per rupee.
	17	Faridpur	" 11, '93	0·46	Weather—unsettled. Harvesting of *rabi* crops in progress, and sowing of paddy and *til* commenced. *Juli* and *boro* paddy doing well. Common rice sells at 12 to 13 seers per rupee. Cattle get fodder.
	18	Backergunge	" 11, '93	Nil	Weather—seasonable. Prospects of crops good. Common rice sells at about 11 seers per rupee. Fodder and water sufficient.
	19	Mymensingh	" 11, '93	0·07	Weather—getting hot in day; cool at night. State and prospects of standing crops good. *Boro* crop is likely to be damaged if there is more rain. Common rice selling at 11½ to 14½ seers per rupee. Condition of cattle good. Fodder and water available.
RAJSHAHI DIVN.	20	Dinajpur	" 11 '93	0·32	Weather—cool and cloudy. The rain will cause injury to mango blossoms. Ploughing of lands for *bhadoi* and jute going on. Price of rice at Sadar 15 seers per rupee; that at Thakurgaon unchanged. Cattle-disease has again appeared in certain parts of the Thakurgaon subdivision; elsewhere condition of cattle good. Fodder and water-supply plentiful.
		Thakurgaon	...	0·45	
	21	Rajshahi	" 11, '93	0·18	Weather—cold and cloudy. Ploughing for *aus, aman*, jute and *til* in progress. Harvesting of *rabi* crops has commenced in some places. Condition of cattle generally good. Price of common rice ranges from 12 to 16 seers per rupee. Fodder and water-supply sufficient.
		Nator	...	0·19	
		Naugaon	...	0·10	
	22	Rangpur	" 11, '93	Nil	Weather—cloudy with slight rain. Lands under preparation for *aus* crops: rice has been sown in some places. Wheat and tobacco very promising. Price of common rice 12 to 15 seers per rupee.
		Nilphamari	...	0·63	
		Gaibanda	...	Nil	
		Kurigram	...	0·02	
		Ulipur	...	Nil	
	23	Bogra	" 11, '93	0·12	Weather—unsettled. Ploughing for *aus* and jute goes on. Common rice sells at 12½ seers per rupee. Fodder and water sufficient.
		Sherpur	...	0·17	
	24	Pabna	" 11, '93	0·21	Weather—cloudy; growing hot. Standing *rabi* crops somewhat damaged by rain. Ploughing of lands continues. Rice selling at 12¼ seers per rupee at Pabna and Rs. 3 to Rs. 4-8 per maund at Sirajganj. Jute sells at Rs. 4-6 to Rs. 4-14 per maund. Condition of cattle good. Fodder and water-supply sufficient.
	25	Darjeeling	" 11, '93	0·02	Weather—finer and warmer, but thick haze mostly prevails. Rain on afternoon of 11th with heavy sky. *In the hills*:—Wheat and barley progressing favourably. Lands prepared for *kagni* and *chota marua*. *Bhutta* has been planted in some places. Potatoes also growing. *In the Terai*:—Ploughing for coming crops continues. Tobacco and barley doing well. *Kauni* being sown in places. Prices of coarse rice:— Srs. Hills ... ... 11 } per rupee. Terai ... ... 13 }
		Siliguri	...	0·49	
	26	Jalpaiguri	" 11, '93	0·42	Weather—cold and cloudy. Land is being prepared for *bhadoi* crops. Harvesting of tobacco continues; outturn estimated at 15 annas. Mustard reaped with a 15-anna crop. Common rice sells at 13 seers 5¼ chitaks per rupee. Fodder and water-supply sufficient. No cattle-disease reported.

	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
Bhagalpur Divn.	27	Monghyr March 11, '93 Begusarai ... Jamui ...	Nil Nil 0·08	Weather—cloudy at times with a few drops of rain. The damage to *rabi* in Begusarai is put at 4 to 6 annas, in Jamui 4 annas, and in head-quarters not more than 4 annas. There has been no fresh injury to the poppy. The *mahua* and mango blossoms have been injured. The number of cattle lost by cold is put down at 500 in Jamui. Prices of common rice:— Srs. Sadar ... ... 12 to 16½ } per rupee. Begusarai ... ... 16 } Jamui ... ... 14 }
	28	Bhagalpur „ 11, '93 Banka ... Madhipura ... Supaul ...	Nil 0·65 Nil 0·42	Weather—unusually cloudy and cold for March. Standing crops partially damaged by the late rain. Indigo benefited by it. Prospects of crops continue to be good; outturn a little over 12 annas. Common rice 15 seers 2 chitaks per rupee.
	29	Purnea „ 11, '93 Kishanganj ... Araria ...	Nil 0·23 0·04	Weather—cloudy and heavy rain in some localities; cold for the season. Tobacco cutting in progress. Prospects of tobacco, *rabi* and mango threatened by the rain; otherwise good Ploughing for *bhadoi* proceeding. Fodder and water sufficient. Prices stationary.
	30	Malda „ 11, '93 Chanchal ... Shibganj ... Gajole ...	0·03 0·05 0·08 0·03	Weather—cool and cloudy with breaks of sunshine. Prospect of *rabi* crops continues favourable. Transplantation of *boro* rice not yet finished. The rain during the week has done some injury to the mango blossoms. Common rice sells at from 13½ to 16 seers per rupee. Fodder and water abundant.
	31	Sonthal Parganas „ 11, 93 Godda ... Jamtara ... Pakur ...	0·30 0·35 0·11 0·16	Weather—cool and cloudy with some rain. The rainy weather is damaging the *chaiti* crops and the mango and *mahua*. Ploughing is going on briskly. Fodder and water abundant.
Patna Division.	32	Patna „ 11, '93 Barh ... Bihar ... Dinapore ...	Nil Nil 0·20 Nil	Weather—cloudy. *Rabi* being harvested. The state of poppy reported to be satisfactory. The drug is said to be flowing freely, and little or no loss is anticipated from the late rain; about 10 annas collected up to date. Prices of common rice:— Srs. Sadar ... ... 16 } Barh ... ... 11½ or 12 } per rupee. Bihar ... ... 16 } Dinapore ... ... 15 }
	33	Gaya „ 11, '93 Nawada ... Aurangabad ... Jahanabad ...	0·08 0·21 0·10 0·27	Weather—unseasonably cloudy and damp. The continued damp weather has caused about two annas damage to standing crops, and the rain has injured those on the threshing-floors. Late-sown poppy somewhat benefited by the rain, but otherwise considerably damaged; about half the crop has been collected. Prices are, however, fairly easy. Uncleaned rice selling at 14 seers per rupee. Fodder and water-supply sufficient.
	34	Shahabad „ 11, '93 Buxar ... Sasaram ... Bhabhua ...	0·10 0·10 0·21 0·27	Weather—unsettled; cloudy with easterly winds and frequent showers. Much damage has been done to the pulses by the rainy weather, and wheat and barley are attacked in places by blight. Steady sunshine and westerly winds are urgently wanted for the *rabi* harvest, and more particularly the poppy.
	35	Darbhanga „ 11, '93	Nil	Weather—close and cloudy—getting warm. General prospects favourable. Lancing of poppy in progress. Indigo sowing commenced. No rain wanted at present. Cattle healthy. Fodder and water abundant.
	36	Muzaffarpur „ 11, '93 Sitamarhi ... Hajipur ...	Nil Nil 0·03	Weather—cloudy and unsettled and much warmer. Rain has done some damage to the *rabi* crops. The weather continues to be most unfavourable to the opium, and the outturn is at present very unsatisfactory. No disease among cattle. Fodder and water sufficient.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR—*concld.*			
Patna Division—concld.			
37	Saran Mar. 11, '93 Siwan .. Gopalganj ...	Nil Nil Nil	Weather—most part of the week cloudy. Crops need sun. Prospects not yet bad. Indigo sowings commenced. Weather again cloudy with slight drizzle since yesterday (10th). Effect on poppy not yet known. Water and fodder ample. Prices of common rice:— Srs. c. Chapra ... ... 13 8 } Siwan ... ... 13 10 } per rupee. Gopalganj ... ... 13 9 }
38	Champaran „ 11, '93	0·02	Weather—fine; sometimes cloudy. *Rabi* doing well. Poppy promises fairly good outturn. Collection of drug and leaf manufacture in progress. Weather cloudy the last two days, with a slight shower to-day (11th) which is not good for poppy, which now requires sun. Indigo sowing retarded in Bettiah by the cold. Sowings commenced in parts of the Sadar. *Jasaria* paddy and *china* sowings proceeding. No cattle-disease. Fodder and water sufficient. No marked change in prices.
ORISSA.			
Orissa Divn.			
39	Cuttack „ 11, '93	2·40	Weather—cloudy most of the week. Any crops on the ground doing well. Supply of fodder and water ample. Current prices of common rice:— Srs. c. Srs. c. Sadar ... ... 10 8 to 14 7 } Kendrapara ... ... 15 0 to 21 0 } Jajpur ... ... 15 12 to 19 0 } per rupee. Banki ... ... 17 0 }
40	Puri „ 9, '93 Khurda ... Banpur ..	0·36 0·91 2·20	Weather—cloudy with occasional showers. Lands being ploughed for next *sarad* crops. Damage to *mung* and *dalua* crops by recent rain reported from parganas Rahang and Serai. Prices of common rice stationary.
41	Balasore ...	...	Report not received.
CHOTA NAGPUR.			
South-West Frontier Agency.			
Chota Nagpur Divn.			
42	Hazaribagh Mar. 11, '93 Giridi ...	0·21 0·05	Weather—cloudy and occasional showers. *Mahua, rahar* and *khesari* have suffered from rain and cloudy weather. It is reported that 8 annas poppy crop has already been collected, and that the poppy yield will improve now that the weather is clearing. Ploughing going on. Common rice 12 to 14 seers per rupee.
43	Lohardaga „ 11, '93	0·62	Weather—cloudy. Ploughing continues. Common rice selling at 13 seers per rupee. Fodder and water plentiful.
44	Palamau ...	...	Report not received.
45	Singhbhum „ 11, '93	1·24	Weather—very unseasonable, more like the rains. *Rabi* crops suffering somewhat from the wet weather. Common rice selling at from 12 to 16 seers per rupee. No cattle-disease. Water and fodder plentiful.
46	Manbhum „ 11, '93 Gobindpur ...	0·90 0·12	Weather—rainy and cloudy throughout district except Chandil to south. Mango and *mahua* will be seriously damaged. Prospects somewhat gloomy. Rice 10 to 14 seers per rupee.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 14th March, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

The following Statement shows the Quantities of the Principal Staples of Traffic imported into Calcutta from the Interior during the month of December, 1892.

IMPORTS INTO CALCUTTA.

Whence imported.	FOOD-GRAINS. Rice and Paddy. Rice.	* Paddy.	Total (in rice).	Wheat.	Gram and pulses.	Other food-grains.	Total.	FIBROUS PRODUCTS. Jute, raw.	† Gunny-bags.	OIL-SEEDS. Linseed.	Mustard seed.	Tea, Indian.	Cotton, raw.	Silk, raw.	SUGAR. Refined	Un-refined.	TOBACCO. Un-manu-factured.	Manu-fac-tured.
BENGAL.	Mds.	Mds.	Mds.	Mds	Mds.	Mds.	Mds.	Mds.	No.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Burdwan	91,577	9,427	97,469	......	153	220	97,842	2,820	71,260	1,323	......	......	......	7	......	19	...	......
Birbhum	2,50,741	599	2,51,115	......	...	...	2,51,115	495	31,920	......	......	......	......	64	......	......	...	......
Midnapore	1,61,172	5,156	1,64,395	......	575	456	1,65,426	5,287	1,863	952	85	......	551	336	......	105	107	100
Hooghly	62,312	3,404	64,439	1,533	1,723	33	67,728	1,33,343	276,817	8,402	1,196	......	125	19	1,073	384	5,359	2,117
24-Parganas ...	3,93,866	15,171	4,03,348	70	532	......	4,03,950	1,59,175	569,259	94	68	......	799	......	3,767	33,576	1,347	234
Nadia	14,792	308	14,984	7,863	47,573	360	70,780	65,316	8,906	11,637	193	......	355	148	......	1,202	2,586	......
Khulna	14,799	5,550	18,268	......	......	...	18,268	26,263	455	......	......	......	......	......	......	13,344	...	......
Jessore	43,319	2,310	44,763	363	718	......	45,844	74,450	4,095	217	400	......	35	......	6,021	10,118	1,715	......
Murshidabad ...	42,432	......	42,432	5,094	5,366	145	53,035	18,473	250	3,716	884	......	......	137	......	......	...	......
Dinajpur	6,251	......	6,251	...	224	...	6,485	53,012	369,770	...	......	......	......	......	......	......	77	......
Rajshahi	1,696	...	1,696	......	1,670	......	3,366	63,271	2,525	2,028	69	......	......	389	......	......	111	......
Rangpur	222	...	222	..	......	...	222	2,68,776	62,895	......	65	23	3,228	......	......	......	13,850	......
Bogra	31,462	459	31,749	......	...	......	31,749	24,990	3,010	......	......	......	15	......	......	......	...	......
Pabna	643	......	643	......	705	......	1,348	3,80,457	842,835	214	4,868	......	......	......	......	......	818	......
Darjeeling	252	......	252	......	......	......	252	5,670	166,005	......	......	13,565	......	......	......	......	...	......
Jalpaiguri	......	...	......	......	......	......	......	1,01,048	328,169	......	118	30,938	......	......	......	......	388	......
Dacca	437	......	437	......	496	......	933	7,11,164	2,800	79	......	......	1,824	......	......	......	...	......
Faridpur	21,901	522	22,227	......	2,455	......	24,682	3,34,221	2,065	864	2,664	40	930	5	......	......	311	......
Backergunge ...	2,04,048	2,400	2,06,448	......	196	......	2,06,644	11,864	1,015	......	...	......	......	......	......	......	...	15
Mymensingh ...	90	......	90	......	51	...	141	2,56,952	355	96	......	......	......	......	......	......	...	......
Tippera	14,000	......	14,000	......	......	......	14,000	6,421	......	......	......	......	......	......	......	......	...	......
Chittagong	...	......	...	......	......	......	......	40	......	......	......	914	3,712	......	......	......	...	......
Noakhali	12,084	550	12,428	......	...	......	12,428	2,350	......	......	......	......	300	......	...	......	...	......
Total of Bengal .	13,68,936	45,856	13,97,6[illegible]6	14,923	62,447	1,212	14,76,238	27,05,988	2,746,260	29,672	10,610	45,480	11,874	1,105	10,861	58,748	26,660	2,466
BIHAR																		
Patna	28,301	......	28,301	10,442	24,405	5,609	68,757	......	1,540	20,174	4,282	......	260	......	2,360	5,360	657	1,790
Gaya	2,166	......	2,166	...	714	...	2,880	......	1,155	......	301	......	......	......	2	7,837	...	521
Shahabad	7	......	7	20,159	13,164	133	33,453	......	1,120	6,861	467	......	......	......	......	17,151	...	......
Muzaffarpur ...	11,955	......	11,955	......	789	704	13,448	...	35	11,820	2,957	......	......	......	......	380	6	......
Darbhanga	89,407	332	89,615	793	100	155	90,663	......	945	11,668	6,431	......	......	......	...	80	370	7
Saran	5,678	......	5,678	1,721	613	337	8,369	...	135	6,553	1,261	......	10	......	......	857	7	......
Champaran ...	2,644	...	2,644	...	612	795	4,051	...	......	4,561	297	......	......	......	...	...	...	......
Monghyr	14,200	......	14,200	*8,094	3,939	3,958	31,031	...	140	2,254	805	......	......	......	......	883	1	9
Bhagalpur	58,269	2,255	59,678	10,329	2,327	38,761	1,11,095	1,061	700	6,003	17,233	......	......	......	......	60	...	......
Purnea	3,279	......	3,279	977	453	34	4,743	56,905	2,625	1,370	9,280	......	...	......	......	...	305	...
Malda	1,341	......	1,341	815	960	2,387	5,503	23,010	......	975	......	......	......	......	......	...	3	......
Sonthal Parganas	25,725	......	25,725	3,977	5,619	8,076	43,397	7,041	1,295	3,342	......	......	......	11	...	23	...	......
Total of Bihar ...	2,42,972	2,587	2,44,589	58,198	53,695	60,968	4,17,450	88,017	9,870	75,587	43,314	......	279	11	2,362	32,631	1,340	2,327
ORISSA.																		
Cuttack	1,937	598	2,311	......	......	......	2,311	......	3,000	......	407	......	......	......	......	......	...	......
Balasore	36,428	11,807	43,807	......	393	......	44,200	5,574	1,150	902	362	......	56	...	......	......	...	......
Total of Orissa ...	38,365	12,405	46,118	...	393	......	46,611	5,574	4,150	902	769	...	56	...	......	...	...	......
CHOTA NAGPUR.																		
Hazaribagh ...	613	......	613	......	309	......	922	......	......	......	......	......	......	......	......	......	...	......
Singhbhum ...	5,394	...	5,394	......	......	......	5,394	......	175	......	......	......	......	......	......	......	...	......
Manbhum ...	9,747	...	9,747	......	......	......	9,747	......	1,365	......	......	25	......	......	......	......	...	......
Total of Chota Nagpur.	15,754	......	15,754	......	309	......	16,063	......	1,540	......	......	25	......	......	......	......	...	......
Grand Total of supplies from the Provinces under the Lieutenant-Governor of Bengal.	16,66,087	60,848	17,04,117	73,121	1,16,844	62,180	19,56,262	27,99,579	2,761,820	1,06,161	54,693	45,505	12,209	1,116	13,223	91,379	28,018	4,793
OTHER PROVINCES																		
Assam	9,225	...	9,225	......	......	......	9,225	26,932	1,033	42,290	68,308	93,628	687	125	......	......	...	......
North-Western Provinces and Oudh.	29,833	......	29,833	1,84,186	2,13,780	3,697	4,61,496	2,257	560	......	66,777	649	34,971	......	559	2,909	428	70
Punjab	12	...	12	3,657	73,0[illegible]3	7,204	83,926	......	......	10,384	1,507	445	2,120	......	......	......	...	......
Central Provinces	55,460	......	55,460	13,391	29,622	835	99,308	...	......	1,559	387	......	2,055	......	......	864	...	......
Rajputana and Central India ...	362	......	362	715	21,025	130	22,232	......	......	......	......	......	......	......	......	......	...	......
Berar	......	......	......	......	......	......	......	......	......	......	......	......	477	......	......	......	...	......
Bombay	......	...	......	......	......	......	......	......	6,000	......	......	......	32,883	......	......	......	...	6
Madras	......	......	......	...	......	......	......	5	......	......	400	......	235	......	1,422	......	303	303
Pondicherry ...	...	......	......	...	......	......	......	......	......	......	......	......	......	......	......	......	...	5
Burma	279	19	291	......	608	......	899	......	......	......	......	......	17,368	......	......	......	218	33
Other places ...	12	...	12	......	......	......	12	......	25,400	27	......	......	......	......	8,759	......	4	731
Grand Total of Imports in Dec. ... 1892	17,61,270	60,867	17,99,312	2,75,070	4,84,932	74,046	24,33,360	28,28,773	2,794,815	1,60,421	1,92,072	1,40,227	1,03,005	1,241	23,963	95,152	28,971	5,941
1891	19,36,422	77,646	19,84,951	5,18,402	4,78,020	67,867	30,49,240	17,87,028	2,779,385	2,36,929	1,39,044	4,14,711	34,952	1,300	28,421	99,736	24,525	3,003

* One maund of paddy is equivalent to 25 seers of rice. | † Exclusive of bags obtained by local manufacture.

The Sea-borne Trade of Calcutta in these Staples during the month of December 1892, *was as follows.*—

EXPORTED FROM CALCUTTA—																		
To Indian ports, viz.—																		
Bombay ...	1,55,762	30	1,55,721	......	465	......	1,56,186	......	4,265,870	......	......	1,901	......	......	1,217	995	...	11
Madras	784	......	784	2,342	51,390	746	55,262	......	485,350	......	......	5	......	172	182	......	...	17
Other ports in Madras ...	1,08,751	6,190	1,12,620	461	73,818	2,798	1,89,697	......	594,280	......	......	2	......	23	103	317	...	48
Burma ...	12,307	......	12,307	5,380	32,213	7,931	57,831	......	2,113,850	......	......	174	614	16	1,533	189	4,910	348
Other Indian ports	20	......	20	431	3,287	......	3,739	......	307,930	......	......	4	......	6	2,400	1,243	1,227	210
Pondicherry ...	......	...	......	102	738	...	840	...	23,000	......	......	......	......	......	......	......	...	......
Sind	...	...	......	......	......	......	......	......	76,500	......	......	......	......	......	......	......	...	......
Total of Inter-portal trade ...	2,77,564	6,220	2,81,452	8,716	1,61,911	11,475	4,63,554	......	7,866,780	......	......	2,086	614	217	5,435	2,746	6,137	634
To Foreign ports—United Kingdom	47,165	......	47,165	1,14,049	21,075	39,889	2,22,178	13,83,529	693,800	93,719	34,508	1,70,250	1,533	131	102	611	...	16
Other Foreign ports ...	7,44,390	2,636	7,46,037	1,161	52,340	9,465	8,09,003	13,91,536	7,129,775	5,993	2,766	5,365	12,347	795	......	6,437	2,683	382
Total of Foreign trade ...	7,91,555	2,6[illegible]6	7,93,202	1,15,210	73,415	49,354	10,31,181	27,75,065	7,823,575	99,712	37,274	1,75,615	13,880	926	102	7,048	2,683	398
Grand Total of Exports in Dec. ... 1892	10,69,119	8,856	10,74,654	1,23,926	2,35,326	60,829	14,94,735	27,75,065	15,690,355	99,712	37,274	1,77,701	14,494	1,143	5,537	9,794	8,820	1,032
1891	11,89,731	2,537	11,91,534	4,08,280	2,18,945	15,697	19,24,426	15,38,130	17,406,738	2,20,507	53,150	1,83,891	4,430	1,449	5,453	2,168	11,333	628

The following Statement shows the several Routes followed by the Trade in the Principal Staples of Traffic imported into Calcutta during the month of December, 1892.

IMPORTS INTO CALCUTTA

Specification of Routes.	Food-grains: Rice.	Food-grains: Paddy.	Food-grains: Wheat.	Food-grains: Gram and pulses.	Food-grains: Other food-grains.	Fibrous Products: Jute, raw.	Fibrous Products: Gunny-bags.	Oilseeds: Linseed.	Oilseeds: Mustard seed.	Tea, Indian.	Cotton, raw.	Silk, raw.	Sugar: Refined.	Sugar: Unrefined.	Tobacco: Unmanufactured.	Tobacco: Manufactured.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	No.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
By country boats ...	8,85,820	85,091	19,297	44,601	3,694	12,12,833	839,943	32,216	23,980	...	1,923	275	2,998	26,233	7,331	1,938
„ river steamers ...	32,038	365	498	2,978	... ...	642,833	......	749	54,697	77,476	4,124	116	... ..	122	345	.. ..
„ rail { East Indian Railway.	6,78,354	10,567	2,52,915	4,12,868	70,352	82,319	119,700	1,20,178	1,06,456	1,119	39,672	190	2,619	36,317	793	763
„ rail { Eastern Bengal State Railway.	75,001	1,088	2,360	23,460	......	7,05,133	1,776,390	6,741	3,910	60,718	2,335	621	4,601	8,520	16,424	......
„ road	55,728	2,903	......	24	......	1,20,256	27,182	......	440	. . .	697	... ..	3,534	21,960	3,553	2,166
„ sea	33,729	10,853	......	1,001	......	5,339	31,600	537	689	914	53,954	... ..	10,181	......	525	1,074
Grand Total of Imports in December { 1892 ..	17,61,270	60,867	2,75,070	4,84,932	74,046	28,28,773	2,794,815	1,60,421	1,92,072	1,40,227	1,03,005	1,241	23,963	95,152	28,971	5,941
Grand Total of Imports in December { 1891...	19,36,423	77,646	5,18,403	4,78,020	67,867	17,87,028	2,779,385	2,34,929	1,30,044	1,14,714	34,952	1,300	28,421	99,736	24,525	3,003

The following Statement shows the Values and Quantities of the Principal Staples of Traffic exported Inland from Calcutta during the month of December, 1892.

EXPORTS FROM CALCUTTA.

Whither exported.	Cotton piece-goods: European.	Cotton piece-goods: Indian.	Cotton twist: European.	Cotton twist: Indian.	Salt.	Gunny-bags.
	Rs.	Rs.	Mds.	Mds.	Mds.	No.
Bengal.						
Burdwan ...	2,35,970	840	344	1,175	23,482	62,950
Birbhum ...	1,62,654	700	72	775	17,694	1,77,590
Midnapore ...	1,92,440	.... .	3,128	64	16,863	11,628
Hooghly ...	1,60,070	2,895	513	57	2,706	39,099
24-Parganas ...	2,77,517	2,960	317	......	11,529	15,797
Nadia ...	4,02,340	... ..	1,!23	......	24,787	56,445
Khulna ...	1,46,556	... ..	109	......	4,618	2,695
Jessore ...	2,48,141	..	1,672	......	12,285	11,830
Murshidabad .	86,844	4,746	62	......	8,447	27,005
Dinajpur ...	248,144	... .	243	......	9,789	5,745
Rajshahi ...	2,32,162	......	150	......	20,781	26,835
Rangpur ..	5,41,552	... ..	504	.. ...	18,579	4,445
Bogra ...	2,69,960	......	15	......	11,732	47,775
Pabna ...	3,31,840	......	243	......	15,139	3,480
Darjeeling ...	1,14,070	......	345	6	7,098	1,235
Jalpaiguri ...	2,63,500	......	177	......	11,385	1,680
Dacca ...	12,22,232	......	1,993	......	54,722	4,670
Faridpur ...	2,41,060	......	780	... ..	28,953	10,015
Backergunge ...	4,09,020	......	1,542	......	22,550	10,965
Mymensingh ...	2,99,064	... ..	19	......	26,545	770
Tippera ...	......	......	23	......	9,075	... ..
Chittagong ...	94,471	......	58	......	......	122,830
Noakhali ...	......	......	......	......	8,250	......
Total of Bengal	62,18,607	12,141	14,212	2,077	3,67,039	645,474
Bihar						
Patna ...	2,41,886	510	237	318	29,210	148,650
Gaya ...	68,852	......	7	1,129	19,250	20,720
Shahabad ...	2,57,908	336	24	1,163	24,187	37,905
Muzaffarpur ...	2,94,044	......	......	111	16,025	20,055
Darbhanga ...	3,75,116	......	6	787	29,650	93,160
Saran ...	2,36,550	42	......	212	18,053	20,055
Champaran ...	3,56,334	......	13	275	18,255	9,135
Monghyr ...	1,12,772	294	25	415	16,505	36,435
Bhagalpur ...	2,49,172	462	21	502	38,181	112,105
Purnea ...	2,57,696	798	8	356	14,781	19,770
Malda ...	100	......	......	... ..	3,475	2,835
Sonthal Parganas ...	1,92,852	210	150	722	16,359	178,780
Total of Bihar ...	26,43,882	2,652	503	5,990	2,43,931	699,605
Orissa.						
Cuttack ...	7,125	......	49	394	......	10,000
Balasore ...	47,050	......	355	1,485	16,983	179,700
Total of Orissa ...	54,175	......	404	1,879	16,983	189,700

Whither exported.	Cotton piece-goods: European.	Cotton piece-goods: Indian.	Cotton twist: European.	Cotton twist: Indian.	Salt.	Gunny-bags.
Chota Nagpur.	Rs.	Rs.	Mds.	Mds.	Mds.	No.
Hazaribagh	50,824	756	9	383	5,111	7,840
Singhbhum	53,048	......	53	1,721	4,427	6,405
Manbhum	1,37,050	84	61	1,433	28,186	16,835
Total of Chota Nagpur	2,40,922	840	123	3,537	37,724	31,080
Grand Total of supplies into the provinces under the Lieutenant-Governor of Bengal.	91,57,586	15,633	15,242	13,483	6,65,677	1,565,859
Other Provinces.						
Assam	7,91,312	......	992	42	55,864	14,940
North-Western Provinces and Oudh	34,49,284	6,900	3,516	1,408	34,754	817,950
Punjab	6,71,242	2,100	671	....	2	364,945
Central Provinces .. .	1,32,0[illegible]0	210	537	1,705	......	164,535
Rajputana and Central India	82,888	126	107	88	......	71,715
Berar	572	......	......	......	......	99,190
Nizam's Territory	258	......	......	... .	... ..	......
Bombay	6,746	84	... ..	......	......	4,265,870
Madras	73,250	......	174	2,392	... ..	1,079,630
Pondicherry	... ..	... ..	... ..	......	......	23,000
Burma	2,35,773	240	816	1,150	... ..	2,113,850
Sind	8,6?2	.....	177	......	......	76,500
Other places	62,440	1,104	85	14,450	......	7,823,575
Grand Total of Exports in Dec. { 1892 ..	1,46,72,043	26,397	22,317	34,727	7,56,297	18,481,559
Grand Total of Exports in Dec. { 1891 .	1,42,76,070	94,650	21,628	22,524	6,32,169	19,905,938

The Sea-borne Trade of Calcutta in these Staples during the month of December, 1892, was as follows:—

	Cotton piece-goods: European.	Cotton piece-goods: Indian.	Cotton twist: European.	Cotton twist: Indian.	Salt.	Gunny-bags.
Imported into Calcutta—	Rs.*	Rs.	Mds.	Mds.	Mds.	No.
From Foreign Ports—						
United Kingdom ...	1,15,13,474	... ..	11,003	......	4,51,370	......
Other Foreign ports ...	12,900	......	676	......	2,76,627	25,400
Total of Foreign Trade ...	1,15,26,374	......	11,679	......	7,27,997	25,400
From Indian Ports—						
Bombay	26,781	1,63,500	5	14,755	23,445	6,000
Madras	300	537	......	... .	......	......
Other Ports in Madras ...	... ..	350	......	209	8,300	......
Burma	41,746	905	192	247	......	......
Other Indian Ports ...	......	......	......	15	......	200
Total of Interportal Trade...	68 827	1,65,292	197	15,226	31,745	6,200
Grand Total of Imports in Dec. { 1893 ...	1,15,9?,2?1	1,65,292	11,876	15,226	7,59,742	31,600
Grand Total of Imports in Dec. { 1891 ...	1,04,0?,65?	1,89,831	20,695	12,586	6,96,815	23,600

* As per tariff declaration value.

The following Statement shows the several Routes followed by the Trade in the Principal Staples of Traffic exported from Calcutta during the month of December, 1892.

Specification of Routes.	Cotton piece-goods: European.	Cotton piece-goods: Indian.	Cotton twist: European.	Cotton twist: Indian.	Salt.	Gunny-bags.
	Rs.	Rs.	Mds.	Mds.	Mds.	No.
By country boats ...	2,30,810	2,895	1,866	......	2,54,167	107,962
„ river steamers ...	6,41,172	... ..	3,090	141	55,446	40,147
„ rail { East Indian Railway ...	76,61,472	19,198	5,971	14,659	3,22,771	2,461,815
„ rail { Eastern Bengal State Railway ...	53,38,612	......	9,544	......	1,02,388	177,380
„ road ...	2,69,504	2,960	313	47	4,842	4,600
„ sea ...	5,30,383	1,344	1,533	19,880	16,633	15,690,355
Grand Total of Exports in December ... { 1892 ...	1,46,72,043	26,397	22,317	34,727	7,56,297	18,481,559
Grand Total of Exports in December ... { 1891 ...	1,12,76,070	94,650	21,628	22,524	6,32,169	19,905,938

STATISTICAL DEPARTMENT,
The 9th March 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS. Air pressure. Mean barometric height, 8 A. M. reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. Prevailing direction.	Mean wind velocity.	Temperature. Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri .	30·078	30 027	—	N	158	84·7	8th Mar.	66·6	6th Mar.	83·2	69·2	76·2
		Gopalpore ..	30·080	30·041	+·125	NNW	195	84·7	8th ,,	65·9	6th ,,	83·1	68·6	75·8
		False Point ..	30·082	30·045	+·117	NWly	168	82·4	9th ,,	62·0	6th ,,	81·8	65·8	73·8
	Cuttack	Cuttack ...	30·029	30·054	+·138	Calm	39	86·6	6th ,,	65·8	6, 9th ,,	84·3	69·3	76·8
	Balasore	Balasore ..	30 041	30·046?	+·122	Variable	70	84 4	5th ,,	54·5	9th ,,	82·8	64·4	73·6
South-West Bengal.	Midnapore	Midnapore	29 967	30·068	+·143	N	211	87·3	8th ,,	62·2	5th ,,	83 3	65·5	74·4
	24-Parganas	Calcutta ..	30·081	30·018	+·125	Calm	31	84 6	8th ,,	59·7	5th ,,	81·8	63·6	72·7
		Saugor Island	30·072	30·042	+·119	NEly	192	82·7	9th ,,	63·4	5th ,,	81·7	66 0	73·9
	Howrah													
	Hooghly													
	Nadia ..	Krishnagar	30·058	30 055	+·152	WNW	76	85 0	8th ,,	56·8	5th ,,	82·2	62·0	72·2
	Khulna													
	Jessore	Jessore ..	30·060	30·041	+·120	NNE	51	85·5	8th ,,	59·0	5th ,,	82·7	62·6	72·6
	Burdwan ...	Burdwan ..	30·018	30·067	+·144	Calm	12	84·5	8 h ,,	58·6	5th ,,	82 0	63·7	72·9
		Raniganj ..	29 779	30·087	+·143	Variable	31	83·7	7, 8th ,,	57·1	5th ,,	81·1	63·0	72·1
	Bankura	Bankura .	29·782	30·045	+·129	Calm	46	85·6	8th ,,	58 6	5th ,,	81·9	63 5	72·7
	Birbhum					Wly								
	Murshidabad	Berhampore .	30·036	30·034	+·136	NW	41	84·6	8th ,,	56·4	5th ,,	81·7	62·5	72·1
North Bengal.	Pabna	Sirajganj .	30·048	30·045	+·135	Variable	25	84·4	8th ,,	52·5	5th ,,	81·2	59 5	70·4
	Bogra ..	Bogra .	30·013	30·029	+·151	NE	40	85·2	8th ,,	50·2	5th ,,	82·1	58·3	70·3
	Rajshahi	Rampur Boalia.	30·027	30·048	+·146	Calm	55	83·6	8th ,,	52·7	5th ,,	80·7	59·4	70·1
	Malda ..	Malda ..	30·025	30·060	—	NE, SW	73	83·0	6th ,,	50·4	5th ,,	81·1	58·8	70·0
	Dinajpur	Dinajpur ...	29·981	30·058	+ 121	NE	56	83·6	7th ,,	49·9	5th ,,	81·2	58·8	70·0
	Rangpur ...	Rangpur ..	29·983	30·065	+·157	Variable	74	83·3	8th ,,	48·6	5th ,,	81·2	57·1	69·1
	Jalpaiguri	Jalpaiguri	29·858	30·089	+·175	Calm & NE	40	82·9	9th ,,	53 1	5th ,,	79 0	57·9	68·3
	Kuch Bihar													
	Darjeeling	Darjeeling ...	23·075	—	+·001	Variable	85	53·9	8th ,,	36·9	10th ,,	49·7	38·9	44·3
	Sikkim	Gnatong	19·249		..	Variable	83	41 2		11·1	9th ,,	35·3	13·4	24·4
East Bengal.	Chittagong	Chittagong ...	29·995	30·033	+·084	NNW	55	68 7	11th ,,	57·1	6th ,,	86·6	62·2	74·4
	Chittagong Hill Tracts	Demagiri ...												
	Backergunge	Barisal ..	30·073	30·032	+·124	Calm	61	85·3	9th ,,	59·1	5th ,,	84·2	63·7	74·0
	Noakhali	Noakhali ...	30·043	30·034	+·106	N	106	84·9	8, 9, 11 ,,	54·0	5th ,,	83·6	59·4	71·6
	Faridpur	Faridpur* ...	30·053	30·018	+·118	N	43	82·5	7th ,,	56·5	5th ,,	81·1	59·0	70·1
	Dacca	Dacca ..	30·071	30·041	+·117	Variable	87	85·1	8th ,,	57·8	5th ,,	83·0	62·3	72·6
	Tippera . ..	Comilla ...	30·054	30·038	+·109	Variable	44	86·4	8th ,,	55·5	5th ,,	84·7	59·9	72·4
	Mymensingh	Mymensingh	30·029	30·048	+·110	Variable	57	82·9	8th ,,	52·7	5th ,,	81·2	60·1	70·6
North Bihar.	Purnea	Purnea ..	29·983	30·068	+·154	Calm	28	82 2	8th ,,	52·3	6th ,,	80·5	58·0	69·3
	Bhagalpur	Bhagalpur ..	29·941	30·062	+·157	Calm	6	83 7	7, 8th ,,	52·0	5th ,,	80·9	60 3	70·6
	Darbhanga	Darbhanga ...	29·946	30·074	+·163	Variable	62	82·9	8th ,,	51·4	5th ,,	79·9	58 3	69·2
	Muzaffarpur	Muzaffarpur...	29·928	30·068	—	ESE	63	82·7	8th ,,	50·3	5th ,,	80 1	59·0	69·5
	Champaran	Motihari ...	29·861	30·054	+·154	Calm	78	83·2	8, 10th ,,	48·9	5th ,,	80·9	56·7	68·9
	Saran	Chapra ...	29·915	30·057	+·162	Variable	65	82·8	10th ,,	53·6	5th ,,	80·1	60 1	70·1
South Bihar.	Shahabad	Dehri ...	29·715	30·036	+·102	SW	24	83·7	11th ,,	57·0	5th ,,	80·0	62·0	71·1
		Buxar ..	29·847	30·052	+·125	Variable	72	84·6	10th ,,	58·4	5, 9th ,,	80·7	60·9	70·8
		Arrah ..	29·902	30·053	+·153	S&Ely	61	82·3	10th ,,	55·0	5th ,,	80·2	60 3	70·3
	Gaya	Gaya ...	29·715	30·061	+·120	Sly	129	84·0	11th ,,	56·6	5th ,,	80·1	61·0	70·6
	Patna	Bankipore ..	29·921	30·064	+·130	SE	81	85·8	6th ,,	56·2	5th ,,	80·6	61·1	70·9
	Monghyr													
	Sonthal Parganas ..	Naya Dumka	29·608	30·077	+·159	Calm	32†	83·6	7th ,,	53·8	5th ,,	80·5	61·1	70·9
Chota Nagpur.	Hazaribagh	Hazaribagh ..	25·043	30·067	+·102	Variable	140	80·2	8th ,,	55·3	9th ,,	75·5	57·6	66·6
	Lohardaga	Ranchi ...	27·916	30 060	+·098	Calm	98	76·0	8th ,,	54·4	9th ,,	73·2	57·0	65·1
	Palamau													
	Singhbhum ...	Chaibassa ...	29·324	30·061	+·142	Variable	23	83·2	7th ,,	58·6	5th ,,	80·3	63·4	71·9
	Manbhum													

* Mean of 5 days. | † Mean of 6 days.

Explanation.—*Summary.*—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period
The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01
rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station
district, *i.e.* from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one or

for the week ending Saturday, the 11th of March 1893.

					DISTRICT OBSERVATIONS.										
					Of week.				Rainfall.						
									Since 1st of month.			Since 16th October 1892.			
Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.	District.
—	72·9	84	3·6	0·36		0·14		0·24		0·24			7·60		Puri.
—2·0	72·1	88	3·1	0·02											
—4·6	72·1	89	6·4	0·17											
—6·4	72·7	78	7·9	2·11		0·16		0·42		0·45			5·59		Cuttack.
—4·9	70·1	87	2·1	0·19		0·22		0·47		0·42			4·64		Balasore.
—5·3	70·5	79	5·0	0·15	0·11	0·32	0·50	0·45	0·11	0·55	—0·44	12·76	5·00	+7·76	Midnapore.
—5·7	69·2	83	6·9	0·24	0·27	0·20	0·86	0·43	0·27	0·41	—0·14	13·39	5·02	+8·37	24-Parganas.
—6·1	70·6	92	7·7	Nil											
					0·31	0·18	1·00	0·51	0·31	0·37	—0·06	9·09	4·17	+4·92	Howrah.
					0·20	0·25	1·00	0·53	0·20	0·42	—0·22	13·73	3·84	+9·90	Hooghly.
—4·8	68·4	76	7·3	1·24	0·65	0·31	1·20	0·51	0·65	0·47	+0·18	10·62	3·72	+6·90	Nadia.
—6·0	68·6	81	6·4	0·08	0·03	0·21	0·33	0·46	0·03	0·44	—0·41	12·48	4·89	+7·59	Khulna.
—5·7	69·0	72	8·0	1·16	0·28	0·31	0·60	0·39	0·28	0·56	—0·28	14·24	4·40	+9·84	Jessore.
—6·3	[illegible]	76	1·4	[illegible]	0·62	0·20	1·00	0·39	0·62	0·40	+0·22	10·44	3·56	+6·88	Burdwan.
—5·9	67·6	80	6·7	0·31	0·54	0·25	1·00	0·41	0·54	0·45	+0·09	10·71	3·29	+7·42	Bankura.
—3·9	65·0	84	7·6	0·42	0·41	0·18	1·00	0·35	0·41	0·27	+0·14	9·32	2·63	+6·67	Birbhum.
					0·32	0·21	0·83	0·33	0·32	0·29	+0·03	6·81	2·50	+4·31	Murshidabad.
—4·1	[illegible]	83	5·9	0·19	0·20	0·32	1·00	0·41	0·20	0·47	—0·27	6·37	3·72	+2·63	Pabna.
—4·7	64·7	81	5·1	0·12	0·44	0·15	1·00	0·36	0·44	0·19	+0·25	4·54	2·63	+1·91	Bogra.
—5·4	67·4	78	5·7	0·10	0·16	0·14	1·00	0·24	0·16	0·18	—0·02	5·11	2·67	+2·44	Rajshahi.
—	66·3	82	5·7	0·03	0·04	0·09	0·60	0·24	0·04	0·16	—0·12	3·69	2·47	+1·22	Malda.
—3·8	64·1	83	4·4	0·24	0·30	0·19	0·80	0·16	0·30	0·14	+0·16	2·80	1·97	+0·92	Dinajpur.
—3·2	64·3	83	1·9	0·18	0·29	0·28	0·75	0·40	0·29	0·37	—0·08	2·92	2·63	+0·29	Rangpur.
—3·3	63·3	81	7·4	0·51	0·42	0·27	1·00	0·26	0·42	0·40	+0·02	3·18	3·83	—0·65	Jalpaiguri.
					0·12	0·28	0·50	0·56	0·12	0·38	—0·26	2·45	2·43	+0·02	Kuch Bihar.
—4·8	45·2	86	9·7	0·02	0·18	0·45	0·50	0·82	0·50	0·72	—0·22	6·47	4·69	+1·87	Darjeeling.
—	[illegible]	74	6·9	0·87											Sikkim.
—1·4	69·4	74	5·9	Nil	Nil	0·32	0·00	0·46	Nil	0·37	—0·37	13·44	7·33	+6·06	Chittagong.
					Nil	0·64	0·00	0·70	Nil	0·85	—0·85	10·10	7·53	+2·57	Chittagong Hill Tracts.
—3·5	69·5	77	6·4	0·02	Nil	0·30	0·00	0·51	Nil	0·44	—0·44	11·73	6·19	+5·54	Backergunge.
—4·2	68·7	79	1·0	Nil	Nil	0·69	0·00	0·95	Nil	0·93	—0·93	17·97	8·44	+9·53	Noakhali.
—6·0	67·3	79	3·0	Nil	0·20	0·53	0·67	0·76	0·20	0·93	—0·73	12·31	4·59	+7·72	Faridpur.
—4·9	67·8	74	6·0	0·02	0·02	0·78	0·00	0·82	0·02	0·93	—0·91	12·93	5·14	+7·79	Dacca.
—3·4	68·7	76	4·6	Nil	Nil	1·09	0·00	1·13	Nil	1·38	—1·38	11·48	5·81	+5·67	Tippera.
—2·1	65·2	71	5·3	0·07	0·08	0·41	0·40	0·61	0·08	0·56	—0·48	6·33	4·04	+2·29	Mymensingh.
—3·7	62·4	90	3·9	Nil	0·09	0·10	0·33	0·18	0·09	0·22	—0·13	2·32	2·50	—0·18	Purnea.
—4·2	65·7	80	7·7	Nil	0·27	0·07	0·50	0·17	0·27	0·12	+0·15	3·77	2·20	+1·57	Bhagalpur.
—3·8	64·5	78	5·6	Nil	Nil	0·10	0·00	0·13	Nil	0·19	—0·19	2·70	2·13	+0·57	Darbhanga.
—	64·2	95	5·4	Nil	0·02	0·03	0·00	0·13	0·02	0·14	—0·12	2·71	2·28	+0·43	Muzaffarpur.
—3·3	62·3	87	5·4	0·02	0·01	0·03	0·00	0·11	0·01	0·21	—0·20	2·33	1·85	+0·48	Champaran.
—3·8	65·1	81	8·1	Nil	Nil	0·04	0·00	0·14	Nil	0·07	—0·07	2·61	2·22	+0·39	Saran.
—3·3	66·0	83	5·4	0·12											
—4·7	65·6	76	5·9	0·10	0·16	0·08	0·80	0·17	0·16	0·24	—0·08	3·11	2·79	+0·32	Shahabad.
—4·3	65·5	82	2·4	0·10											
—6·1	65·5	79	5·7	0·08	0·18	0·07	1·00	0·16	0·18	0·17	+0·01	4·14	2·33	+1·76	Gaya.
—3·2	68·0	76	6·1	0·05	0·06	0·07	0·25	0·19	0·06	0·13	—0·07	3·02	2·36	+0·66	Patna.
					0·06	0·04	0·60	0·10	0·06	0·11	—0·05	5·26	2·55	+2·71	Monghyr.
—5·9	66·9	76	4·7	0·30	0·17	0·12	0·67	0·25	0·17	0·21	—0·04	5·51	2·30	+3·21	Sonthal Parganas.
—6·7	62·4	77	8·6	0·51		0·32		0·25		0·81			3·32		Hazaribagh.
—8·2	61·8	81	7·1	0·62		0·40		0·50		0·70			4·02		Lohardaga.
—6·9	66·0	89	7·4	1·24	0·25	0·18	1·00	0·32	0·25	0·34	—0·08	3·73	3·08	+0·65	Palamau.
					1·24	0·28	2·00	0·50	1·24	0·56	+0·68	13·78	4·09	+0·69	Singhbhum.
					0·51	0·28	1·50	0·49	0·51	0·43	+0·08	9·38	3·23	+6·15	Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 11th of March 1893.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 5th.	Monday, 6th.	Tuesday, 7th.	Wednesday, 8th.	Thursday, 9th.	Friday, 10th.	Saturday, 11th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th October 1892.	Average rainfall from 16th October to date.
ORISSA	Puri	Puri	...	0·36	...	...	...	...	...	1	0·36	0·06	0·36	0·12	15·68	8·27
		Khurda	...	0·72	...	0·14	0·05					0·21		0·27		5·82
		Banpur	...	0·10	...	0·10						0·23		0·30		7·26
		False Point	...	0·17	...	...	...	...	...	1	0·17	0·07	0·17	0·23	13·30	9 03
		Gop	...	0·32								?		?		?
		Satpara	...	0·05	...	1·20	0·02					?		?		?
		Pipli	...	0·90	...	0·09						?		?		?
	Cuttack	Jagatsingpore	...	1·60								0·16		0·?8		5·23
		Banki	...	2·15	...	0·05	0·09					0·06		0·75		5·62
		Cuttack	...	2·40								0·12		0·54		5·76
		Kendrapara	...	0·72	...	0·01	0·13	...	...	2	0·86	0·25	0·86	0·34	10·04	5·72
		Jajpur	...	0·78	...	...	0·10	...	...	2	0 88	0·22	0·88	0·35	7·80	5·52
		Dharmsala	...	1·80								?		?		?
		Salipore	...	1·00								?		?		?
		Pal Lahara										?		?		?
	Balasore	*Akhyapada*	...	0·36	...	...	0·03	...	...	1	0·39	?	0·39	?	6·22	•
		Chandbali	...	0·24	...	...	0·10	...	...	2	0·34	0·12	1·28	0·31	?	5·76
		Bhadrak	...	...	...	...	0·77	...	...	1	0·77	0·20	0·86	0·32	13·04	4 97
		Soro	...	0·08	...	...	..	...	...	Nil	0·08	0·43	0·38	0·70	10·16	4·59
		Balasore	...	0·02	...	...	0·11	...	...	1	0·13	0·27	0·13	0·54	15·03	5·98
		Jellasore										0·19		0·38		3·44
		Baripodah	...	...	...	...	0·18	...	...	1	0·18	0·13	0·18	0·30	12·79	3·14
SOUTH-WEST BENGAL.	Midnapore	Contai	...	...	...	...	0·09	...	...	Nil	0·09	0·11	0·09	0·27	14·33	6 79
		Tamluk	...	...	...	...	0·13	...	...	1	0·13	0·29	0·13	0·51	9·74	5 28
		Midnapore	...	...	...	...	0·15	...	...	1	0·15	0·36	0·15	0·57	12·83	4·72
		Ghatal	...	...	...	...	0·08	...	...	Nil	0·08	0·61	0·08	0·85	14·15	3·11
		Kukrahaty	...	...	...	...	0·09	...	...	Nil	0·08	?	0·08	?	9 83	?
		Garhbeta	...	...	...	...	0·70	...	...	1	0·70	?	0·70	?	9·03	?
		Panokura	...	...	...	...	...	...	...	Nil	Nil	?	?	?	?	?
	24-Parganas	Saugor Island	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·33	17·83	6·87
		Diamond Harbour	...	...	...	...	0·50	...	...	1	0·50	0·16	0·50	0·36	13·92	5·56
		Canning Town	...	...	...	...	0·80	...	...	1	0·80	?	0·80	?	15·35	?
		Alipore (Observatory.)	...	...	...	...	0·24	...	...	1	0·24	0·31	0·24	0 60	10·09	5 45
		Barrackpore	...	...	...	...	0·20	...	...	1	0·20	0·23	0·20	0·42	15·18	4·30
		Dum-Dum	...	...	...	...	0·25	...	...	1	0·25	0·15	0·25	0·38	10·50	4 39
		Barasat	...	...	...	...	0·61	...	...	1	0·61	0·15	0·61	0 34	12·83	4 48
		Basirhat	...	...	...	...	0 12	...	...	1	0·12	0·25	0 12	0·13	13·33	4·14
	Howrah	Howrah	...	...	...	...	0·10	...	...	1	0 10	0·16	0·10	0 39	8·09	4·58
		Mohesreka	...	...	...	...	0·52	...	...	1	0·52	0·29	0·52	0·35	10·35	3 73
		Ulubaria	...	...	...	...	0·16	...	...	1	0·16	?	0·16	·	7 99	?
	Hooghly	Serampore	...	...	...	...	0·19	...	...	1	0·19	0·22	0·19	0·41	16·05	3 78
		Hooghly	...	...	...	...	0·29	...	...	1	0·29	0·21	0·29	0·38	14·50	3 97
		Jahanabad	...	...	...	...	0·33	...	...	1	0·13	0·31	0·13	0 46	10·66	3 77
	Nadia	Ranaghat	...	...	...	...	0·33	...	...	1	0·33	0·38	0·33	0·49	12·09	3·86
		Krishnagar	...	...	...	...	1·24	...	...	1	1·24	0·14	1·24	0·31	14·63	3 01
		Chuadanga	...	...	...	...	0·35	...	...	1	0·35	0·29	0·35	0·52	?	4·01
		Meherpore	...	...	...	...	0·55	...	...	1	0·55	0·32	0·55	0·47	9·57	3·66
		Kushtia	...	...	...	0·45	0·32	...	...	2	0·77	0·43	0·77	0·56	8 90	4·02
	Khulna	Satkhira	...	...	...	...	0·10	...	...	1	0·10	0·13	0·10	0·31	11·21	4·54
		Bazorhat	...	...	...	...	...	...	...	Nil	Nil	0·22	Nil	0·48	12·95	4·91
		Khulna	...	...	...	...	...	...	...	Nil	Nil	0 29	Nil	0·53	13·30	5·18
		Nakipur										?		?		?
		Rampal										?		?		?
	Jessore	Narail	...	...	...	...	0·03	...	...	Nil	0 03	0·27	0·03	0·46	12·58	4·83
		Jessore	...	...	...	...	0·08	...	...	Nil	0·08	0·39	0·08	0·62	18·44	4 83
		Jhenidah	...	...	...	...	0·31	...	...	1	0·31	0·19	0·31	0·48	14·60	4·47
		Magura	...	...	...	...	0·85	...	...	1	0·85	0·52	0·85	0·83	12·79	3 89
		Bangaon	...	...	...	...	0·12	...	...	1	0·12	0·19	0·12	0·41	12·77	4·12
	Burdwan	Kalna	...	...	...	...	0·44	...	...	1	0·44	0·39	0·44	0·59	13·08	3·90
		Burdwan	...	...	...	0·01	1·15	...	...	1	1·16	0·19	1 16	0·43	12·54	3·57
		Katwa	...	...	...	...	9 65	...	0·01	1	0·66	0·10	0·66	0·30	9 26	3 64
		Raniganj	...	...	...	...	0·15	...	0·05	1	0·20	0·10	0·20	0·24	6·83	3 08
		Mankur	...	...	...	0·30	0·45	...	...	2	0·75	?	0·75	?	7·75	?
	Bankura	Bankura	...	...	...	...	0·31	...	...	1	0·31	0·35	0·31	0·67	10·34	3·88
		Vishnupur	...	...	...	0·08	0·37	...	...	1	0·45	0 20	0·45	0·46	11·68	3 30
		Maliara	...	...	...	...	0·98	...	...	1	0·98	0·25	0·98	0·29	7·59	2·43
		Khatra	...	...	...	...	0·40	...	...	1	0·40	0·29	0 40	0·36	13·17	3·56
		Indas	...	...	...	...	1·68	...	...	1	1·68	?	1·61	?	12·19	?
		Kotalpur	...	...	...	...	1·62	...	...	1	1·62	?	1·62	?	11·28	?
		Onda	...	...	...	0·41	0·35	...	...	2	0·76	?	0·76	?	11·11	?
		Gangajalghati	...	...	...	0·22	0·22	...	...	2	0·44	?	0·44	?	7 19	?
		Raipur	...	...	...	...	1·64	...	...	1	1·64	?	1·64	?	16·41	?
		Sonamukhi	...	...	...	...	0·43	...	...	1	0·43	?	0 43	?	13·64	?
	Birbhum	Suri	...	...	...	...	0·58	...	0·05	1	0·63	0·23	0·63	0·32	9·50	3 08
		Hetampore	...	...	...	..	0·25	...	0·05	1	0·30	0·10	0·30	0·11	10 55	2·16
		Rampur Hat	...	...	...	...	0 31	...	...	1	0·31	0·20	0·31	0 36	7·35	2·70
		Bolpur	...	...	...	...	1·19	...	...	1	1·19	?	1 19	?	9·38	?
		Murari	...	...	...	...	0·14	...	...	1	0·14	?	0·14	?	4·87	?
	Murshidabad	Kandi	...	...	...	...	0·42	...	...	1	0·42	0·21	0·42	0·26	9·79	2·68
		Berhampore	...	...	...	...	0·42	...	...	1	0·42	0·27	0·42	0·37	6·79	3·04
		Lalbagh	...	...	...	...	0·37	...	...	1	0·37	0·23	0·37	0·27	7·31	2·12
		Azimganj	...	...	...	...	0·29	...	...	1	0·29	0·25	0·29	0·32	5·71	2·63
		Jangipur	...	...	...	...	0·09	...	...	Nil	0·09	0 1[illegible]	0·09	0·24	5·22	2·18
		Lalgola	...	...	...	...	0·35	...	...	1	0·35	0·14	0·35	0·25	6·22	2·33
		Akhriganj	...	...	...	...	0·21	...	...	1	0·21	?	0·21	?	5·41	?
		Putkabari	...	...	...	...	0·80	...	...	1	0·80	?	0·80	?	7·20	?
NORTH BENGAL	Pabna	Pabna	...	...	...	...	0·21	...	...	1	0·21	0·49	0·21	0·70	7·86	3·69
		Sirajganj	...	...	...	...	0·19	...	...	1	0·19	0·15	0·19	0·25	4·86	3·70
	Bogra	Sherepore	...	...	...	...	0·17	...	...	1	0·17	0·22	0·17	0·25	5·38	3·11
		Nowkhilla	...	...	...	...	0·17	...	...	1	0·17	0·11	0·17	0·13	5·01	2·78
		Bogra	...	...	...	...	0·12	...	...	1	0·12	0·08	0·12	0 12	4·33	2·89
		Panchbibi	...	...	...	...	1·29	...	...	1	1·29	0·19	1·29	0·24	3·43	1·69
	Rajshahi	Boalia	...	...	...	...	0·18	...	...	1	0·18	0·17	0·18	0·23	5·73	2·62
		Nator	...	...	...	...	0·19	...	...	1	0·19	0·16	0·19	0·23	5·95	3·14
		Naogaon	...	...	...	...	0·10	...	...	1	0·10	0·19	0·10	0·09	3·70	2·23
		Lalpore	...	...	...	...	0·20	...	...	1	0·20	?	0·20	?	5·22	?
		Manda										?		?		?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 11th of March 1893—contd.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 5th	Monday, 6th	Tuesday, 7th	Wednesday, 8th	Thursday, 9th	Friday, 10th	Saturday, 11th	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
ORTH BENGAL—concld.	Malda ...	Malda ...	...	...	...	...	0·03	...	...	Nil	0·03	0·07	0·03	0·18	4·60	2·76
		Chanchal .	...	...	...	...	0·05	...	...	Nil	0·05	0·10	0·05	0·12	2·76	2·10
		Gajol ...	...	...	...	...	0·03	...	...	Nil	0·03	?	0·03	?	2·29	?
		Sibganj	...	...	...	...	0·08	...	...	Nil	0·08	?	0·08	?	5·54	?
	Dinajpur ...	Mohadebpore	...	...	...	...	0·09	...	...	Nil	0·09	0·03	0·15	0·07	3·32	1·59
		Churaman ...	...	...	...	...	0·19	...	...	1	0·19	0·05	0·19	0·09	2·64	1·67
		Raiganj ..	...	...	...	...	0·55	...	...	1	0·55	0·14	0·55	0·16	3·26	1·69
		Dinajpur ...	...	...	...	...	0·22	...	...	1	0·22	0·16	0·22	0·25	2·17	3·33
		Balurghat ...	...	...	...	...	0·47	...	...	1	0·47	0·10	0·47	0·11	2·94	1·61
		Thakurgaon ...	...	...	...	...	0·45	...	...	1	0·45	?	0·45	?	1·92	?
	Rangpur ...	Bhawanigunge (*Gyabanda*)	...	...	...	...	0·33	...	...	1	0·33	0·18	0·33	0·34	1·95	2·83
		Rangpur ...	...	...	...	...	0·18	...	...	1	0·18	0·26	0·18	0·38	5·33	3·18
		Kurigaon ...	...	...	...	...	0·02	...	...	Nil	0·02	0·43	0·02	0·40	1·27	2·36
		Bagdogra (*Nilphamari*)	...	...	...	...	0·63	...	...	1	0·63	0·24	0·63	0·26	2·99	2·15
		Ulipore ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·06	?
	Jalpaiguri ...	Jalpaiguri ..	...	...	...	...	0·38	0·04	...	1	0·42	0·27	0·42	0·40	3·18	3·83
		Alipore Dooar	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·87	?
		Fallacotta ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·45	?
		Debiganj ...	...	...	...	...	0·10	...	...	1	0·10	?	0·10	?	2·15	?
		Bhagatpore (Nagrakatta)	...	...	...	...	0·43	0·11	...	2	0·54	?	0·54	?	9·37	?
	Kuch Bihar*	Dinhatta ...	...	...	...	...	0·12	0·02	...	1	0·14	0·31	0·14	0·39	1·99	2·51
		Kuch Bihar ...	...	...	...	...	...	...	...	Nil	Nil	0·30	Nil	0·48	2·56	2·46
		Mickliganj ...	...	...	...	...	0·30	...	...	1	0·30	0·30	0·30	0·35	2·80	2·52
		Mathabhanga	...	...	...	...	0·02	...	...	Nil	0·02	0·22	0·02	0·30	2·36	2·12
	Darjeeling ...	Buxa ...	...	...	...	...	0·07	...	...	Nil	0·07	0·75	0·07	1·02	15·53	6·62
		Siliguri ...	...	...	...	...	0·49	...	...	1	0·49	0·26	0·40	0·65	4·32	2·31
		Darjeeling ...	...	...	...	...	...	0·02	...	Nil	0·02	0·40	0·02	0·62	2·81	5·85
		Kalimpong ...	...	...	...	...	...	0·12	...	1	0·12	0·39	0·12	0·57	3·77	3·49
		Kurseong ...	...	...	...	...	0·35	0·15	...	2	0·50	?*	0·50	?	5·14	?
EAS. BENGAL	Chittagong ..	Cox's Bazar ...	...	...	...	...	...	...	...	Nil	Nil	0·23	Nil	0·25	13·30	8·27
		Chittagong ...	...	...	...	...	...	...	...	Nil	Nil	0·41	Nil	0·49	13·58	6·41
		Kutubdia ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	19·79	?
		Satkanya ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	9·41	?
		Kodala ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	?	?
		Fenoa ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	?	?
		Mirsarai ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	?	?
		Chandpur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	?	?
	Chittagong Hill Tracts.	Rangamati ...	...	...	...	...	...	...	...	Nil	Nil	0·64	Nil	0·85	10·10	7·53
		Bundarban ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	9·16	?
	Backergunge	Patuakhali ...	...	...	...	...	...	...	...	Nil	Nil	0·22	Nil	0·29	12·16	6·31
		Pirojpur ...	...	...	...	...	...	...	...	Nil	Nil	0·22	Nil	0·42	12·69	5·90
		Barisal ...	...	...	...	...	...	...	...	Nil	Nil	0·45	Nil	0·57	10·36	6·46
		Gournaddi ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·53	?
		Bhola ...	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	0·49	11·63	5·96
		Daulatkhan ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	14·54	?
		Bauphal ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	11·69	?
	Noakhali ...	Noakhali ...	...	...	...	...	...	...	...	Nil	Nil	0·73	Nil	1·05	18·56	7·55
		Fenny ...	...	...	...	...	...	...	...	Nil	Nil	0·65	Nil	0·81	17·35	9·27
		Harishpore ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	22·12	?
		Ramganj ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	14·50	?
	Faridpur ..	Madaripur ...	...	...	...	...	...	...	...	Nil	Nil	0·38	Nil	0·85	9·61	4·73
		Faridpur ...	...	...	...	...	0·46	...	...	1	0·46	0·67	0·46	1·15	16·98	4·86
		Goalundo ...	...	...	...	...	0·13	...	...	1	0·13	0·54	0·13	0·80	10·38	4·18
	Dacca ...	Munshiganj ...	...	...	...	...	...	...	...	Nil	Nil	0·82	Nil	1·11	10·76	6·36
		Dacca ...	...	...	...	...	...	...	...	Nil	Nil	0·71	Nil	0·91	15·44	4·34
		Narayanganj ...	...	...	...	...	0·03	...	...	Nil	0·03	1·17	0·03	1·19	13·60	6·09
		Manikganj ...	...	...	...	...	0·04	...	...	Nil	0·04	0·41	0·04	0·50	11·75	3·66
		Joydebpore ...	...	...	...	...	0·03	...	...	Nil	0·03	?	0·03	?	7·23	?
	Hill Tippera	Agartola ...	...	...	...	...	...	...	...	Nil	Nil	1·25	Nil	1·65	9·68	6·38
	Tippera ..	Comilla ...	...	...	...	...	...	...	...	Nil	Nil	0·76	Nil	1·18	11·55	5·80
		Chandpore ...	...	...	...	...	...	...	...	Nil	Nil	0·95	Nil	1·15	11·05	4·68
		Brahmanbaria	...	...	...	...	...	...	...	Nil	Nil	1·40	Nil	1·55	13·59	6·39
		Ramchandrapore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	8·71	?
		Nasirnagar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	13·62	?
		Daudkandi ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	7·84	?
		Kasba ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	14·04	?
		Laksham ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	12·01	?
	Mymensingh..	Kishorganj ...	...	...	...	...	0·18	...	...	1	0·18	0·55	0·18	0·89	8·72	4·31
		Atia (*Tangail*)	...	...	...	...	...	...	...	Nil	Nil	0·23	Nil	0·39	6·17	3·88
		Mymensingh ...	...	...	...	...	0·07	...	...	Nil	0·07	0·37	0·07	0·56	4·55	4·11
		Jamalpur .	...	...	...	...	0·13	...	...	1	0·13	0·14	0·13	0·17	4·90	3·65
		Netrakona ...	...	...	...	...	...	...	...	Nil	Nil	0·71	Nil	0·78	7·31	4·16
		Subornakhally	...	...	...	...	0·13	...	...	1	0·13	?	0·13	?	4·35	?
		Durgapore ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·41	?
		Sherepore Town	...	...	...	...	0·26	...	...	1	0·26	?	0·26	?	6·51	?
		Dewanganj ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·37	?
ORTH BIHAR	Purnea ...	Kishanganj ...	...	...	...	...	0·23	...	...	1	0·23	0·11	0·23	0·21	2·56	2·51
		Araria ...	...	...	...	...	0·04	...	...	Nil	0·04	0·11	0·04	0·29	2·50	2·31
		Purnea ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·16	2·75	2·75
		Gondwara (Korah) ...	...	...	...	...	0·17	...	...	1	0·17	?	0·17	?	1·40	?
		Barsoe ...	...	...	...	...	0·35	...	...	1	0·35	?	0·35	?	2·21	?
		Forbesganj ...	...	...	...	...	0·29	0·15	...	2	0·44	?	0·44	?	2·19	?
		Kaliaganj ...	...	...	...	...	0·25	...	...	1	0·25	?	0·25	?	1·57	?
	Bhágalpur ...	Madhipura ...	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·14	2·60	2·18
		Bongaon (Syfabad).	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·27	?
		Supaul ...	...	...	...	...	0·42	...	...	1	0·42	0·06	0·42	0·15	2·74	1·96
		Protabganj ...	...	...	...	...	0·30	0·16	...	2	0·46	?	0·46	?	2·57	?
		Bhagalpur ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·07	4·02	2·22
		Banka ...	...	0·60	...	0·05	...	...	...	1	0·65	0·08	0·65	0·10	5·63	2·39
		Colgong ...	...	...	...	...	0·01	...	...	Nil	0·01	?	0·01	?	4·93	?
	Darbhanga ...	Tajpur ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·14	1·98	1·98
		Darbhanga ...	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·17	2·73	2·17
		Madhubani ...	...	...	...	...	...	...	...	Nil	Nil	0·21	Nil	0·26	3·42	2·34
		Bahera ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·33	?
		Roshera ...	...	...	...	...	...	...	0·30	1	0·30	?	0·30	?	1·72	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 11th of March 1893—concld.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 5th.	Monday, 6th.	Tuesday, 7th.	Wednesday, 8th.	Thursday, 9th.	Friday, 10th.	Saturday, 11th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BIHAR—concluded.	Muzaffarpur	Sitamarhi	...	...	...	...	.	...	...	Nil	Nil	0·03	Nil	0·25	3·40	1·95
		Muzaffarpur	...	0·03	...	...	...	...	...	Nil	0·03	0·02	0·03	0·09	2·12	2·83
		Hajipur	...	0·03	...	...	...	...	...	Nil	0·03	0·03	0·03	0·07	2·62	2·00
		Paru	...	...	...	...	..	...	...	Nil	Nil	?	Nil	?	1·70	?
		Mahwa (Chitwarra.)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·40	?
		Siuhar	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·40	?
		Pupri	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·79	?
	Champaran	Motihari	...	0·02	...	...		...	...	Nil	0·02	0·03	0·02	0·22	2·60	1·72
		Bettiah	...	...	...	...		...	...	Nil	Nil	0·03	Nil	0·20	2·03	1·86
		Bagaha	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·63	?
		Burhurwa	...	0·02	...	...	...	...	...	Nil	0·02	?	0·02	?	1·80	?
	Saran	Gopalganj	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·01	2·34	1·82
		Siwan	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·08	2·67	2·53
		Chapra	..	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·11	2·85	2·34
SOUTH BIHAR	Shahabad	Buxar	...	0·10	...	...	...	...	...	1	0·10	0·10	0·10	0·13	3·00	2·54
		Dehri	..	0·12	...	...	...	...	...	1	0·12	0·13	0·12	0·40	3·26	3·05
		Bhabhua	.	0·27	...	...	...	...	...	1	0·27	0·06	0·27	0·38	3·19	3·22
		Sasaram	..	0·21	...	...	...	...	...	1	0·21	0·03	0·21	0·15	2·50	2·65
		Arrah	...	0·08	..	...	...	..	0·03	Nil	0·11	0·07	0·11	0·13	3·40	2·35
		Mohanea	...	0·15	...	...	...	..	...	1	0·15	?	0·15	?	1·48	?
		Khiri	...	0·20	0·70	...	...	...	...	2	0·90	?	0·90	?	3·37	?
		Ageaon										?		?		?
		Ramagar	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·33	?
		Koath	...	0·11	0·81	...	...	...	...	2	0·92	?	0·92	?	3·93	?
		Sikroul	0·18	0·05	...	...	.	...	0·10	2	0·36	?	0·38	?	2·73	?
		Bassowan	0·25	..	...	...	...	...	..	1	0·25	?	0·25	?	3·91	?
		Monaharpur	...	0·15	0·70	...	...	...	0·02	2	0·87	?	0·87	?	3·77	?
	Gaya	Aurangabad	...	0·10	...	...	..	...	0·04	1	0·14	0·05	0·14	0·20	4·03	2·08
		Gaya	...	0·08	.	...	.	...	...	Nil	0·08	0·04	0·08	0·14	3·65	2·49
		Nawadah	..	0·08	0·13	...	..	...	..	1	0·21	0·09	0·21	0·18	5·18	2·48
		Jahanabad	...	0·12	0·15	...	..	...	0·01	2	0·28	0·08	0·28	0·15	3·58	2·54
		Arwal	..	...	0·30	...	...	...	...	1	0·30	?	0·30	?	2·84	?
		Daudnagar	...	...	.	...	...	...	...	Nil	Nil	?	Nil	?	1·85	?
		Sherghati		...	0·15	...	...	...	...	1	0·15	?	0·15	?	6·11	?
		Rajauli	...	...	0·10	...	...	...	...	1	0·10	?	0·10	?	7·34	?
		Pakri Barawan	...	...	0·29	...	...	...	...	1	0·29	?	0·29	?	4·03	?
	Patna	Patna	...	..	...	...	...	...	0·01	Nil	0·01	0·04	0·01	0·10	2·61	2·26
		Dinapore	...	.	...	...	...	...	0·02	Nil	0·02	0·05	0·02	0·09	2·22	2·11
		Bihar	...	0·15	0·05	...	...	...	...	1	0·20	0·11	0·20	0·17	3·78	2·69
		Barh	...	...	...	...	..	...	0·02	Nil	0·02	0·07	0·02	0·16	3·35	2·38
		Bickram	...	..	...	...		...	...	Nil	Nil	?	Nil	?	3·35	?
		Hilsa	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·81	?
	Monghyr	Begusarai	...	...	...	...	..	...	0·09	Nil	0·09	0·04	0·09	0·09	5·82	2·72
		Monghyr	...	..	...	...	..	...	...	Nil	Nil	0·03	Nil	0·11	5·10	2·52
		Jamui	...	...	0·03	...	..	...	...	Nil	0·03	0·04	0·08	0·11	4·87	2·39
		Gopri	...	...	...	...	..	...	...	Nil	Nil	?	Nil	?	10·86	?
		Shaikpura	...	...	...	...	..	...	...	Nil	Nil	?	Nil	?	4·62	?
		Chahai Bamda	...	...	0·05	...	0·07	...	0·03	Nil	0·15	?	0·15	?	5·92	?
	Sonthal Parganas.	Rajmahal	...	...	...	..	.	...	...	Nil	Nil	0·01	Nil	0·08	3·76	1·74
		Godda	...	...	0·26	0·04	0·05	...	...	1	0·35	0·10	0·35	0·18	4·55	1·93
		Pakour	...	...	...	...	0·16	...	...	1	0·16	0·14	0·16	0·18	7·61	1·64
		Naya Dumka	...	...	...	...	0·29	...	0·01	1	0·30	0·12	0·30	0·33	5·53	2·93
		Deoghur	...	...	...	...	...	...	0·07	Nil	0·07	0·20	0·07	0·24	4·03	3·04
		Jamtara	..	...	...	...	0·11	...	...	1	0·11	0·17	0·11	0·27	7·48	2·53
		Belbodda	...	...	...	...	..	...	...	Nil	Nil	?	Nil	?	3·67	?
		Nanihat	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·95	?
CHOTA NAGPUR.	Hazaribagh	Pachamba (*Giridih*).	...	0·05	...	...	...	...	0·60	1	0·65	0·22	0·65	0·40	8·11	2·80
		Hazaribagh	...	0·24	...	...	0·07	...	0·20	2	0·51	0·17	0·51	0·34	8.31	3·05
		Semtaguran	..	0·19	...	...	...	0·19	0·46	3	0·84	0·12	0·84	0·63	8·43	2·91
		Mahudi Hills										0·21		0·48		3·01
		Jhumra Hill	...	0·10	...	...	0·10	...	0·90	3	1·10	1·99	1·10	2·20	10·69	4·79
		Barhi	...	0·17	...	...	...	...	0·06	1	0·23	?	0·23	?	6·59	?
		Chatra	...	0·15	...	...	0·13	...	0·11	3	0·39	?	0·39	?	7·19	?
		Karagdeha	...	0·06	...	...	...	...	0·07	Nil	0·13	?	0·13	?	4·41	?
		Ramgar	...	...	...	...	0·39	...	0·50	2	0·89	?	0·89	?	9·95	?
	Lohardaga	Lohardaga	...	0·33								0·53		0·86		3·98
		Ranchi	...	0·15	...	...	0·34	...	0·10	3	0·59	0·27	0·59	0·54	13·25	4·03
		Silli					0·20					?		?		?
	Palamau	Palamau (Daltonganj).	...	0·18	...	...	...	...	0·07	1	0·25	0·18	0·25	0·33	3·73	3·98
		Balumath	...	0·54	...	...	0·15					?		?		?
		Husainabad	...	0·21	...	...	...	...	0·15	2	0·36	?	0·36	?	4·62	?
		Garhwa	...	0·40	...	...	...	...	0·06	1	0·46	?	0·46	?	5·45	?
	Singhbhum	Chaibassa	...	...	...	...	1·08	...	0·16	2	1·24	0·28	1·24	0·56	13·78	4·09
		Chakardharpur.	...	...	...	...	0·55					?		?		?
		Ghatsila	...	...	...	...	2·00	...	0·10	2	2·10	?	2·10	?	14·25	?
		Baharagura	...	...	...	...	1·45					?		?		?
	Manbhum	Purulia	...	...	...	0·45	0·37	...	0·08	2	0·90	0·35	0·90	0·53	12·03	3·42
		Gobindpur	...	...	...	...	0·12	...	...	1	0·12	0·20	0·12	0·32	6·70	2·95
		Raghunathpore	...	...	...	...	0·12	...	0·16	2	0·28	?	0·28	?	5·00	?
		Barahabhum	...	...	...	0·60	...	...	0·10	2	0·70	?	0·70	?	11·50	?
		Jhalda	...	...	...	...	0·41	...	...	1	0·41	?	0·41	?	6·35	?
		Chas	...	...	...	...	0·35	...	0·12	2	0·47	?	0·47	?	7·08	?
		Pandra	...	...	...	...	0·16	...	...	1	0·16	?	0·16	?	6·18	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the* 14*th March* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 11TH OF MARCH 1893.

DURING the second half of the previous week fine settled weather had prevailed over the whole province, but conditions were decidedly unusual for the season on account of the very low temperature and decidedly high pressure which obtained. On March the 5th, or the first day of the present week, pressure was falling slowly in the west of the province, while it was rising slowly to moderately at the central and eastern stations. Winds also became southerly at some of the Bihar stations, and temperature remained rather largely in defect of the normal. On this day a well defined barometric depression entered North-Western India, moving in an easterly direction, and its centre was near Deesa, while a small subsidiary depression appeared near Peshawar. On the 6th an area of barometric depression existed between Sutna and Nowgong, while relatively low pressure existed over a large part of Western India. In Bengal pressure was rising at the western and south-western stations, and falling at the eastern and northern stations, but an area of disturbed conditions had reached the south-western districts, and rain was reported on the 6th from almost all stations in Orissa and at a considerable number of stations in Bihar and Chota Nagpur. On the 7th the areas of low pressure had either filled up or had passed away in an easterly direction; a moderate fall of pressure had taken place over Bengal, but pressure was still above the normal by amounts usually exceeding a tenth of an inch, and weather generally again became fair and settled, and only a few local showers occurred in Bihar and Chota Nagpur. On the 8th the barometric changes in Bengal were small, and at most stations pressure was rising, and again conditions appeared fairly settled, but from some cause not easily explainable, the sky began to cloud over rapidly, and notwithstanding the fact that a further rapid increase of pressure took place from the 8th to the 9th, by which the general pressure over the province became in excess of the normal by about a sixth of an inch, very disturbed conditions set in. Thus moderate rain was reported in almost all districts of the province on the 9th, and light irregular winds prevailed in all districts, and at the southern stations in particular north-easterly winds were commonly reported. With the general rainfall accompanying the heavily clouded skies, temperature was still unusually low, the defects being largest at the western stations, where they ranged up to 14°. A slight reaction then set in, and pressure began to fall slowly to moderately on the 10th, but notwithstanding the falling pressure, weather conditions began to improve, and on this day practically no rainfall was reported, and the sky began to clear rather rapidly. On the 11th instant the fall of pressure continued, the fall exceeding a twentieth of an inch in the north-eastern districts of Bengal, but still pressure remained in excess of the normal by more that a tenth of an inch. Winds were northerly at the eastern and southern stations, and generally southerly in Bihar and Chota Nagpur, probably in connection with a small barometric depression in North-Western India, while weather remained fine in all districts except parts of Bihar and Chota Nagpur, where again showers had fallen. Thus again the week has been one of somewhat disturbed conditions with moderate rain in all districts.

Pressure—Has been unusually high throughout the week, and the mean for the period has been in excess of the normal by about 0·12″ or 0·13″. The distribution of this excess, however, has been irregular, and thus at such stations as Rangpur, Jalpaiguri, Bhagalpur, Darbhanga, Motihari, and Chapra, the excess has equalled 0·16″ and upwards. On the other hand, the excess has been less than a tenth of an inch at Chittagong, and at Darjeeling it has only equalled 0·06.″

Temperature—Has again been unusually low throughout the week, and for the whole province the defect in the mean temperature for the period has been 4·8°, while defects exceeding five-and-a-half degrees have been recorded in South-West Bengal and Chota Nagpur.

The distribution of temperature during the week and its variation from the normal value are best seen in the table below, where the average maximum, minimum, and mean temperatures for the week at nine typical stations in different districts of the province are compared with the normal values for the period. The defect again, it will be seen, has been most largely marked in the maximum or day temperatures, which at such stations as Cuttack, Burdwan, Gaya, and Hazaribagh have been about 10° below the normal, while at Calcutta the average maximum or day temperatures have been only 81·8,° or 7·4° below the normal for the week:—

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 11th March 1893.

	Normal mean maximum temperature for the week ending 11th March.	Actual mean maximum temperature for the week ending 11th March 1893.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 11th March.	Actual mean minimum temperature for the week ending 11th March 1893.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 11th March.	Actual mean daily temperature for the week ending 11th March 1893.	Variation of actual mean from the normal.
Cuttack	96·0	84·3	—11·7	70·4	69·3	—1·1	83·2	76·8	—6·4
Calcutta	89·2	81·8	—7·4	67·4	63·6	—3·8	78·3	72·7	—5·6
Dacca	88·8	83·0	—5·8	66·2	62·3	—3·9	77·5	72·6	—4·9
Burdwan	91·4	82·0	—9·4	65·8	63·7	—2·1	78·6	72·9	—6·7
Patna	87·9	80·6	—7·3	60·2	61·1	+0·9	74·1	70·9	—3·2
Gaya	90·6	80·1	—10·5	62·9	61·0	—1·9	76·7	70·3	—6·1
Purnea	88·0	80·5	—7·5	57·1	58·0	+0·9	72·6	69·3	—3·3
Hazaribagh	85·5	75·5	—10·0	61·1	57·6	—3·5	73·3	66·6	—6·7
Darjeeling	56·3	49·7	—6·6	41·7	38·9	—2·8	49·1	44·3	—4·8

Rainfall.—The heaviest falls during the week have occurred in Orissa, which has received an average amount of 0·82 inch, and in Chota Nagpur with a fall of 0·52 inch. The falls in South-West Bengal and North Bengal have averaged from a third to a quarter of an inch, and Bihar has received a tenth of an inch, but the falls in East Bengal have been very small. The actual falls during the week have been largely in excess of the normal in Orissa, moderately in excess in Chota Nagpur and South-West Bengal, and slightly in excess in all other districts except East Bengal, where the fall has been rather largely in defect of the normal, the actual fall not equalling a tenth of the usual amount.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 11th of March 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week. Of highest of each day.	Of lowest of each day.	Of mean for each day.	Average mean of week above or below normal mean of week.	Of week. Average.	Normal average.	Variation.	Rainy days. Average number in week.	Normal average number in week	Variation.	Since 1st of month. Average.	Normal average.	Since 16th Oct. 1892. Average.	Normal average.
Orissa	86·6	54·5	83·1	67·4	75·2	—4·5	0·82	0·18	+0·64	1·53	0·39	+1·14	0·82	0·38	11·87	5·76
South-West Bengal ...	87·3	56·4	82·0	63·6	72·9	—5·5	0·34	0·24	+0·10	0·83	0·45	+0·38	0·34	0·42	11·32	3·90
North Bengal	85·2	48·6	80·9	58·5	69·8	—4·1	0·25	0·19	+0·06	0·76	0·33	+0·43	0·25	0·26	8·72	2·60
East Bengal	88·7	53·7	83·5	60·9	72·2	—3·6	0·05	0·60	—0·55	0·16	0·73	—0·57	0·05	0·80	11·48	5·04
North Bihar	83·7	48·9	80·4	58·7	69·6	—3·3	0·08	0·06	+0·02	0·17	0·14	+0·03	0·08	0·15	2·86	2·19
South Bihar	85·8	53·8	80·4	61·1	70·7	—4·6	0·13	0·08	+0·05	0·59	0·19	+0·40	0·13	0·18	4·21	2·44
Chota Nagpur	83·2	54·4	76·3	59·3	67·9	—7·1	0·52	0·40	+0·12	1·73	0·37	+1·36	0·52	0·65	9·49	3·45

METEOROLOGICAL OFFICE, BENGAL,
The 14th March 1893.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 5th to 11th March 1893.

Month.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature. Daily mean.	Maximum.	Range.	Minimum.	Hygrometry. Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	Rainfall at 10 A.M. for past 24 hours.
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
March ...	5th ...	30·108	71·4	81·9	21·0	60·9	77·6	64·6	·437	55·2	46	...
" ...	6th ...	·132	72·9	83·4	21·1	62·3	78·6	65·6	·458	56·5	47	...
" ...	7th ...	·081	73·8	84·7	21·8	62·9	79·8	70·6	·626	65·3	62	...
" ...	8th ...	·069	76·4	83·9	15·0	68·9	79·6	71·6	·669	67·3	66	...
" ...	9th ...	·152	72·3	80·4	16·3	64·1	74·2	67·6	·590	63·6	70	0·24
" ...	10th ...	·113	73·9	83·9	20·0	63·9	77·6	69·6	·617	64·9	65	...
" ...	11th ...	·103	73·1	81·2	16·3	64·9	77·6	68·6	·580	63·1	61	...

	Inches.
The mean 10 A.M. pressure of the seven days	30·108
	°
The mean temperature of the seven days	73·4
The extreme variation of temperature	23·8
The maximum temperature	84·7
	%
The mean 10 A.M. relative humidity of the seven days	60
The total fall of rain from 5th to 11th March 1893	0·24 inch.

The daily mean temperatures are the crude means of maximum and minimum temperatures.

A. PEDLER,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 13th March 1893.

Results of the Meteorological Observations taken at the Alipore Observatory from 5th to 11th March 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Temperature. Maximum.	Temperature. Range.	Temperature. Minimum.	Hygrometry. Mean wet bulb.	Hygrometry. Vapour tension.	Hygrometry. Dew point.	Hygrometry. Humidity.	Wind. Prevailing direction.	Wind. Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
March	5th	139·4	5·2	30·026	70·4	81·2	21·5	59·7	63·2	0·486	58·2	68	Variable and calm	11	Nil	Partially cloudy, o, ⌓.
„	6th	141·8	6·3	·032	71·5	81·7	19·6	62·1	65·3	·543	61·3	72	WNW and calm...	27	„	Partially cloudy, ⌓.
„	7th	140·0	5·8	·017	73·5	84·5	21·7	62·8	67·8	·607	64·4	75	WSW and calm ...	32	„	Partially cloudy, ⌓.
„	8th	140·4	1·5	·037	73·0	82·0	13·8	68·2	68·6	·644	66·2	80	Variable and calm	55	0·23	Chiefly cloudy, o, g, d, t, p.
„	9th	139·3	7·2	·080	71·5	78·7	14·5	64·2	67·4	·613	64·7	80	WNW and calm...	29	0·01	Partially cloudy, o, g, d.
„	10th	137·2	9·5	·052	72·6	82·2	18·8	63·4	6·60	·553	61·8	69	NNE and calm ...	48	Nil	Chiefly clear, ⌓.
„	11th	136·7	2·7	·020	72·9	79·7	14·8	64·9	65·3	·524	60·2	65	NNW and calm...	45	„	Chiefly cloudy, ⌓.

	Inches.
The mean pressure of the seven days	30·038
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	29·842
	Hours.
The total number of hours of bright sunshine	38·2
The maximum possible number of hours of sunshine	82·6
	°
The mean temperature of the seven days	72·2
The average temperature of the corresponding period for 24 years, S.-G.'s Office	78·2
The extreme variation of temperature	24·8
The maximum temperature	84·5
	Miles.
The highest velocity of the wind in one hour	10
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	73
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	69
	Inches.
The total fall of rain from 5th to 11th March 1893	0·24
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·40
The total fall from 1st January to 11th March 1893	5·24
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	2·28

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; d, drizzling rain; t, thunder; p, passing temporary showers; ⌓, dew.

A. Pedler,
For Meteorological Reporter to the Govt. of India.

Meteorological Office, Govt. of India;
Calcutta, the 13th March 1893.

IRRIGATION DEPARTMENT,—BENGAL.

Statement showing heights over mean sea-level and low-water in the Rivers Ganges, Bhagirathi, Jalangi, and Brahmaputra, for the month of February 1893.

DATE.	River Ganges.																River Bhagirathi.		River Jalangi.		River Brahmaputra.	
	Mirzapur.		Benares.		Buxar.		Dinapore.		Monghyr.		Sahibganj.		Rampur Boalia.		Goalundo.		Berhampore.		Serajganj.		Gowhatty.	
Distance. Miles.	From Allahabad ... 86		From Allahabad ... 134	From Mirzapur ... 48	From Benares 90		From Benares 177	From Buxar ... 87	From Benares 287	From Dinapore 110	From Benares 391	From Monghyr 94	From Benares 471	From Sahibganj ... 90	From Benares 591	From Rampur Boalia ... 120						
	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.
									Below zero.		Below zero.										Below zero.	
1st	3·50	209·72	1·50	198·30	1·83	170·88	7·10	141·33	0·37	101·48	0·58	67·42	0·23	42·23	1·33	10·27	3·00	36·74	2·46	6·76	0·75	148·01
2nd	3·50	209·72	1·42	198·22	1·75	170·80	7·00	141·23	0·42	101·43	0·75	67·25	0·21	42·21	1·33	10·27	2·98	36·72	2·42	6·72	0·70	148·06
3rd	3·50	209·72	1·33	198·13	1·75	170·80	7·00	141·23	0·44	101·41	0·75	67·75	0·19	42·19	1·33	10·27	2·96	36·70	2·42	6·72	0·77	147·99
4th	3·42	209·64	1·42	198·22	1·67	170·72	7·00	141·23	0·46	101·39	0·83	67·17	0·17	42·17	1·33	10·27	2·94	36·68	2·42	6·72	0·80	147·96
5th	3·42	209·64	1·37	198·17	1·67	170·72	7·00	141·23	0·50	101·35	0·92	67·08	0·15	42·15	1·33	10·27	2·92	36·66	2·42	6·72	0·80	147·96
6th	3·42	209·64	1·33	198·13	1·67	170·72	7·10	141·33	0·52	101·33	0·92	67·08	0·12	42·12	1·33	10·27	2·92	36·66	2·42	6·72	0·85	147·91
7th	3·42	209·64	1·33	198·13	1·67	170·72	7·10	141·33	0·54	101·31	1·00	67·00	0·10	42·10	1·33	10·27	2·92	36·66	2·42	6·72	0·90	147·86
8th	3·42	209·64	1·33	198·13	1·67	170·72	7·10	141·33	0·58	101·27	1·08	67·00	0·08	42·08	1·42	10·36	2·92	36·66	2·42	6·72	0·90	147·86
9th	3·42	209·64	1·25	198·05	1·58	170·63	7·00	141·23	0·60	101·25	1·17	66·83	0·06	42·06	1·42	10·36	2·89	36·63	2·42	6·72	0·90	147·86
10th	3·42	209·64	1·21	198·01	1·58	170·63	7·00	141·23	0·62	101·23	1·25	66·75	0·04	42·04	1·42	10·36	2·89	36·63	2·33	6·63	0·90	147·86
11th	3·33	209·55	1·17	197·97	1·58	170·63	6·95	141·18	0·67	101·18	1·33	66·67	0·02	42·02	1·25	10·19	2·87	36·61	2·33	6·63	0·92	147·84
12th	3·33	209·55	1·17	197·97	1·58	170·63	6·90	141·13	0·71	101·14	1·42	66·58	0·00	42·00	1·08	10·02	2·87	36·61	2·33	6·63	0·95	147·81
													Below zero.									
13th	3·25	209·47	1·17	197·97	1·58	170·63	6·95	141·18	0·71	101·14	1·33	66·67	0·02	41·98	1·00	9·94	2·85	36·59	2·33	6·63	0·97	147·79
14th	3·17	209·39	1·17	197·97	1·58	170·63	6·90	141·13	0·75	101·10	1·33	66·67	0·02	41·98	0·92	9·86	2·85	36·59	2·33	6·63	0·97	147·79
15th	3·17	209·39	1·17	197·97	1·58	170·63	6·90	141·13	0·77	101·08	1·42	66·58	0·04	41·96	1·00	9·94	2·85	36·59	2·33	6·63	0·97	147·79
16th	3·17	209·39	1·17	197·97	1·50	170·55	6·90	141·13	0·79	101·06	1·38	66·42	0·06	41·94	1·00	9·94	2·85	36·59	2·33	6·63	0·98	147·78
17th	3·17	209·39	1·17	197·97	1·50	170·55	7·00	141·23	0·83	101·02	1·67	66·33	0·08	41·92	1·00	9·94	2·85	36·59	2·33	6·63	0·98	147·78
18th	3·17	209·39	1·17	197·97	1·50	170·55	7·00	141·23	0·85	101·00	1·75	66·25	0·10	41·90	1·00	9·94	2·85	36·59	3·08	7·38	0·98	147·78
19th	3·08	209·30	1·17	197·97	1·50	170·55	7·00	141·23	0·87	100·98	1·83	66·17	0·12	41·88	1·00	9·94	2·83	36·59	3·10	7·40	0·98	147·78
20th	3·08	209·30	1·17	197·97	1·50	170·55	7·00	141·23	0·92	100·93	1·92	66·08	0·14	41·86	1·17	10·11	2·83	36·59	3·17	7·47	0·90	147·86
21st	3·08	209·30	1·17	197·97	1·50	170·55	7·00	141·23	0·95	100·90	2·08	65·92	0·17	41·83	1·17	10·11	2·83	36·59	2·58	6·89	0·85	147·91
22nd	3·08	209·30	1·25	198·05	1·50	170·55	7·00	141·23	0·96	100·89	2·08	65·92	0·19	41·81	1·08	10·02	2·77	36·51	2·58	6·88	0·85	147·91
23rd	3·08	209·30	1·33	198·13	1·58	170·63	7·00	141·23	0·96	100·89	2·17	65·83	0·19	41·81	1·08	10·02	2·81	36·55	2·50	6·80	0·80	147·96
24th	3·08	209·30	1·33	198·13	1·58	170·63	7·10	141·33	1·00	100·85	2·25	65·75	0·21	41·79	1·08	10·02	2·79	36·53	2·42	6·72	0·80	147·96
25th	3·08	209·30	1·25	198·05	1·58	170·63	7·15	141·38	1·04	100·81	2·33	65·67	0·21	41·79	1·08	10·02	2·79	36·53	2·42	6·72	0·80	147·96
26th	3·08	209·30	1·17	197·97	1·42	170·47	7·20	141·43	0·83	101·02	2·42	65·58	0·23	41·77	1·00	9·94	2·77	36·51	2·42	6·72	0·83	147·93
27th	3·08	209·30	1·17	197·97	1·42	170·47	7·40	141·63	0·75	101·10	2·50	65·50	0·23	41·77	0·92	9·86	2·75	36·49	2·42	6·72	0·85	147·91
28th	3·08	209·30	1·17	197·97	1·33	170·38	7·55	141·78	0·50	101·35	2·50	65·50	0·21	41·79	0·83	9·77	2·75	36·49	2·42	6·72	0·70	148·06

CALCUTTA,
The 13th March 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

IRRIGATION DEPARTMENT, BENGAL.

IRRIGATION OPERATIONS FOR THE OFFICIAL YEAR 1892-93.

Areas leased for irrigation up to end of January 1893.

Circle.	District.	Canal.	Estimated full discharge.	Average discharge in month.	Discharge utilised.	Approximate area of land irrigated during the year up to the end of the month.	Approximate area of land under irrigation up to the same date last year.	Details of areas leased. Five years, all crops.	Five years, kharif.	Annual leases. Kharif.	Rabi.	Sugarcane.	Bhadoi.	Hot-weather.	Total.	Grand Total.	Rainfall, 1892-93. During month.	Rainfall, 1892-93. Up to end of month.	Rainfall, 1891-92. During month.	Rainfall, 1891-92. Up to end of month.	Remarks.
			C. ft.	C. ft.	C. ft.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Inches.	Inches.	Inches.	Inches.	
Orissa	Cuttack	Taldanda, 1st reach	1,342	28	} 1	8,732	10,537	......	8,308	472	139	29	......	......	640	8,948	3'10	52'75	......	76 60	
		Ditto, 2nd "	566	9													{ 1 90	50'91	......	62'19	
		Machgong	766	19	3	27,439	33,404	......	25,084	2,601	125	23	......	......	2,749	27,833	{ 2'50	45'02	. ....	51'98	
		Kendrapara	1,067	176'26	76'39	50,115	47,489	......	51,475	37	1,746	38	......	......	1,821	53,296	1'80	40'25	.....	48'93	
		Gobri	372'82	42	11'16	2,610	3,063	......	3,287	......	50	......	......	......	50	3,337	1'85	48'26	... ..	73'33	
		Do. Extension	648	36	6'49	3,574	3,633	......	3,216	......	13	......	......	......	13	3,229	No rain gauge.		.. ...	.. ...	
		Pattamoondi	885	86	49'75	12,627	13,541	......	11,802	......	199	......	......	......	199	12,001	1'70	12 52	No gauge.		
		High Level, Range I	608	134'17	......	21,739	21,368	......	21,955	114	276	......	......	......	390	22,345	1'83	53'80	......	42'84	
		Ditto, ditto II	727'16	......	......	2,384	2,732	......	2,329	114	45	......	......	......	159	2,488	......	......	......	......	
		Jajpur Canal	700	......	......	791	1,366	......	404	......	......	......	......	......	......	404	......	......	......	......	
	Balasore	High Level, Range III	727'16	......	......	32,746	37,201	......	34,318	......	1	168	......	......	169	34,487	1'23	53'60	.. ...	62'00	
		Total	......	......	......	162,757	174,334	......	162,178	3,338	2,594	258	......	......	6,190	168,368	......	......	......	......	
		Total of the corresponding period of last year	......	......	......	......	......	......	179,030	2,444	3,884	293	......	......	6,621	185,651	......	......	......	......	
South-Western.	Midnapore	Midnapore	1,411	39	......	81,501	76,673	......	82,146	13	......	......	......	......	13	82,159	0'35	38'11	......	54'92	Whole month discharging.
		Panchkoora	522	3	......	7,266	5,258	......	7,531	40	......	......	......	......	40	7,571	0'16	33'81	......	41'60	Three days discharging.
	Howrah	Tidal Reaches, Ranges I & II	......	......	......	835	375	......	642	......	......	......	......	......	......	642	.... .	....	......	.. .	
		Total	......	......	......	89,602	82,306	......	90,319	53	......	......	......	......	53	90,372	......	......	......	......	
		Total of the corresponding period of last year	......	......	......	......	......	......	82,798	......	......	......	......	......	......	82,798	......	......	......	......	
Sone	Shahabad	Western Main	4,342	2,081	103	30,250	52,002	16,310	......	3,506	10,847	... ..	......	807	15,160	31,470	} 0'66	40'86	0'06	18'98	
		Buxar	1,226	373	308	100,884	125,035	60,546	......	7,591	26,963	......	54	4,093	38,701	99,247					
		Arrah	2,000	1,256	667	158,405	105,496	115,541	......	9,798	20,086	......	......	4,076	33,960	149,501	0'57	34'94	0'09	24'08	
	Patna and Gaya.	Eastern Main	} 1,466	390	300	{ 2,975	2,522	2,099	......	402	436	......	3	......	841	2,940	} 1'24	49'01	0'03	34'04	
		Patna				{ 71,226	90,751	60,137	......	6,481	4,287	......	29	......	10,797	70,934					
		Total	......	......	......	363,740	435,806	254,633	......	27,778	62,619	......	86	8,976	99,459	354,092	. ....	......	. . ..	......	
		Total of the corresponding period of last year	......	......	......	......	......	234,442	......	46,484	121,509	1,113	520	9,973	179,599	414,041	......	......	......	......	
		Grand Total	......	......	......	616,099	692,446	254,633	252,497	31,169	65,213	258	86	8,976	105,792	612,832	......	......	. ....	. ....	
		Grand Total of the corresponding period of last year	......	......	......	......	......	234,442	261,823	48,928	125,393	1,406	520	9,973	186,220	682,490	......	......	......	......	

CALCUTTA,
The 14th March 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

IRRIGATION DEPARTMENT, BENGAL.

Abstract statement showing Tollage on Canals in Bengal classed as Major Works for the month of January 1893, as compared with that of the corresponding month of the previous year.

Canals.	Tollage, 1892-93. During the month.			Tollage, 1892-93. To end of the month.			Tollage, 1891-92. During the month.			Tollage, 1891-92. To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Orissa Circle.												
Taldanda Canal System	152	2	7	5,702	15	8	193	12	7	3,470	13	7
Kendrapara ditto ...	7,415	5	5	54,708	5	3	10,239	5	1	76,709	8	5
High Level, Range I	1,478	15	6	11,275	2	6	1,515	10	3	9,330	8	0
Ditto " II	378	9	6	2,247	4	9	364	3	9	2,129	5	3
Ditto " III	173	2	3	1,226	10	4	174	10	11	1,380	8	4
Jajpur Canal ...	51	9	0	214	2	0	37	12	0	202	4	0
Total Orissa Circle ...	9,649	12	3	75,374	8	6	12,525	6	7	93,222	15	7
South-Western Circle.												
Midnapore Canal ...	8,136	0	3	94,146	6	0	14,577	14	3	95,548	8	3
Hijili Tidal Canal ...	3,104	4	0	40,891	8	3	4,505	0	9	25,323	1	0
Total South-Western Circle ...	11,240	4	3	1,35,037	14	3	19,082	15	0	1,20,871	9	3
Sone Circle.												
Patna Canal System ...	1,159	15	0	17,115	4	9	1,756	3	0	20,422	2	0
Arrah ditto ...	1,115	2	6	14,465	12	9	938	7	3	17,157	5	0
Buxar ditto ...	532	4	3	8,254	7	9	778	7	9	8,685	13	9
Total Sone Circle ...	2,807	5	9	39,835	9	3	3,473	2	0	46,265	4	9
GRAND TOTAL ...	23,697	6	3	2,50,248	0	0	35,081	7	7	2,60,359	13	7

Government Transport Service.

Canal.	Tollage, 1892-93. During the month. Passengers.	Goods.	Total receipts.	To end of the month. Passengers.	Goods.	Total receipts.	Tollage, 1891-92. During the month. Passengers.	Goods.	Total receipts.	To end of the month. Passengers.	Goods.	Total receipts.
	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.
Orissa Circle.												
High Level ...	2,114	913	2,086 11 6	14,067	12,164	14,477 4 10	1,673	1,568	1,750 13 4	10,277	9,794	10,275 9 1
Total Orissa Circle	2,114	913	2,086 11 6	14,067	12,164	14,477 4 10	1,673	1,568	1,750 13 4	10,277	9,794	10,275 9 1

Total Navigation Receipts.

Canals.	Earnings, 1892-93. During the month.			Earnings, 1892-93. To end of the month.			Earnings, 1891-92. During the month.			Earnings, 1891-92. To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Orissa Canals ...	11,736	7	9	89,851	13	4	14,276	3	11	1,03,498	8	8
Midnapore Canal ...	8,136	0	3	94,146	6	0	14,577	14	3	95,548	8	3
Hijili Tidal Canal ...	3,104	4	0	40,891	8	3	4,505	0	9	25,323	1	0
Sone Canals ...	2,807	5	9	39,835	9	3	3,473	2	0	46,265	4	9
Total ...	25,784	1	9	2,64,725	4	10	36,832	4	11	2,70,635	6	8

CALCUTTA,
The 13th March 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

IRRIGATION DEPARTMENT, BENGAL.

Abstract statement showing Tollage on Canals in Bengal classed as Minor Works and Navigation for the month of January 1893, *as compared with that of the corresponding month of the previous year.*

CANALS.	TOLLAGE, 1892-93.						TOLLAGE, 1891-92.					
	During the month.			To end of the month.			During the month.			To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Calcutta and Eastern Canals	54,596	6	3	2,83,845	10	6	53,194	1	6	3,08,195	3	0
Tolly's Nala ...	11,551	0	9	72,204	1	3	13,572	13	3	92,696	7	0
Total ...	66,147	7	0	3,56,049	11	9	66,766	14	9	4,00,891	10	0
Orissa Coast Canal ...	4,297	3	6	40,445	4	9	7,062	13	0	43,731	6	9
Nadia Rivers ..	9,669	8	0	1,48,500	8	3	9,635	0	0	1,76,894	6	6
GRAND TOTAL ...	80,114	2	6	5,44,995	8	9	83,464	11	9	6,21,517	7	3

CALCUTTA,
The 13*th March* 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 11*th March* 1893, *as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 11TH MARCH 1893.			WEEK ENDING SATURDAY, THE 12TH MARCH 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs
Rice and paddy	1,063	3,02,3[illegible]0	5,024	755	3,35.290	5,738
Jute	69	34,600	550	7	3,110	54
Firewood	137	1,01,525	1,657	110	61,325	886
Other articles	916	2,71,560	4,303	974	3,02,420	4,502
Total ...	2,185	7,09,985	11,534	1,846	7,02,145	11,180

EAST INDIAN RAILWAY.

Statement of Goods Traffic in Staples carried during the four weeks ending 28th January 1893, as compared with the same period of 1892.

STAPLES.	1892.		1893.		INCREASE.		DECREASE.	
	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.
	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.
Cotton, raw	65,723	45,167	1,43,049	68,912	77,326	23,745	..	...
Cotton twist and yarn—								
1.—European	8,631	9,305	7,280	7,514	...	...	1,351	1,791
2.—Indian	22,078	11,507	17,125	9,078	...	...	4,953	2,429
Cotton piece-goods—								
1.—European	1,27,154	1,37,861	96,547	1,07,422	...	...	30,607	30,439
2.—Indian	15,867	16,720	12,151	7,150	...	...	3,716	9,570
Drugs and chemicals—								
1.—Intoxicating other than opium	688	219	508	129	...	...	180	90
2.—Non-intoxicating	9,903	10,259	9,410	7,992	...	...	493	2,267
Dyes and tans—								
1.—Indigo	15,074	15,943	7,489	6,351	...	...	7,585	9,592
2.—Myrabolams	44,937	9,455	44,211	9,416	...	...	726	39
3.—Aniline dyes	412	466	189	189	...	...	223	277
4.—Cutch	1,237	515	2,031	1,224	794	709	...	...
5.—Paints and colours	14,538	4,542	17,121	4,661	2,583	119	...	...
6.—Others	4,161	2,111	3,845	2,812	...	701	316	...
Grains—								
1.—Wheat	3,95,522	1,33,350	2,81,907	1,01,495	...	...	1,13,615	31,855
2.—Rice	9,74,701	1,47,044	6,61,997	1,13,352	...	...	3,12,704	33,692
3.—Jawar and bajra	78,253	11,213	89,719	11,584	11,466	371	...	...
4.—Gram	75,314	16,548	1,21,819	58,659	46,505	42,111	...	...
5.—Indigo seed	1,03,659	42,429	1,00,626	32,651	...	...	3,033	9,778
6.—Seeds other than oil-seeds	79,440	24,111	86,538	27,902	7,098	3,791	...	...
7.—Others	3,99,581	85,489	3,22,615	87,078	...	1,589	76,966	...
Hides and skins—								
1.—Hides of cattle	57,627	37,957	53,905	35,862	...	...	3,722	1,095
2.—Skins of sheep, &c.	14,874	9,850	17,062	7,581	2,188	...	...	2,269
Horns	3,697	2,045	1,450	969	..	...	2,247	1,076
Jute—								
1.—Raw	53,324	13,853	98,606	26,927	45,282	13,074	...	...
2.—Gunny bags and cloth	81,611	36,149	74,710	36,191	...	42	6,901	...
Lac—								
1.—Stick	24,515	7,711	31,684	12,784	7,169	5,073	...	...
2.—Shell lac	15,940	11,973	17,859	14,080	1,919	2,107	...	...
Leather—								
1.—Unmanufactured	2,167	4,273	1,782	3,600	...	...	385	673
2.—Manufactured	5,619	5,733	6,093	7,358	474	1,625	...	...
Liquors—								
1.—Beer	9,151	5,195	8,988	4,425	...	...	163	770
2.—Wines	2,763	5,073	3,847	3,521	1,084	...	...	1,552
3.—Spirits	2,381	3,151	1,504	1,993	...	...	877	1,158
Metals—								
1.—Copper, unwrought	9,197	11,411	4,442	4,315	...	...	4,755	7,096
2.—Brass, unwrought	3,626	2,203	3,340	2,049	...	...	286	154
3.—Brass and copper, wrought	19,484	10,446	19,405	8,778	...	...	79	1,668
4.—Iron	2,13,539	1,04,697	3,24,585	1,23,466	1,11,046	18,769	...	...
5.—Tin	4,867	3,871	4,398	2,782	...	...	469	1,089
6.—Others	12,741	9,310	12,172	8,724	...	...	569	586
Oils—								
1.—Castor	3,496	935	4,157	1,098	661	163	...	...
2.—Kerosine	1,26,477	62,284	1,10,469	48,113	...	...	16,008	14,171
3.—Others	7,954	3,547	13,366	5,637	5,412	2,090	...	...
Oil-seeds—								
1.—Linseed	1,26,902	46,033	36,226	12,096	...	...	90,676	33,937
2.—Rape and mustard	65,919	14,564	96,806	25,382	30,887	10,818	...	...
3.—Til or jinjili	51,046	12,630	69,990	22,544	18,944	9,914	...	...
4.—Castor	54,148	13,767	63,653	15,469	9,505	1,702	...	...
5.—Poppy	28,074	8,759	3,988	974	...	...	24,086	7,785
6.—Others	14,434	4,458	11,767	2,328	..	.	2,667	2,130
Opium	30,290	31,901	19,551	17,899	...	...	10,739	14,002
Paper and pasteboard	9,624	6,929	10,913	6,712	1,289	...	...	217
Provisions—								
1.—Ghee	33,505	23,521	34,979	20,485	1,474	...	...	3,036
2.—Dried fruits and nuts	29,304	26,639	28,787	19,518	...	...	517	7,121
3.—Cocoanuts	10,989	2,954	6,272	1,775	...	...	4,717	1,179
4.—Turmeric	9,940	5,116	10,546	5,658	606	542	...	...
5.—Others	95,029	36,685	75,658	31,293	...	...	19,371	5,392
Salt	4,16,202	98,365	5,09,078	90,218	92,876	...	...	8,147
Saltpetre, &c.—								
1.—Saltpetre	77,878	33,194	63,827	27,789	...	...	14,051	5,405
2.—Borax	3,218	2,366	3,792	3,073	574	707	...	...
3.—Other saline substances	34,301	9,940	30,292	9,790	...	...	4,009	150
Silk, raw—								
1.—Foreign	9	4	...	..	..	...	9	4
2.—Indian	3,859	1,869	6,095	2,762	2,236	893	...	...
Silk piece-goods—								
1.—Foreign	9	17	6	9	...	...	3	8
2.—Indian	536	751	590	532	54	...	...	219
Spices—								
1.—Pepper	3,233	3,170	2,598	2,687	...	...	635	483
2.—Other	25,933	13,830	25,741	17,348	...	3,518	192	...
Sugar—								
1.—Drained	19,312	8,262	13,621	5,143	...	...	5,601	3,119
2.—Undrained	4,97,510	89,289	5,70,715	1,07,244	73,205	17,955	...	...
Stone and lime	2,24,964	30,685	3,04,657	45,012	79,693	14,327	...	...
Tea—								
1.—Foreign	3	2	5	1	2	...	...	1
2.—Indian	2,157	1,746	2,171	1,719	14	...	...	27
Timber, &c.—								
1.—Timber	1,66,258	28,119	1,05,476	16,538	...	...	60,782	11,581
2.—Firewood	30,822	2,028	30,465	2,167	...	139	357	...
Tobacco	21,849	10,260	17,095	8,692	...	...	4,754	1,568
Umbrellas	658	1,038	671	1,088	13	50	...	...
Wool—								
1.—Raw	2,249	2,167	2,253	1,658	4	...	...	509
2.—Piece-goods—								
a.—European	1,341	1,179	399	573	...	...	942	606
b.—Indian	2,040	2,181	1,696	1,615	...	...	344	566
3.—Shawls	...	...	...	...	...	...	...	...
All other articles of merchandise	4,63,237	1,67,675	3,42,819	1,45,119	...	...	1,20,418	22,556
Total	56,68,705	18,18,616	53,43,199	17,00,334	...	...	3,25,506	1,18,282
Military stores	19,002	30,078	12,673	18,785	...	...	6,329	11,293
Coal—								
1.—For public	42,34,829	6,20,498	42,43,974	5,85,802	9,145	...	...	34,696
2.— " Railway	4,94,700	64,580	4,90,554	61,377	...	...	4,146	3,203
Railway Materials—								
1.—For construction and revenue	6,61,248	25,775	8,12,209	40,670	1,50,961	14,895	...	...
Live-stock	...	8,600	...	6,622	...	...	...	1,078
Total	1,10,78,484	25,68,147	1,09,02,609	24,13,590	...	...	1,75,875	1,54,557

T. SIMPSON, *Assistant Auditor.*

TRAFFIC AUDIT OFFICE, GOODS DIVISION, JAMALPUR, *the 7th March* 1893.

EASTERN BENGAL STATE RAILWAY.

Abstract of principal commodities carried over the Eastern Bengal State Railway during the month of December 1892, as compared with the same month of the previous year.

Staples.	1892. Up.	1892. Down.	1891. Up.	1891. Down.	Total. 1892.	Total. 1891.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal	6,159	3,462	6,388	16,990	36,290*	30,008*	6,282	......
Cotton, raw	27	253	28	99	280	127	153	......
Cotton twist and yarn—								
1.—European								
2.—Indian								
Cotton piece-goods—								
1.—European—								
a.—In bales and bundles	2,849	109	3,229	174	2,958	3,403	......	445
b.—In boxes								
2.—Indian—								
a.—In bales and bundles								
b.—In boxes								
Grains—								
2.—Rice	2,158	4,012	4,741	1,932	6,170	6,673	......	503
5.—Others	1,014	4,184	2,112	5,509	5,228	7,621	......	2,393
Hides and skins—								
1.—Hides of cattle—								
a.—Dressed								
b.—Undressed								
2.—Skins of sheep, &c.—	6	678	4	605	684	609	75	......
a.—Dressed								
b.—Undressed								
Jute—								
1.—Raw—								
a.—Screwed	26	8,663	......	6,760	8,389	6,760	1,629	......
b.—Unscrewed	52	18,061	10	21,690	18,113	21,700	......	3,587
2.—Gunny bags and cloth	305	1,447	364	1,779	1,752	2,143	......	391
Metals—								
1.—Copper, unwrought								
2.—Brass, unwrought								
3.—Brass and copper, wrought	2,107	143	1,147	106	2,250	1,253	997	......
4.—Iron								
5.—Tin								
6.—Others								
Oils—								
2.—Kerosine	5,338	24	1,680	17	5,362	1,697	3,665	......
3.—Others	325	56	272	21	381	293	88	......
Oil-seeds—								
1.—Linseed								
2.—Rape and mustard								
3.—Til or gingelly								
4.—Niger	236	685	312	1,585	921	1,897	... ..	976
5.—Castor								
6.—Poppy								
7.—Others								
Provisions—								
2.—Betel-nuts	124	1,184	119	1,102	1,308	1,221	87	......
3.—Others	510	388	765	284	898†	1,049	......	151
Railway plant and rolling-stock	......	......	......	......	9,442	8,963†	479	......
Salt	3,418	48	3,100	34	3,466	3,134	332	......
Sugar—								
1.—Drained	869	516	1,396	209	1,385	1,605	......	220
2.—Undrained								
Tea—								
1.—Foreign	1	2,253	5	1,779	2,254	1,784	470	......
2.—Indian								
Wood—								
1.—Timber	193	305	189	370	498	559	......	61
2.—Firewood	1,056	......	1,591	......	1,056	1,591	......	535
Tobacco	78	660	112	416	738	528	210	......
All other articles of merchandise—								
1.—Unmanufactured	3,779	2,502	3,991	2,799	6,281	6,790	......	509
2.—Manufactured								
Hay, straw, and wooloo (C. & S.-E. Sections)...	526	... ..	635	......	526	635	......	109
Total ...	31,183	49,333	32,190	64,260	116,630	112,043	14,467	9,880

* Includes 26,669 tons and 6,630 tons of coal during 1892 and 1891, respectively, carried for Revenue, for which no "Up" and "Down" register maintained.

† Railway plant and rolling-stock, 9,442 tons and 8,963 tons for the years 1892 and 1891, respectively, for which no "Up" and "Down" register maintained.

Comparative Statement of principal commodities carried on the Eastern Bengal State Railway during the month of December 1892.

INCREASES.

	Tons.
Coal	6,282
Railway and Flotilla consumption principally.	
Jute, screwed	1,629
Silliguri, Haldibari and Saidpur contributed about two-thirds of the increase.	
Kerosine oil	3,665
Due to the prohibition of carriage by boat within certain limits of the port of Calcutta.	
Tea	470
The increase was in despatches from Jalpaiguri. Much of the crop could not be brought earlier into the market owing to the cart roads having been washed away by heavy rains.	

DECREASES.

	Tons.
Rice	503
Charkai and Goalundo show the principal decreases said to be due to short crop.	
Jute, unscrewed	3,587
The principal decreases are in despatches from Serajgunge, Kushtea, Siliguri, Julpaiguri and Hilli. The market was uncertain in December.	

JAMES SHAW,
Examiner of Accounts.

CALCUTTA, *the 7th March* 1893.

BENGAL CENTRAL RAILWAY.

Abstract of principal commodities carried over the Bengal Central Railway during the month of December 1892, as compared with the same month of the previous year.

Staples.	1892. Up.	1892. Down.	1891. Up.	1891. Down.	Total. 1892.	Total. 1891.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal	1,751	......	2,483	......	2,251*	2,483*	......	232
Cotton, raw	......	3	.....	......	3	......	3	......
Cotton twist and yarn—								
1.—European								
2.—Indian								
Cotton piece-goods—								
1.—European—								
a.—In bales and bundles	451	......	345	2	451	347	104	......
b.—In boxes								
2.—Indian—								
a.—In bales and bundles								
b.—In boxes								
Grains—								
2.—Rice	25	851	10	1,141	876	1,151	......	275
5.—Others	98	21	98	49	119	147	......	28
Hides and skins—								
1.—Hides of cattle—								
a.—Dressed								
b.—Undressed								
2.—Skins of sheep, &c.—	......	38	......	25	38	25	13	......
a.—Dressed								
b.—Undressed								
Jute—								
1.—Raw—								
b.—Unscrewed	......	990	......	699	990	699	291	......
2.—Gunny bags and cloth	19	1	21	......	20	21	......	1
Metals—								
1.—Copper, unwrought								
2.—Brass, unwrought								
3.—Brass and copper, wrought	163	15	66	7	178	73	105	......
4.—Iron								
5.—Tin								
6.—Others								
Oils—								
2.—Kerosine	142	4	117	......	146	117	29	......
3.—Others	107	......	112	......	107	112	......	5
Oil-seeds—								
1.—Linseed								
2.—Rape and mustard								
3.—Til or gingelly								
4.—Niger	39	23	40	168	62	208	......	143
5.—Castor								
6.—Poppy								
7.—Others								
Provisions—								
2.—Betel-nuts	......	1,037	......	1,088	1,037	1,088	......	51
3.—Others	55	144	64	35	199	99	100	......
Railway plant and rolling-stock	......	......	......	......	123†	473†	......	350
Salt	249	......	189	......	249	189	60	......
Sugar—								
1.—Drained	21	380	30	171	401	201	200	......
2.—Undrained								
Tobacco	31	36	37	10	67	47	20	......
All other articles of merchandise—								
1.—Unmanufactured	434	242	432	430	676	912	......	236
2.—Manufactured								
Total ...	3,585	3,783	4,094	3,825	7,993	8,392	925	1,324

* Includes 500 tons during 1892 carried for Revenue, for which no "Up" and "Down" register maintained.
† Railway plant and rolling-stock 123 tons and 473 tons for the years 1892 and 1891, respectively, for which no "Up" and "Down" register maintained.

Comparative Statement of principal commodities carried on the Bengal Central Railway during the month of December 1892.

INCREASES.

	Tons.
Sugar	200

This increase was almost exclusively in despatches from Jhikargacha.

DECREASES.

	Tons.
Rice	275

The chief decreases are in despatches from Khulna and Bengal Central Flotilla Company's stations, due to merchants having sent the traffic by country boats direct to Calcutta.

JAMES SHAW,
Joint Auditor and Examiner of Accounts.

CALCUTTA, *the 7th March* 1893.

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 4th March 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	295,882	3,04,766 1 0	28,26,289 0	6,45,652 7 0	17,245 2 0	9,67,663 10 0	76,136¼	109,626¾	185,763
Or per mile of railway	......	189 3 10	......	400 14 5	10 11 4	600 13 7	......	......	......
For previous 8 weeks of half-year	2,440,626	28,24,665 9 0	2,24,49,141 30	50,17,822 4 0	1,37,075 1 0	79,79,562 14 0	631,484	855,795	1,487,279
Total for 9 weeks ...	2,736,508	31,29,431 10 0	2,52,75,430 30	56,63,474 11 0	1,54,320 3 0	89,47,226 8 0	707,620¼	965,421¾	1,673,042
Comparison.									
Total for corresponding week of previous year	291,240	3,19,377 13 2	29,59,408 20	6,62,336 5 10	20,426 13 4	10,02,141 0 4	73,808	113,156	1,86,964
Per mile of railway corresponding week of previous year ...	......	201 12 6	......	418 7 4	12 14 6	633 2 4	......	......	......
Total for corresponding 9⅔ weeks of previous year	2,609,225½	29,73,897 0 6	2,57,53,874 20	58,87,532 12 7	1,64,544 2 0	90,25,973 15 1	703,542	955,204	1,658,746

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 4th March 1893, on 22¼ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	19,840	5,415 2 0	7,147 20	638 7 0	11 0 0	6,084 9 0	865	103	968
Or per mile of railway	......	243 6 0	......	29 9 6	0 7 11	273 7 5	......	......	......
For previous 8 weeks of half-year	*181,490	*46,462 10 0	†85,639 20	†2,922 6 0	‡87 0 0	49,472 0 0	7,040	908	7,948
Total for 9 weeks ...	201,330	51,877 12 0	92,787 0	3,560 13 0	98 0 0	55,556 9 0	7,905	1,011	8,916
Comparison.									
Total for corresponding week of previous year	20,721	5,364 9 6	19,147 30	729 11 0	9 10 0	6,103 14 6	880	110	990
Per mile of railway corresponding week of previous year ...	......	241 1 8	......	32 12 9	0 6 11	274 5 4	......	......	......
Total for corresponding 9⅔ weeks of previous year ...	206,163	52,448 9 4	1,85,595 10	6,065 8 9	115 15 3	58,630 1 4	8,227	991	9,218

* Added number of passengers 440 and Rs. 108 } on account of difference between the approximate and audited figures for the week ended 28th January 1893.
† Ditto Mds. 296 ... ...
‡ Ditto ... ... ,, 6

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 4th March 1893, on 161⅝ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	16,343	11,060 14 0	57,018 20	8,239 10 0	34 0 0	19,334 8 0	5,047½	3,768	8,815½
Or per mile of railway	......	68 8 6	......	51 0 10	0 3 4	119 12 8	......	......	......
For previous 8 weeks of half-year	*138,845	*91,511 8 0	†4,11,259 20	†63,672 0 0	‡295 0 0	1,55,478 8 0	41,847	25,872½	67,7
Total for 9 weeks ...	155,188	1,02,572 6 0	4,68,278 0	71,911 10 0	329 0 0	1,74,813 0 0	46,894½	29,640½	76,535
Comparison.									
Total for corresponding week of previous year	16,785½	12,296 11 3	43,110 10	8,425 13 0	73 5 6	20,795 13 9	5,450	2,130	7,580
Per mile of railway corresponding week of previous year ...	......	76 3 0	......	52 3 4	0 7 3	128 13 7	......	......	......
Total for corresponding 9⅔ weeks of previous year	133,039	93,770 2 7	4,08,271 0	71,995 14 0	600 6 0	1,66,366 6 7	53,233	19,608	72,841

* Added number of passengers 19 and deducted Rs. 99 } on account of difference between the Approximate and Audited figures for the week ended 28t January 1893.
† Ditto maunds 232 and ,, 149
‡ Deducted ,, 10

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for the week ended 4th March 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	234,039	a1,06,330 0 0	682,600 0	85,210 0 0	12,970 0 0	2,04,510 0 0	27,784	26,720	54,504
Or per mile of railway	301	137 0 0	879 0	110 0 0	*1 0 0	248 0 0	......	......	......
For previous 8 weeks of half-year	1,478,735	7,02,860 0 0	5,654,107 0	8,24,870 0 0	1,29,060 0 0	16,56,790 0 0	221,782	234,539	456,321
Total for 9 weeks ...	1,712,794	8,09,190 0 0	6,336,707 0	9,10,080 0 0	1,42,030 0 0	18,61,300 0 0	249,566	261,259	510,825
Comparison.									
Total for corresponding week of previous year	197,825	83,285 0 0	540,828 0	76,607 0 0	11,500 0 0	1,71,392 0 0	27,209	29,064	56,273
Per mile of railway corresponding period of previous year ...	255	107 0 0	696 0	99 0 0	*1 0 0	207 0 0	......	......	......
Total to corresponding date of previous year	1,601,457	7,91,764 0 0	5,438,701 0	7,71,326 0 0	1,33,961 0 0	16,97,051 0 0	253,995	271,338	525,333

* Excluding steamer earnings.

a. The increase is due to Dole Jatra festival, which took place on 13.h March last year.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 4th March 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	37,654	12,300 0 0	60,379 0	3,990 0 0	70 0 0	16,360 0 0	3,730	1,960	5,690
Or per mile of railway	301	98 0 0	[illegible] 0	32 0 0	1 0 0	131 0 0	......	......	......
For previous 8 weeks of half-year	243,920	89,130 0 0	490,242 0	29,970 0 0	1,330 0 0	1,20,430 0 0	29,152	16,242	45,394
Total for 9 weeks ...	281,574	1,01,430 0 0	550,621 0	33,960 0 0	1,400 0 0	1,36,790 0 0	32,882	18,202	51,084
Comparison.									
Total for corresponding week of previous year	36,286	10,938 0 0	57,185 0	3,613 0 0	112 0 0	14,663 0 0	3,737	1,935	5,672
Per mile of railway corresponding week of previous year ...	290	87 0 0	457 0	29 0 0	1 0 0	117 0 0	......	......	......
Total to corresponding date of previous year	277,985	1,01,676 0 0	580,830 0	36,324 0 0	901 0 0	1,38,901 0 0	33,5*4	19,129	52,703

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 4th March 1893, on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	19,922	6,390 0 0	15,845 0	1,940 0 0	110 0 0	8,440 0 0	2,545	679	3,224
Or per mile of railway	232	74 0 0	184 0	23 0 0	1 0 0	98 0 0	......	......	......
For previous 8 weeks of half-year	146,207	46,620 0 0	1,32,733 0	12,390 0 0	1,380 0 0	60,390 0 0	19,874	5,918	25,792
Total for 9 weeks ...	166,129	53,010 0 0	1,48,578 0	14,330 0 0	1,490 0 0	68,830 0 0	22,419	6,597	29,016
Comparison.									
Total for corresponding week of previous year	17,530	5,778 0 0	15,885 0	1,064 0 0	51 0 0	6,893 0 0	2,545	719	3,264
Per mile of railway corresponding week of previous year ...	204	67 0 0	185 0	12 0 0	1 0 0	80 0 0	......	......	......
Total to corresponding date of previous year	159,129	53,217 0 0	1,15,141 0	10,473 0 0	1,412 0 0	65,102 0 0	23,185	6,693	29,878

BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

Approximate Return of Traffic for the week ending 25th February 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	100,150	43,780	3,95,820	62,970	11,750	1,18,500	13,463	19,274	32,737
Or per mile of railway	132·47	57·91	523·57	83·30	15·54	156·75	......	......	......
For previous 7 weeks of half-year	613,040	2,61,570	29,13,780	4,21,610	83,050	7,66,230	74,529	112,743	187,272
Total for 8 weeks ..	713,190	3,05,350	33,09,600	14,84,580	94,800	8,84,730	87,992	132,017	220,009
COMPARISON.									
Total for corresponding period of previous year on 751 miles open	83,790	45,078	3,39,317	50,970	23,096	1,18,964	11,112	17,458	28,570
Per mile of corresponding week of previous year	111·57	60·03	451·82	67·63	30·75	158·41	......	......	......
Total to corresponding date of previous year	654,886	2,86,472	27,49,212	3,83,777	88,914	7,59,163	96,546	139,918	236,464

BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

Approximate return of traffic for the week ending 4th March 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	93,330	39,970	427,450	68,090	11,310	1,19,370	13,613	19,133	32,776
Or per mile of railway	123·58	52·87	565·41	90·07	14·96	157·90	......	....	......
For previous 8 weeks of half-year	713,190	3,05,350	3,309,600	4,84,580	94,800	8,84,730	87,992	132,017	220,009
Total for 9 weeks ...	806,520	3,45,320	3,737,050	5,52,670	1,06,110	10,04,100	101,635	151,150	252,785
COMPARISON.									
Total for corresponding period of previous year on 755 miles open	82,893	33,392	332,133	48,897	7,228	87,517	11,428	16,954	28,382
Per mile of corresponding week of previous year	109·79	44·23	439·91	62·12	9·57	115·92	......	.....	......
Total to corresponding date of previous year	737,779	3,19,834	3,081,345	4,30,674	96,142	8,46,680	107,978	156,872	264,84

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 25th February 1893	12,256	0	0
Corresponding period of 1892	13,554	0	0
Decrease	1,298	0	0
Receipts per mile for the week ending 25th February 1893	240	5	0
Corresponding period of 1892	265	12	4
Decrease	25	7	4
Receipts from 1st January to 25th February 1893	80,083	0	0
Corresponding period of 1892	72,541	0	0
Increase	7,542	0	0

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CONTENTS.

Abstract of the Proceedings of the Council of the Lieutenant-Governor of Bengal, assembled for the purpose of making Laws and Regulations under the provisions of the Act of Parliament, 24 and 25 Vic., Cup. 67.

The Council met at the Council Chamber on Saturday, the 11th March, 1893.

Present:

The HON'BLE SIR CHARLES ALFRED ELLIOTT, K.C.S.I., Lieutenant-Governor of Bengal, *presiding*.
The HON'BLE J. T. WOODROFFE, *Offg. Advocate-General.*
The HON'BLE T. T. ALLEN.
The HON'BLE H. J. S. COTTON, C.S.I.
The HON'BLE H. H. RISLEY, C.I.E.
The HON'BLE J. LAMBERT, C.I.E.
The HON'BLE H. LEE.
The HON'BLE DR. MAHENDRA LAL SIRCAR, C.I.E.
The HON'BLE A. H. WALLIS.
The HON'BLE GONESH CHUNDER CHUNDER.
The HON'BLE P. PLAYFAIR.
The HON'BLE MAULVI SYED FAZL IMAM, KHAN BAHADUR.
The HON'BLE MAHARAJAH RAVANESHWAR PROSAD SING BAHADUR.

MALARIA IN SHAHABAD.

The Hon'ble MAULVI SYED FAZL IMAM, Khan Bahadur, asked the following question:—

"Whether Government is aware that the construction of irrigation channels in Shahabad has introduced malaria into the district, and that the health of the people has greatly deteriorated in consequence; and, if so, whether the Government has taken any steps or will take steps, and of what nature, to check the spread of the disease."

The Hon'ble Mr. COTTON replied as follows:—"The alleged deterioration of the health of the district of Shahabad, subsequently to the introduction of canal irrigation, has repeatedly attracted the attention of Government. It was brought prominently to the notice of the Sone Canal Committee of 1887, and their remarks on the subject will be found in paragraphs 69 to 77 of their report. The increase of malarial fever was considered to be established. The suggestion that irrigation should be prohibited in the immediate vicinity of towns and villages was thought to be of little practical value, because canal water is rarely used in those lands. With regard to drainage, the Committee held that it was the duty of the authorities to remove obstructions which caused the accumulation of surface water, but that there were no means of dealing effectually with the question of subsoil drainage so as to prevent the rise of the water level in the subsoil generally. Mr. Odling, the Chief Engineer and Secretary to this Government in the Irrigation Department, in a lecture, which he delivered at the Engineering College, Sibpur, on the 23rd February last (a copy of which I shall have much pleasure in placing in the hon'ble member's hands), has touched on this subject. He has shown that rice irrigation requires an artificial supply of about 30 inches of water, which is an addition of from 50 to 75 per cent. to the natural rainfall of the country. This necessarily affects the health of the district; but so long as the people insist on planting rice, which gives an easy and certain outturn in preference to wheat or other cold-weather cereals, this deterioration in health cannot be avoided, except by such measures of despotic interference with the choice of the agriculturists as to the crops they wish to raise, as Government would be very unwilling to adopt. He further asserts that the canals have not stopped the surface drainage of the country, but have on the contrary improved it. Before the canals were constructed 'there was not a stream or small river which was not every two or three miles practically closed by embankments, sometimes a mile in length, constructed across the stream. These embankments were mostly constructed for fishing purposes, but not unfrequently with the view of raising the level of the water and utilising it for purposes of irrigation.' These embankments have to a great extent been cleared away, the channels being taken up as public water-courses on which no encroachments will in future be allowed. The river Kao, for instance, which is the main drainage channel of the district, was, when irrigation works were commenced, completely closed at different points of its course by 14 embankments crossing the stream, and as a drainage channel it had ceased to exist. This has now been remedied, and the same process is going on elsewhere wherever it is found necessary, and this appears to be the most practical step that Government can take towards remedying the mischief to health which the lavish use of canal water for rice cultivation is liable to cause."

LICENSED WAREHOUSE AND FIRE-BRIGADE BILL.

The Hon'ble MR. COTTON moved that the clauses of the Bill, for the regulation of Warehouses and the maintenance of a Fire-brigade, be further considered for settlement in the form recommended by the Select Committee.

The Motion was put and agreed to.

The Hon'ble MR. WOODROFFE moved that, after section 28, the following section be added:—

'The Fire-brigade Fund formed under this Act, and the fire-engines, fire-escapes, horses, accoutrements and other equipments and appurtenances of the fire-brigade, and all stations, buildings and places heretofore acquired, provided or built out of any fund appropriated to the maintenance of the fire-brigade under Act IV of 1883, or any of the Acts repealed thereby, or which shall hereafter be acquired, provided or built under the provisions of this Act, are hereby vested in, and shall belong to, the Commissioners, subject to the control of the Commissioner of Police.'

He said:—"Under the Bill, as it at present stands, and so far as it has received the approbation of the Council, there will be imposed on the general public, through the Commissioners of Calcutta, a considerable charge for the maintenance and up-keep of the fire-brigade, which was not laid on the public before. The general public will have to pay at least fifty per cent. of such expenditure. Under the Bill there is a provision for the acquisition of sites for fire-brigade stations, and for the purchase of the various equipments and appurtenances required for the fire-brigade; but there is no provision in the Bill vesting those sites and things in any body. They ought, I conceive, to be vested in the Commissioners as representing the general public. Next, it appears to be very desirable that the control of the fire-brigade should, in express terms, be secured to the Commissioner of Police. The section, the introduction of which I have the honour to move, is framed with this two-fold object. By Act II of 1872, section 15, it was enacted that all existing public fire-engines, or stables or buildings thereto belonging, except those belonging to the Military Department, or to the Port Commissioners, constituted under Act V of 1870, should be transferred to the fire-brigade, which, by that section, the Justices were to organise and thereafter to maintain. By Act V of 1870, the Commissioner of Police was, under section 17, directed to take charge of the existing fire-brigade with all buildings, animals, &c., thereto belonging. In Act IV of 1883, there is nothing to be found as to the vesting of the proprietary right of the properties belonging to the fire-brigade, or as to the Commissioner of Police having control of the brigade. That is how the law stands at present.

"The practical results to be obtained by the proposed section are that if passed there cannot be at any time any question as to the persons in whom there is vested property in the fire-brigade, and that if it should be thought desirable to sell any site or to secure other sites in more convenient localities, the disposal and acquisition of such sites will be more readily effected. The existing sites and appurtenances have been acquired for the benefit of the fire-brigade in former years by means of the heavy license fees imposed on the jute industry. After the passing of this Bill, the burden will be divided, and the public will, in the shape of general taxation, have with the industries taxed to pay for those sites and equipments. It appears therefore, Sir, but just that the property and funds belonging to the fire-brigade should be vested in the Municipal Commissioners. It seems to me also just that while vesting the Commissioners with the proprietary right in these matters, they should be subject, as they practically have been during a considerable period of time, to the absolute control of the Commissioner of Police. It is not my intention to interfere with that control; nor do I think it could, under the language of this section, be contended that the Municipal Commissioners could interfere with or disturb that control. The proposed section merely provides for vesting in the Commissioners the Fire-brigade Fund, the fire-engines, fire-escapes, horses, accoutrements, and other equipments and appurtenances of the fire-brigade, and all stations, buildings and places heretofore acquired, provided or built out of any fund appropriated to the maintenance of the fire-brigade under Act IV of 1883."

The Hon'ble Mr. Cotton said:—"I regret, Sir, that I should find it my duty to oppose this amendment. It appears to me that there are only two principles before this Council in respect of the executive management of the fire-brigade. Either the fire-brigade must be managed as it is in other countries by the local body concerned, that is to say, in the case of Calcutta by the Calcutta Corporation, or it must be managed by an executive officer appointed for the purpose, as it has been the practice in Calcutta by the Commissioner of Police.

When first the fire-brigade was established in Calcutta, the responsibility of its administration rested with the Justices of Calcutta. The fire-brigade in those days was managed in a very simple manner; but when, in consequence of the large conflagrations in jute warehouses, it was found necessary to increase the fire-brigade, the Justices found themselves unable to administer it efficiently, and they requested the Commissioner of Police to take over charge. This he did, and the arrangement which was come to in 1872 was ratified by the Legislature in 1879, and that arrangement has remained in force ever since. The reason for the arrangement was that the Commissioner of Police, with the large staff at his disposal, is able to administer and control the brigade more efficiently and certainly very much more cheaply than the Calcutta Corporation would be able to do. He is able to administer the brigade thoroughly and efficiently at a cost of something more than Rs. 50,000 a year. There can be no doubt, I think, that if the control were transferred from the Commissioner of Police to the Corporation, the expenditure would be trebled. In Bombay, where the Corporation is responsible for the administration, the cost of maintaining the fire-brigade is about Rs. 1,50,000 a year. It was primarily in order to avoid this large expenditure that the Legislature decided that the arrangement for managing the fire-brigade through the Commissioner of Police should continue, and, as far as I am aware, the Municipal Commissioners of Calcutta have not objected to this arrangement. It is no doubt inconsistent with the general doctrine that those who provide the funds should be responsible for the administration. That is a sound and healthy rule, but it is liable, like all other general rules, to exceptions. The reason for the exception in this case is that the fire-brigade can be managed very much more cheaply by the Commissioner of Police.

"The amendment proposed by the learned Advocate-General recognizes the control of the Commissioner of Police, but it vests the whole property of the fire-brigade in the hands of the Municipal Commissioners; and it seems to me that by so doing it introduces an element of friction and disturbance. Under the Bill as it now stands, the Commissioners of Calcutta will have nothing whatever to do with the fire-brigade or with the licensing of warehouses, except the collecting of the funds necessary for the purpose of maintaining the brigade. The powers hitherto exercised by the Calcutta Corporation have been materially diminished by the provisions of the Bill. It is, as hon'ble members are aware, a sore point with the representatives of the Municipality in this Council that it should be so. But of this I am sure that, if the amendment now proposed by the learned Advocate-General is passed, the sore which already exists will be constantly kept alive. This amendment will act as a perpetual blister which will serve to perpetuate the friction, which possibly, if left alone, may die out. It is inconceivable that the Municipal Commissioners, having the whole property of the brigade vested in them, should not take action under the power which the law gives them. I cannot say what direction that action might take, but there can be little doubt, I imagine, that it would result in interfering with the absolute discretion which the law at present leaves in the hands of the Commissioner of Police in administering the affairs of the brigade. If their interference should not tend in that direction, I cannot say in what direction it would operate; and I, for one, would very greatly regret if we allow a provision to be inserted in this Bill which is likely to produce so dangerous and troublesome an effect.

"There is one other very practical objection to the learned Advocate-General's amendment, and that is, that it is not the Commissioners of Calcutta alone who are interested in the working of this Bill. It is not in the Commissioners of Calcutta alone that the property of the fire-brigade will be vested, if this amendment is passed. But it is in all the Commissioners of the neighbouring municipalities as well as the Commissioners of Calcutta, and it will be absolutely impossible to define what property is vested in the hands of the Commissioners of Calcutta, what property is vested in the hands of the Municipal Commissioners of Howrah, or in those of the Commissioners of Cossipore or Chitpore, or of the South Suburban town. In those outlying municipalities, fire-brigade stations have generally been constructed. The head-quarters of the brigade are in Calcutta itself, and all the property of the

brigade, fire-escapes, horses, accoutrements, equipments, and what not, which are now stationed in Lall Bazar, will, if this section be passed, be vested equally or proportionately, I cannot say what the learned Advocate-General's intention is in this respect, not only in the Calcutta Commissioners, but in those of the Commissioners of the municipalities to which this Act is extended. This is a very practical difficulty against the acceptance of the amendment proposed. I object to it, Sir, both on the ground of the extreme friction which a clause of this nature will be calculated to excite, and I object to it also on the ground of its extreme practical inconvenience."

The Hon'ble Mr. Lambert said:—"I think that this Council will consider that the motion brought forward by the learned Advocate-General ought to be based either on what is equitable, or what is expedient, if not on both. Now, is the proposal an equitable one? At an earlier stage in the debate, the learned Advocate-General insisted with much emphasis that the municipalities had without any kind of justification benefited largely from the Fire-brigade Fund. The amount appropriated for general improvements was said to amount to upwards of a lakh of rupees. The property of the fire-brigade may, at the present time, be estimated at something like two lakhs of rupees, and why this valuable property should now be made over as a free gift to the municipalities, simply because it is proposed to impose on those bodies a portion of the cost, I am at a loss to understand. The property has been paid for wholly by the owners of jute warehouses. If, therefore, the Hon'ble Mr. Playfair were to make any claim on behalf of the owners of warehouses, the proposal would be intelligible. But, Sir, as the matter stands, the Council will, I think, fail to see where the equity of the motion comes in.

"Nor is it expedient? The proposal to vest the control of the brigade in the Commissioner of Police is not a new one. This method of control was decided on twenty years ago, as soon as ever it was found necessary to maintain a brigade at all; and this method was decided for two reasons: economy and efficiency. Now, it is not proposed to disturb this arrangement. The control of the brigade is still to be vested in the Commissioner of Police, but the property of the brigade is to be vested in the Commissioners. I ask whether anyone in this Council Chamber would, in an inportant matter like this, willingly accept control so fettered? The property of the brigade is declared to belong to certain bodies, but the Commissioner of Police is to control it. And the Hon'ble Member in charge of the Bill has explained that there is not one single municipality, but several municipalities. We already know of four. All these are separate bodies. How then is the property of the brigade to be apportioned amongst them? At the head station there are four steam-engines, and most of the plant and horses; at Howrah there is one engine; at Chitpore-Cossipore, one; at Manicktollah, none. Is Calcutta to take all that is at Lall Bazar?; and is Howrah to take what is at Howrah?, and so on. But, even if this were so settled, the property of the municipalities would be constantly on the move—sometimes here, sometimes there. How is all this to be settled? Again, it may be necessary to condemn an engine or stores. How is this to be done? Is each municipality to be consulted; and supposing one of them objects, who is to decide? Sir, if this motion of the learned Advocate-General be carried, there is only one logical sequence. The control of the fire-brigade must be transferred to the municipalities. Let them manage their own property, but do not by your vote sanction what is neither equitable nor expedient, and which must lead to friction and inconvenience."

The Hon'ble Mr. Playfair said:—"The statement has been accepted by members of this Council, that the jute industry founded the fire-brigade as it has been known since 1872, that that industry has been taxed so as to enlarge the resources of the brigade to an extent commensurate with the adequate protection of a metropolitan area not far short of 55 square miles, to provide pension funds and sums to improve the block property of the Corporation; yet it has never been stated to whom the property of the brigade belongs, or in whom it is vested. It is now, however, proposed that the valuable property represented by the brigade shall be made over to the town, that is, it

shall be a new gift, as we have just heard, of two lakhs of rupees from the jute industry to the city, to the Corporation and citizens of Calcutta. Were the Government now to propose that, in consideration of this handsome donation, this real benefit, the jute industry should be relieved of fire-brigade taxation for, say, a period of five years, it would do nothing more than show a just concern for the interests of a community which, though small, has done a very great deal towards developing the prosperity of this City.

"The funds of the fire-brigade have been so freely utilized for other purposes that I gladly support any proposal that might in future confine the expenditure of these funds solely to the purposes of the brigade, and that would make some single body responsible for the equipment of the brigade. So long as particular industries continue to be assessed to special and differential taxation, I consider it most necessary that the expenditure of the contributions levied from them should be jealously watched. On the supposition that the amendment before the Council has this object in view, I give it my support."

The Hon'ble Mr. Woodroffe in reply said :—"This motion has been opposed by the Hon'ble Member in charge of the Bill on two grounds: first, he says it will operate as a perpetual blister, and, secondly, that it is impractical in its character; and he has alluded to there being some friction, as I understand him, between the Municipality and the Commissioner of Police. [The Hon'ble Mr. Cotton:—"None at present."] How this provision can operate to cause friction of any kind which should be dreaded, I am unable to see. It was said by the hon'ble member that the fire-brigade has been managed, whilst under the control of the Commissioner of Police, in a most economical manner. I trust the hon'ble member will accept my assurance that I in no degree doubt that statement; nor is it any part of this amendment to alter the position of affairs as regards the control of the Commissioner of Police. So far, therefore, as the remarks of the Hon'ble Member in charge of the Bill are concerned, as regards economy and good management, I am at one with him. It is said that the Municipal Commissioners have not objected to the present state of things. What is the present state of things? I was in hopes that the Hon'ble Member in charge of the Bill would have favoured the Council with his opinion as to the persons in whom the property is vested at the present moment. That the Commissioners have not in times past insisted upon an express recognition of their proprietary right may well be, because in those days the general body of rate-payers did not contribute towards the cost of the fire-brigade. No doubt, in the time to come, when this Bill is passed into law and funds have to be provided by the general body of the rate-payers, we may expect that those rate-payers will be less supine in the consideration of their interests, and the safe-guarding of their property, than the Commissioners were when they did not tax the rate-payers at all. If everything is, as I have every reason to believe it to be, perfectly straight and perfectly satisfactory, then I have not such fear and dread of the rate-payers taking such action as the law allows. I think it very desirable that persons should take such action as the law allows them.

"I am not a believer in arbitrary power; my contention is that, whilst the Commissioner of Police should have complete control over the fire-brigade, the Municipal Commissioners should know what the property consists of, and that it should be treated in law as belonging to them. But my hon'ble friend suggested that there was a practical difficulty in the matter. The practical difficulty which suggested itself to him is, that the term used in the amendment is 'the Commissioners,' and that term is defined in the Bill, as he rightly points out, to include not merely the Commissioners of Calcutta, but also the Commissioners of the various suburban municipalities. The term was used by me of set purpose, in order to avoid the difficulty which the hon'ble member seemed to find. It is not my intention, and I do not think the proposed section can be read so as to vest in the Calcutta Corporation portions of the property, and in the Commissioners of Howrah, Cossipore, &c., other portions. For the purposes of this Act, the whole of those Commissioners have the property vested in them; and therefore the section will prevent the occurrence of that which has been described as a blister and as a friction. It will not in any way enable the Corporation to come in and make an objection to a particular mode of dealing with that portion of the

fire-brigade property which is within its limits. Far from it. The property would be vested in the whole of the municipalities concerned, and there would therefore be no ground for the Calcutta Commissioners laying claim to the property in Lall Bazar, or any other particular property. It has been admitted by the Hon'ble Member in charge of the Bill that the general rule is, that to those who pay belong what they pay for. That I understand is the highest principle of law, and it will be found that there is nothing in this section to prevent there being a perfect safeguard in maintaining the complete control over the property of the fire-brigade being in the hands of the Commissioner of Police."

The Hon'ble THE PRESIDENT said :—"I am sure the Council will feel some hesitation in differing from the learned Advocate-General on an amendment which has been brought forward, on a matter which is mainly one of legal scope. I came down to this meeting without having formed any definite view as to what the meaning and effect of this amendment, if carried into law, would be, but I venture to say that the result of the discussion to my mind has been to create the opinion that it would be unwise and dangerous to pass this amendment. It is admitted that, under the present law, which has been in force since 1883, the property of the fire-brigade is not legally vested in any one. This may be technically an anomaly, but I think we should require of any one who wishes to remove that anomaly that he should show that inconvenience has arisen from it hitherto. Apparently, so far as I have understood the debate, no such inconvenience has been felt. If therefore we are to remove an anomaly, from which no inconvenience has arisen, we ought to do it by legislation, the results of which are clear and patent to all.

"It seems to me that the amendment which has been proposed might produce results which are not anticipated, and, at any rate, that there is considerable difference of opinion in the minds of hon'ble members as to what those would be. As far as I understand the question, the advantages which the Advocate-General has referred to as to be brought about by the passing of his amendment are already provided for in the law. The Commissioner of Police has to prepare an annual budget; that budget has to be laid before the Municipal Commissioners at a meeting and may be criticised and modified by them, such criticism and modification only taking effect, if ultimately they are approved by the Local Government. Again, at the close of the year, the Commissioner of Police has to present a report of the working and the expenditure of the fire-brigade, which is to be published in the Gazette. All information, therefore, which is needed by the public, who contribute by the payment of taxes towards the maintenance of the fire-brigade, will be conveyed to them under the provisions of the present law. But it seems to me that it might be a very dangerous thing if there is an obscure region in which the authority of the Commissioners and of the Commissioner of Police might possibly clash. I think we are justified in trusting to the good sense and moderation of both the Municipal Commissioners and the Commissioner of Police that there will be no clashing; but it would be unwise for the Legislature to introduce an amendment, the result of which would be to involve things in obscurity, and possibly clashing, which none of us desire and which can lead to no good result. I shall, therefore, vote against the amendment."

The Motion being put, the Council divided:—

Ayes 3.	*Noes* 10.
The Hon'ble Mr. Playfair.	The Hon'ble Maharajah Ravaneshwar Prosad Sing Bahadur.
The Hon'ble Babu Gonesh Chunder Chunder.	The Hon'ble Maulvi Syed Fazl Imam, Khan Bahadur.
The Hon'ble Mr. Woodroffe.	The Hon'ble Mr. Wallis.
	The Hon'ble Dr. Mahendra Lal Sircar.
	The Hon'ble Mr. Lee.
	The Hon'ble Mr. Lambert.
	The Hon'ble Mr. Risley.
	The Hon'ble Mr. Cotton.
	The Hon'ble Mr. Allen.
	His Honour the President.

So the Motion was negatived.

The Hon'ble MR. WALLIS moved that the following section be added after section 28 of the Bill:—

'The Fire-brigade Fund formed under this Act, and the fire-engines, fire-escapes, horses, accoutrements and other equipments and appurtenances of the fire-brigade, and all stations, buildings and places heretofore acquired, provided or built out of any fund appropriated to the maintenance of the fire-brigade under Act IV of 1883, or any of the Acts repealed thereby, or which shall hereafter be acquired, provided or built under the provisions of this Act, are hereby vested in the Commissioner of Police, subject to the control of the Local Government.'

He said:—"The amendment which stands in my name is identical with that which was brought forward by the learned Advocate-General, and which has just been lost, except that my proposal is, that the property of the brigade shall be vested in the Commissioner of Police, subject to the control of the Local Government, instead of in the Municipal Commissioners as suggested by the Hon'ble Mr. Woodroffe.

"It seems to me beyond question that the valuable property of the brigade should be vested in some responsible official, and no arguments are required to prove that the official most suited to be entrusted with this charge is the Commissioner of Police, as the Chief Executive Officer of the brigade, and under whose sole orders the fire-brigade is worked. Throughout the whole Bill this officer is recognized as the person to whom Government will look for the efficient working of the brigade, and it seems but reasonable that the property should be vested in him, thus making him legally responsible for everything appertaining to or belonging to the brigade. In the event of land being acquired for the purposes of the brigade, it would be vested in the Secretary of State. In the first place, the Commissioner of Police, under section 8, clause (1), is empowered to appoint the Inspector of Warehouses. Under section 24 the Municipal Commissioners have leave to pay to the Commissioner of Police the sums required to meet the cost of the brigade. Under section 27 it is the Commissioner of Police who has to frame the annual budget and to distinguish in the receipts of such budget the proportionate sums to be contributed by the several municipalities. Under section 31 the Commissioner of Police is deputed to maintain an efficient fire-brigade, and finally under section 42 the Commissioner of Police has to submit a report to the Local Government showing the constitution, assets and working of the fire-brigade during the year.

"It will be seen from the sections to which I have ventured to draw the attention of hon'ble members that this officer is in every way held responsible for the equipment and efficient working of the brigade. It is therefore nothing but right that, as the Commissioner of Police is thus made liable, nothing should be done which is likely to hamper his freedom of action, which would interfere with the economical working of the brigade or impair its efficiency.

"It must be remembered that an immense saving is effected by Government allowing the Commissioner of Police to act as chief of the brigade, and in permitting the subordinate members of the police force to assist in cases of emergency. I understand that no charge has been made at the head-quarters of the police for stabling, accommodation for fire-engines, vans, breaks, &c., godowns for stores or quarters for men, and this may be considered an ample return for any benefit the Police Funds may derive by using the horses belonging to the brigade. It must be remembered that the horses would, under any circumstances, have to be kept in exercise, and were it not for the use they get in the police vans, &c., special men would have to be kept for the purpose.

"I think I have said enough to show that, if the property is to be vested in any particular official, the Commissioner of Police is the one in whom it should be so vested.

"With these remarks I would move the amendment which stands in my name."

The Hon'ble MR. WOODROFFE said:—"Although it is very desirable that the property in question should be declared to be vested in some person, I confess there is some difficulty in enacting that such person should be the Commissioner of Police. The proposed section refers to the Commissioner of Police, whilst the hon'ble member suggests that the landed property will be vested in

the Secretary of State, but the amendment which he has proposed vests it in the Commissioner of Police. There are, I think, very serious questions involved in the proposed new section which ought to be avoided, if possible."

The Hon'ble MR. ALLEN said :—" It appears to me that this amendment is decidedly of a very doubtful character, because the Commissioner of Police *qua* Commissioner of Police cannot hold property. In what capacity can he hold property? In England the Rector of a parish can hold property because under the English law he is a corporation sole, but the Commissioner of Police is not a corporation sole, Calcutta being ruled by English law. I speak with great hesitation in the presence of the Advocate-General, but apparently his view is almost identical with mine. Could the Commissioner of Police institute a civil suit? A large number of powers are conferred upon the Commissioner of Police, but they are exercised for the purposes of police. The property of the fire-brigade is mostly moveable property, and mere possession of that moveable property gives the possessor a right against wrong-doers. The mere fact of his having this property in his charge will entitle him to maintain a prosecution for theft. The property being mostly moveable property, there would appear to be no difficulty in protecting it under the ordinary law. But as to immovable property, the question is doubtful. That must vest in some body. I presume that all the immoveable property belonging to the Government and now occupied by the police is vested in the Secretary of State. I can see no difficulty in allowing the property which the police hold for fire-brigade purposes to be regarded as being also vested in the Secretary of State, and it appears to me, therefore, that it would be wiser not to press this very doubtful amendment."

The Hon'ble THE PRESIDENT said :—" I venture to suggest, after what has fallen from the legal advisers of this Council, to the effect that the passing of this amendment would be contrary to law, that the hon'ble mover will perhaps see fit to withdraw the amendment."

The Hon'ble MR. WALLIS, by leave of the Council, then withdrew the amendment.

The Hon'ble MR. WOODROFFE moved that, in section 46, the words " coir," "oil" and "ship-chandlery," wherever they occur, be omitted.

The Motion was put and agreed to.

The Hon'ble MR. COTTON moved that, for section 47, the following be substituted :—

'47. Sections three hundred and forty-seven of the Calcutta Municipal Consolidation Act, 1888, and two hundred and sixty-one of the Bengal Municipal Act, 1884, are hereby repealed, in so far as they entitle the Commissioners to levy fees in respect of premises licensed as depôts for hay, straw, wood, rags, jute or other dangerously inflammable material, which are licensed and used as warehouses under this Act.'

He said :—" The amendment which stands in my name is of a formal character only, and is intended to extend the repeal of the law, in so far as the imposition of a special tax on hay, straw, wood, &c., applies in the Municipality of Calcutta, to other municipalities to which the Fire-brigade Bill has been or may be extended. By an oversight the Select Committee repealed this section in respect of the Calcutta Municipality only. It escaped notice that a similar provision is contained in the Bengal Municipal Act, and that a similar repeal should therefore be enacted in respect of such articles of an eminently dangerous and inflammable character as are enumerated in the Bengal Municipal Act. The amendment before you makes the proposed repeal apply equally to the Calcutta Municipal Consolidation Act and to the Bengal Municipal Act of 1884, and the concluding words of the section repealing the existing law, in so far as it enables the Commissioners to levy fees, in respect of premises licensed as depôts for hay, straw, wood, rags, jute or other dangerously inflammable material which are licensed and used as warehouses under this Act, make it sufficiently clear that the repeal cannot extend to any other

municipality than those to which this Act will apply, or may hereafter be extended. It is only under the Bill now before the Council that warehouses can be licensed and used under the Act. But if this point, in the opinion of my legal friends opposite, is not clear, I shall have no objection to a postponement, in order to reconsider the terms of the section and make it quite clear. I believe, however, that the amendment, as it stands, is not open to any such objection."

The Hon'ble Mr. Woodroffe said:—"I understand that the Hon'ble Member in charge of the Bill has asked for my opinion on this matter. In answer I have to say that I do not see any objection to the proposed amendment. I believe it was by an oversight that we did not take power under the Bill to deal with the mufassal municipalities in the same way as in the case of the Calcutta Municipality."

The Hon'ble the President said:—"I may explain that the difficulty which, I believe, I suggested to the Hon'ble Member in charge of the Bill was, that it appeared to me that as the section in the Bill stands, it precludes taxation of depôts for hay, straw, &c., in all municipalities in Bengal, and not only in those municipalities to which the present Bill applies. This difficulty is, however, an unusual one, for the Hon'ble the Advocate-General agrees with the Hon'ble the Chief Secretary that the introduction of the final words in his amendment would confine it to those warehouses which are licensed under the Act; and this will apply it only to the municipalities of Howrah, Cossipore-Chitpore and Maniktollah, and will prevent its being applied to other municipalities."

The Motion was put and also agreed to.

The Hon'ble the President said:—"We have now disposed of all the amendments which have been brought before the Council, and it is only necessary to hold one more meeting to pass the Bill as amended. It will now be printed and circulated in its revised form, and there will be a final opportunity fôr any verbal alterations which may be found to be required before it is passed into law at the next meeting of the Council. It will be convenient to allow more than one week for this purpose. The Council will, therefore, be adjourned for a fortnight."

The Council adjourned to Saturday, the 25th March, 1893.

Calcutta;
The 21st March, 1893.

C. H. REILY,
Assistant Secretary to the Govt. of Bengal,
Legislative Department.

RESETTLEMENT OF CERTAIN PRIVATE ESTATES AND GHATWALI TENURES IN THE SONTHAL PARGANAS.

REVENUE DEPARTMENT—LAND REVENUE.

Calcutta, the 14th March 1893.

RESOLUTION No. 1291.

READ—

A letter No. 1507R., dated 6th August 1892, from the Commissioner of Bhagalpur, with enclosures, reporting on the resettlement of certain private estates and ghatwali tenures in the Sonthal Parganas.

Read also—

Letter from this Government to the Commissioner of Bhagalpur, No. 3632L.R., dated 21st October 1892, and his reply No. 2527R., dated 19th November 1892.

Law and rules under which settlement has been made.

The Land Revenue paid by the estates in the Sonthal Parganas district is permanently settled, but the relations between the zamindars and raiyats are controlled by Government, and a settlement is made of the rents and rights of the raiyats under the provisions of Regulation III of 1872. The first settlement of rents in the Sonthal Parganas district was begun in that year, and was completed in November 1878 for terms of seven and ten years. During the years 1887 to 1889 applications were made to the Deputy Commissioner by certain zamindars and ghatwals for a revision of the settlement, on the grounds that the term had expired, that the measurements recorded had been very roughly made, and that, although there had been a considerable extension of cultivation since the previous settlement, no rents could be obtained for such land without a new settlement. Government at first directed that the applications should be granted under Regulation II of 1886, but it was finally decided to carry out the work under Regulation III of 1872, as supplemented by Regulation II of 1886. The objection that Regulation III of 1872 did not provide a sufficient guarantee for the recovery of the cost of the operations to be undertaken was met by the applicants depositing the costs in advance. During the progress of the operations rules were framed for the guidance of the Settlement Officer, under the provisions of the two Regulations. In Government notification, dated the 16th April 1889, rules under section 10 of Regulation III of 1872, and section 30 of Regulation II of 1886, relating to measurement, record of rights, and other matters, were prescribed; and in April 1891 the Lieutenant-Governor, after visiting Dumka, drew up, in consultation with the local officers, rules for the settlement of rents in supersession of rules which had been previously framed, but found to be unworkable.

Names of estates settled and their total area.

2. In the orders dated the 10th September, 16th November, and 12th December 1889, 34 estates and ghatwali tenures which lie scattered in the Dumka, Deoghur, Jamtara, and Godda sub-divisions were notified for settlement under the two Regulations. In addition two villages—Sitakatain and Killa Bhadrain—which are not estates, were settled under Regulation II of 1886. A complete list of the areas settled, including the two villages last mentioned, is subjoined. The aggregate area has been found to be 463,432·32 acres, or 724·11 square miles, comprised in 1,432 villages:—

In the Dumka Sub-division.

1.	Taluk Mohila.	13.	Taluk Ranibahal.
2.	„ Pandey Keso.	14.	„ Dhadka.
3.	„ Jhapania.	15.	„ Polma.
4.	„ Mathakeso.	16.	„ Gundhrakpur.
5.	„ Kakui.	17.	„ Sikarpur.
6.	„ Titmo.	18.	„ Porepahar.
7.	„ Lakhanpur.	19.	„ Sankerra.
8.	„ Ashua.	20.	„ Beloodabar.
9.	„ Dhunria.	21.	„ Dumka.
10.	„ Goalsimla.	22.	„ Karaya.
11.	„ Kumrabad.	23.	„ Cheptiam.
12.	„ Sirsa.	24.	„ Goreenala.

In the Deoghur Sub-division.

25. Taluk Deoghurabad.	28. Taluk Tangidih.
26. ,, Banhaiti.	29. ,, Dhanoria.
27. ,, Punasi.	30. ,, Rohini.

In the Jamtara Sub-division.

31. Taluk Norianpur.	32. Taluk Pabia.

33. Sitakatain in taluk Pindari.

In the Godda Sub-division.

34. Taluk Belbathan.	35. Tappeh Barkope.

36. Killa Bhadrain in pargana Godda.

Settlement and Assistant Settlement Officers.

3. Mr. J. A. Craven, Deputy Magistrate and Deputy Collector, was appointed Settlement Officer. Field operations were begun on the 15th November 1888, Mr. Craven and the Assistant Settlement Officer, Babu Jogendro Chandra Bhanjo, each taking charge of one party. Three separate parties worked during the field season 1889-90—the first or Deoghur and Jamtara party under Mr. Craven's personal supervision; the second or Dumka party under the supervision of Babu Jogendra Chandra Bhanjo; and the third or Godda party under Babu Rash Behari Dutt, Second Assistant Settlement Officer. During the season 1890-91, the same number of parties were employed, but Mr. Craven was relieved of the charge of his party by Babu Balaram Das Gupta, the Special Kanungo, who was appointed Third Assistant Settlement Officer. The field work was completed in March 1891. In regard to settlement, the most important work was the determination of rents on the principles laid down by Sir Charles Elliott in the rules of April 1891, the chief heads of which are explained in paragraph 9 of the Commissioner's review. The record of rights drawn up at the last settlement having been found defective in some respects, it was also necessary that the Settlement Officer should prepare, under the rules of April 1889, a fresh record of rights for every village under settlement. This part of the work was done in a very complete and thorough fashion, and included many miscellaneous proceedings of a varied character, some of which are referred to below. The unit of settlement was, as before, the village, and not the estate. The publication, under section 24 of Regulation III of 1872, of copies of the khatian-jamabandis, and of the record of rights, was completed by the 15th February 1892. For almost the whole period covered by the proceedings, Mr. Craven worked under the supervision and control of Mr. Carstairs, the present Deputy Commissioner, and his final report was submitted on the 1st July 1892.

4. The following statements show (1) the progress of the work and (2) the different classes of petitions, their number, and the ratio per cent. of the number of raiyats:—

Statement showing the progress of work.

Season.	Number of villages measured.	Area surveyed and measured (in acres).			Boundary disputes decided.	Number of original khatians prepared.	Number of villages of which rents calculated according to old rates.	Original khatian jamabandis explained to raiyats.	Khatians copied (in duplicate and triplicate).	Assessment sheets drawn up fixing soil rates.	Abstract khatian jamabandis prepared according to the final rules.	Number of villages in which jamabandis are explained to raiyats.	Number of objections disposed of (exclusive of boundary disputes).	Number of enquiry papers with regard to records of rights.	Number of records of rights prepared.	Enquiry into appointment of mustajirs.	Number of pattas and kabuliyats prepared.	Number of villages in which records are locally published.	Number of settlement misls formed (in two parts).	Number of indexes prepared for the misls.	Number of villages for which index or ajmuli maps are prepared.	Settlement registers prepared (No. of villages).	Villages in which excess waste and forest are excluded under section 15, Regulation III of 1872.	Copying khasra from manuscript to printed forms.	
		Cultivated.	Uncultivated.	Total.																				Number of villages.	Number of plots.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
Dumka Party. 1888-89	196	29,670	32,999	68,669	56	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
1889-90	162	25,692	26,927	52,619	94	196	196	196	196	......	......	......	155	292	......	196	......	......	......	......	......	......	......	196	123,872
1890-91	62	13,063	24,333·7	37,396·7	118	162	162	162	162	312	......	......	77	128	......	162	......	......	......	......	......	......	......	50	27.400
1891-92	......	......	......	......	......	......	......	......	62	108	840	420	732	......	840	62	1,680	420	840	1,680	420	420	......	......	......
Total	420	68,425	84,259·7	152,684·7	268	358	358	358	420	420	840	420	964	420	840	420	1,680	420	840	1,680	420	420	......	246	161,272
Deoghur and Jamtara Party. 1888-89	218	16,317	23,915	40,232	95	......	......	......	......	......	......	......	22	......	......	......	......	......	......	......	......	......	......	......	......
1889-90	283	34,821	46,616	81,437	202	218	218	218	436	......	......	......	635	387	......	218	......	......	......	......	......	......	......	218	1,31,236
1890-91	183	31,191·02	67,004·1	98,195·12	107	283	283	283	566	425	......	......	500	297	......	283	......	......	......	......	......	......	20	66	42,37 2
1891-92	......	......	......	......	......	......	......	......	366	259	2,052	684	2,902	......	2,052	183	2,736	684	1,368	2,736	684	684	28	50	37,552
Total	684	82,329·02	137,535·1	219,864·12	404	501	501	501	1,368	684	2,052	684	4,149	684	2,052	684	2,736	684	1,368	2,736	684	684	48	334	2,11,160
Godda Party. 1888-89	......	......	(Work not commenced.)																						
1889-90	152	37,607	11,532	49,139	16	......	......	......	......	......	......	......	......	30	......	......	......	......	......	......	......	......	......	152	97,432
1890-91	176	24,872·6	16,871·9	41,744·5	91	152	152	152	304	222	......	......	58	289	......	152	......	......	......	......	......	......	......	35	22,321
1891-92	......	......	......	......	......	......	......	......	261	106	893	328	1,201	......	893	176	1,312	328	656	1,312	328	328	......	......	......
Total	328	62,479·6	28,403·9	90,883·5	107	152	152	152	565	328	893	328	1,259	328	893	328	1,312	328	656	1,312	328	328	......	187	1,19,753
GRAND TOTAL ...	1,432	213,233·62	250,198·7	463,432·32	779	1,011	1,011	1,011	2,353	1,432	3,785	1,432	6,372	1,432	3,785	1,432	5,728	1,432	2,864	5,728	1,432	1,432	48	767	4,82,185

Statement showing different classes of petitions, their number and the ratio per cent. of the number of raiyats.

NAME OF PARTY.	Total number of raiyats, including kurfas.	Objections to measurement or classification.	Percentage.	Objections to rent.	Percentage.	Disputes regarding possession, including boundary disputes.	Percentage.	Miscellaneous objections.	Percentage.	Objections regarding mustajirs.	Percentage.	Total number of petitions.	Percentage.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Dumka ...	12,650	252	1·99	560	4·42	300	2·37	65	·51	55	·43	1,232	9·73
Deoghur and Jamtara ..	20,152	1,035	5·14	1,336	6·63	1,213	6·02	405	2·01	564	2·79	4,553	22·59
Godda	13,504	377	2·80	350	2·59	317	2·34	103	·76	219	1·62	1,366	10·11
Total ...	46,306	1,664	3·59	2,246	4·85	1,830	3·95	573	1·23	838	1·81	7,151	15·44

5. The 1,432 villages which have been surveyed and measured cover an area of 212,610·82 acres rent-paying and 250,821·5 acres non-rent-paying lands. Of the rent-paying area 211,310·12 acres are cultivated, and 1,300·7 acres uncultivated. Of the non-rent-paying area 1,923·5 acres are cultivated, and 248,898 acres uncultivated. The total cultivated area is thus 213,233·62 acres, and the total uncultivated area 250,198·7 acres. The proportions of the total cultivated and uncultivated areas to the whole area are 46 and 54 per cent. respectively. The average rent of cultivated land is Re. 1-1 per acre.

Particulars of lands.

Proceedings were taken under section 15 of Regulation III of 1872 in 48 villages for the exclusion of excess forest and waste. These excluded areas have been mapped and measured, and pucka boundary pillars have been erected. Proceedings were drawn up for every village headship, as also for every village settled khas. Rules regulating the rights of raiyats in regard to the village forest and jungle have been laid down, with a view to the permanent preservation of the village fuel and the timber supply. The village pasture lands, on which all raiyats are allowed to pasture their cattle, have been separately measured and defined, and the same has been done as regards the village common lands.

6. The total number of raiyati holdings is 36,733, and the average area per holding is 6·03 acres. The total number of sub-tenants is 8,941, and the average area of each sub-holding is 1·19 acres. The total number of headmen's private jotes amounts to 1,249, and the average area of each such jote is 24·97 acres. There are 659 official jotes held by headmen, their average area being 5·14 acres.

Number and area of holdings.

7. The particulars of land in the whole tract under settlement are shown in the following statement :—

	Class of cultivator.	Number of holdings.	Cultivated area. Acres.	Cultivated area. Average area per holding.	Rent. Payable for the first five years.	Rent. Payable from the sixth year.	Rent. Average rent per acre.	Uncultivated area in acres.	Total area in acres.
	2	3	4	5	6	7	8	9	10
					Rs. A. P.	Rs. A. P.	Rs. A. P.		
1	Proprietors' Sir (nijjote)	289	1,263·3	4·37	887 4 0	887 4 0	0 11 3	1,406·4	2,669·70
2	Mustajirs' private jote	1,249	29,966·8	23·99	28,375 0 0	29,079 12 0	0 15 6	1,221·13	31,187·93
3	Mustajirs' official jote	659	3,166·9	4·80	3,186 4 0	3,276 0 0	1 0 6	224·3	3,391·2
4	Raiyats holding under proprietors ..	5,374	27,480·26	5·11	41,080 4 0	42,636 12 0	1 8 9	1,118·44	28,598·7
5	Raiyats holding under mustajirs ...	28,315	148,854·76	5·25	1,48,492 12 0	1,50,065 12 0	1 0 2	3,184·79	152,039·55
5	Raiyats at fixed rent	158	585·1	3·70	1,155 8 0	1,155 8 0	1 15 7	1,300·7	1,885·8
7	Raiyats holding within area excluded from settlement.	118	177·7	1·12	91 8 0	91 8 0	0 8 2	32·5	210·2
	Total .	36,192	211,494·82	5·84	2,23,268 8 0	2,27,192 8 0	1 1 2	8,488·26	210,983·08
8	Rent-free holders	541	1,738·8	3·21	.....	......	......	14·7	1,753·5
	GRAND TOTAL ...	36,733	213,233·62	5·80	2,23,268 8 0	2,27,192 8 0	1 1 0	8,502·96	221,736·58
9	Under-raiyats	8,941	10,286·23	1·15	11,814 3 6	11,814 3 6	1 2 4	357·7	10,643·93
	Mân lands	260	320·9	1·2	198 0 0	198 0 0	0 6 9	.....	320·9
	Chakeran lands	372	1,321·7	3·5	1,041 12 0	1,061 8 0	0 12 10	20·4	1,342·1

Rent.

8. The area under cultivation at the last settlement was 126,158 acres according to a doubtful estimate. The cultivated area now measured is, as above noted, 213,233·62 acres, giving an increase of 87,075·62 acres or 69 per cent. The rent has increased from Rs. 1,60,088-11 to Rs. 2,27,192-8, showing an increase of Rs. 67,103-13, or 41·9 per cent., equivalent to 45·6 per cent. of the cost of survey and settlement. The increase in the rent is therefore less than the increase in the cultivated area, and the rate per cultivated area has fallen (if the estimate of the former cultivated area may be accepted) from Re. 1-4 to Re. 1-1. The proprietors have thus secured, at a comparatively small outlay, (*a*) a considerable enhancement to their rentals, and (*b*) in the place of only rough approximations to the cultivated areas of the last settlement, an accurate and authoritative record of both cultivated and uncultivated areas in their estates. Of the total increased rental, Rs. 3,924 will not, according to Rule 6 of the Government Rules of April 1891, take effect until after the expiration of five years; this amount representing the aggregate excess increase over Rs. 100 per cent in the rents of individual raiyats. In other cases the new rents took effect from the beginning of the Bengali year 1299.

Headmen.

9. The headman, manjhi, mustajir, or pradhan is elected by the villagers when the office falls vacant, either by reason of his dying without a male heir, or being removed for misconduct. He is the head of the village police, and can be removed only by the Deputy Commissioner. He collects the rents from the raiyats except in the villages under khas zamindari management, where the rents are collected by the zamindar's amla. He receives a commission on his collections amounting to 6¼ per cent., or one anna per rupee, from the raiyats, and an equal sum from the zamindar, his nij-jote lands being assessed like other lands of the village. He is allowed to reclaim and cultivate the waste lands in the village without paying rent, or to settle such lands at half-rates with the other raiyats, the other half being appropriated by him; and he has the option of holding in his own possession or settling with other non-resident raiyats the jotes of absconded raiyats or of those who have died without heirs. His jote therefore consists of his private lands and the land which he acquires by virtue of his office. The latter constitutes his official jote. The headman's private and official jotes have been separately recorded in the record of rights; and the lands reclaimed by the headman during his term of office have been recorded as part of his private jote. The office of headman is not saleable, the only exceptions to this rule being the cases of (1) the memorialists to whom certain concessions were granted in Government order No. 1617, dated 7th June 1877, and (2) those settlement holders who were recorded as múl raiyats at the former settlement. The right of alienation in those cases does not include the right of splitting up the headship.

Raiyats.

No raiyat can be evicted except by the order of the Deputy Commissioner, who sanctions eviction only on the ground of non-payment of rent. Only money rents have been settled at certain recorded rates, which are also applicable to under-raiyats. The raiyati jotes are heritable, but not transferable.

Cost.

10. The cost of the operations amounted to Rs. 1,47,158-11-9, which have been paid by the proprietors of the estates under settlement. The average cost is therefore about 5·1 annas per acre on the total area of cultivated and uncultivated lands. The expenditure includes the cost of—

	Rs.	A.	P.
Tents	2,880	7	3
Furniture	698	8	0
Instruments	2,135	3	0
	5,714	2	3

The Lieutenant-Governor approves the Commissioner's suggestion that the tents, furniture, and instruments be kept for future use. They will be valued and paid for from the funds deposited for the settlement, the amount of the valuation being then refunded to the proprietors of the estates now resettled in proportion to their contributions.

11. A Notification under section 5 of Regulation III of 1872, declaring that this settlement has been completed, will be published in the *Calcutta Gazette* of the 15th March 1893, the publication of the records of rights under section 24 having been completed, as stated before, on the 15th February 1892.

Economic information.

12. The Lieutenant-Governor has read with pleasure the interesting economic information contained in the report of the Settlement Officer, relating to the distribution of the area among different classes of cultivators; the system of agriculture, wages, food, dress; the areas of the several classes of land; the proportionate increase in each since the last settlement, and the principal products with the areas covered by each. The total areas of rice and bari lands (*i.e.*, lands on which crops other than rice are grown) at present under cultivation are as follows:—

				Acres.
Rice	...	...	...	106,732·41
Bari	...	...	...	106,501·21

Representing the whole tract under settlement by 100, the proportions borne by the rice lands and the bari lands to the whole area are respectively 23 and 22·9 per cent. The proportion of the areas covered by the several kinds of crops is shown below:—

Rice.	Indian-corn.	Sugarcane.	Wheat.	Oils eeds.	Pulses.	Cotton.	Indigo.	Total.
50·05	10·6	2·7	2·23	7·33	24·09	2·4	0·6	100

Irrigation.

Bandhs or embankments thrown across the jores or narrow streamlets, so as to form reservoirs, are the chief means of irrigation in this district, and are constructed by the Sonthals without any assistance from the zamindars. The total area covered by bandhs and tanks is as follows:—

					Acres.
In the estates in Deoghur		...	...	...	1,962·7
Ditto	in Jamtara	...	...	...	1,690·6
Ditto	in Dumka	...	...	...	1,495·1
Ditto	in Godda	...	...	...	983·7
			Total	...	6,132·1

Or 9·5 square miles.

Mr. Craven estimates that the area now protected by irrigation from all sources taken together amounts to about 34,748 acres, and that the proportion borne by the present irrigated area to the whole cultivated area is about a sixth.

Condition of Diku and Sonthal raiyats.

The ordinary Diku or non-Sonthal cultivator is fairly well off. The Sonthal is thriftless and fond of drink. He is consequently always in debt and in difficulties with his mahajan.

Maintenance of settlement records.

13. Rules for the maintenance of the settlement records were sanctioned in Government order No. 3254L.R., dated 27th August 1892.

14. The Lieutenant-Governor desires that his acknowledgments may be conveyed to Mr. Craven for the careful and thorough manner in which this survey and settlement have been carried out, and to Mr. Carstairs for his efficient supervision of the work.

ORDER.—Ordered that this Resolution be published in the *Calcutta Gazette*, and that a copy be forwarded for the information of the Commissioner of Bhagalpur.

By order of the Lieutenant-Governor of Bengal,

H. H. RISLEY,

Secretary to the Govt. of Bengal.

DONATION BY HIS HIGHNESS THE MAHARAJA SCINDIA BAHADUR OF GWALIOR.

GENERAL DPARTMENT—EDUCATION.

Calcutta, the 17th March 1893.

RESOLUTION No. 1105.

READ—

Letter from the Director of Public Instruction, Bengal, No. 1000, dated the 18th February 1893.

THE Lieutenant-Governor has learnt with pleasure that His Highness the Maharaja Scindia Bahadur of Gwalior has placed at the disposal of the Principal of the Presidency College, Calcutta, a donation of Rs. 500 to be invested in a 4 per cent. Government promissory note, the interest accruing on which is to be utilized in awarding annually a medal or money prize, in His Highness's name, to that student of the Presidency College who, on passing the First Arts Examination, stands next in order of merit to those who gain scholarships or other prizes.

2. The acknowledgment of Government is due to His Highness the Maharaja Scindia Bahadur of Gwalior for his kind donation.

ORDER.—Ordered that a copy of this Resolution be forwarded to the Director of Public Instruction and to the Accountant-General, Bengal, for information; also that the Government of India, Foreign Department, be requested to forward a copy, with the permission of His Excellency the Viceroy and Governor-General in Council, to His Highness the Maharaja Scindia Bahadur of Gwalior.

Ordered, also, that a copy of this Resolution be published in the *Calcutta Gazette.*

By order of the Lieutenant-Governor of Bengal,

H. H. RISLEY,

Secretary to the Govt. of Bengal.

CONTRIBUTION MADE BY BABU RAJ RAJESWAR PROSAD SING, OF SOORAJPURAH, TOWARDS THE COST OF THE ARRAH WATER-WORKS.

No. 1019M., dated Calcutta, the 18th March 1893.

From—J. A. BOURDILLON, ESQ., Officiating Secretary to the Government of Bengal, Municipal Department,

To—The Commissioner of the Patna Division.

I AM directed to acknowledge the receipt of your memorandum No. 13G., dated the 13th January 1893, with which you forward a copy of a letter from the Chairman of the Joint-Committee, Arrah Water-works, reporting that Babu Raj Rajeswar Prosad Sing, of Soorajpurah, has offered to contribute a sum of rupees one lakh-and-a-half towards the cost of the water-works, of which the sum of one lakh of rupees has already been deposited in the Bank of Bengal to the credit of the Collector of Shahabad.

2. In reply, I am to say that the Lieutenant-Governor has much pleasure in accepting the offer of Babu Raj Rajeswar Prosad Sing, and to request that an expression of His Honour's thanks may be conveyed to him for his public spirit and liberality. This letter will be published in the *Calcutta Gazette.*

CONTRIBUTION MADE BY DEWAN ROY JAY PROKASH LAL, C.I.E., OF DUMRAON, FOR EXPENDITURE ON WORKS OF PUBLIC UTILITY IN THE DISTRICT OF SHAHABAD.

No. 1020M., dated Calcutta, the 18th March 1893.

From—J. A. BOURDILLON, ESQ., Officiating Secretary to the Government of Bengal, Municipal Department,

To—The Commissioner of the Patna Division.

I AM directed to acknowledge the receipt of your letter No. 834G., dated the 6th December 1892, in which you report that Dewan Roy Jay Prokash Lal, C.I.E., of Dumraon, has placed to the credit of the Collector of Shahabad in the Bank of Bengal a sum of Rs. 25,000 to be expended on works of public utility in that district.

2. In reply, I am to say that the Lieutenant-Governor has much pleasure in accepting the offer of Dewan Roy Jay Prokash Lal, C.I.E., and to request that an expression of His Honour's thanks may be conveyed to him for his public spirit and liberality. This letter will be published in the *Calcutta Gazette*.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 18th March, 1893.

Division	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.					
BURDWAN DIVN.	1	Burdwan	March 18, '93	0·76	Weather—decidedly warmer the last two days. *Rabi* crops only moderate owing to damage done by recent rain. Sugarcane being cut and lands being ploughed. Prices about the same. Prices of common rice:— Srs. Sadar ... ... 10½ to 13 per rupee. Kalna ... ... 10 to 13 per rupee. Katwa ... ... 13 per rupee. Raniganj ... ... 13 per rupee.
		Kalna	...	0·20	
		Katwa	...	0·43	
		Raniganj	...	0·20	
	2	Bankura	„ 18, '93	0·08	Weather—fair since 14th, and becoming hot. Lands are being ploughed for early sowings. Pressing of sugarcane continues. Fodder and water sufficient. Prices of common rice:— Srs. Sadar ... ... 11¼ per rupee. Vishnupur ... ... 11½ per rupee.
		Vishnupur	...	0·25	
	3	Birbhum	„ 18, '93	1·20	Weather—clear and getting hot. There was a good deal of hail in the Sadar on the 15th which has injured the standing *rabi* crops to some extent. Sugarcane is being pressed and ploughing going on. Rice sells at from 13 to 15 seers per rupee.
		Rampur Hát	...	0·24	
	4	Midnapore	„ 18, '93	0·28	Weather—very much warmer than last week. Ploughing going on everywhere. Prices of common rice:— Srs. Sadar ... ... 12½ per rupee. Contai ... ... 13 per rupee. Tamluk ... ... 12 to 14 per rupee. Garhbeta ... ... 12 per rupee.
	5	Hooghly	„ 18, '93	1·85	The hot weather has set in suddenly at the end of the week. Ploughing for next crop continues. A little sugarcane pressing is still reported to be going on. The late *rabi* is further injured by the rain. Cattle-disease continues but is less severe. Fodder and water plentiful. Prices of common rice:— Srs. Sadar ... ... 11 per rupee. Serampore ... ... 10 to 11½ per rupee. Jahanabad ... ... 11½ to 12¼ per rupee.
		Serampore	...	0·27	
		Jahanabad	...	0·35	
	6	Howrah	„ 18, '93	0·22	Hot weather suddenly set in on Friday (17th). Condition of cattle good. Fodder and water-supply sufficient. Price of rice 10 to 11½ seers per rupee.
		Ulubaria	...	0·30	
PRESIDENCY DIVN.	7	24-Parganas	„ 18, '93	0·30	Weather—seasonable. Ploughing going on. Sufficient fodder and drinking water. No cattle-disease. Prices of rice:— Srs. C. Sadar ... ... 10 to 14 8 per rupee. Barasat ... ... 10 5 per rupee. Barrackpore ... ... 11 0 per rupee. Dum-Dum ... ... 12 0 per rupee. Basirhat ... ... 11 7 per rupee. Diamond Harbour ... ... 13 0 per rupee.
	8	Nadia	„ 18, '93	0·20	Weather—hotter. *Rabi* harvest going on, and land being ploughed for *aus* paddy. Price of rice stationary. Fodder and water sufficient.
		Kushtia	...	0·16	
		Meherpur	...	0·14	
		Chuadanga	...	0·11	
		Ranaghat	...	0·41	
	9	Khulna	„ 18, '93	1·43	Weather—rainy in the early part of the week. Harvesting of *rabi* going on *Boro* promising. Coarse rice selling at from 11 to 14 seers per rupee Supply of fodder and water for cattle sufficient. No cattle-disease reported.
		Bagerhat	...	1·06	
		Satkhira	...	0·90	
	10	Jessore	„ 18, '93	0·44	Weather—days getting hot, but nights and mornings cool. Some injury has been caused to mustard, gram and peas by the rain. Ploughing continues. Planting of *boro* paddy going on in Narail. Some cases of cattle-disease reported. Fodder and water sufficient. Prices of rice stationary.
		Jhenida	...	0·17	
		Magura	...	0·11	
		Narail	...	0·70	
		Bangaon	...	1·36	
	11	Murshidabad	„ 18, '93	0·10	Weather—seasonable. Harvesting of *rabi* crops is going on. Sugarcane is being pressed. Mulberry and indigo promising. Transplantation of *boro* paddy nearly finished. Common rice sells at 12½ seers per rupee. Fodder and water sufficient for cattle.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and State and prospects of the crops.
BENGAL—*concld.*				
CHITTAGONG DIVN.	12	Chittagong Mar. 18, '93	0·04	Weather—seasonable. Prospects of crops good. Rain wanted. Prices stationary. Condition of cattle generally good. Supply of fodder sufficient.
	13	Noakhali „ 18, '93	0·08	Weather—seasonable; cloudy at times. Ploughing for *aus* paddy vigorously going on. State of *rabi* crops favourable. No cattle-disease except in Begumganj. Fodder and water sufficient. Price of rice stationary.
	14	Tippera „ 18, '93	0·31	Weather—warm by day; unusually cool at night. Standing crops doing well. Ploughing operations proceeding. Mustard being gathered. Price of rice rising.
	15	Chittagong Hill Tracts. „ 17, '93	0·08	Weather—getting warmer daily. Condition of vegetables and other crops fair. *Jum* cutting and burning going on. Land for next rice crop being cultivated. No cattle-disease reported. Prices of common rice :— Srs. Rangamati ... ... 10 } Manicksury ... ... 18 } per rupee. Bandarban ... ... 9½ }
DACCA DIVN.	16	Dacca „ 18, '93	0·29	Weather—cloudy. Days hot and nights cool. Prospects of *rabi* crops good. Cultivation and sowing of *aman*, *aus* and *boro* paddy going on. Fodder available. No cattle-disease. Common rice selling at from 11 to 13 seers per rupee.
	17	Faridpur „ 18, '93	0·26	Weather—uncertain. *Rabi* still being harvested. Ploughing and sowing of rice and *til* going on vigorously. *Jali* and *boro* paddy doing well. Common rice sells at from 12 to 13 seers per rupee. Cattle get fodder and doing well.
	18	Backergunge „ 18, '93	Nil	Weather—seasonable. Prospects good. Ordinary rice selling at from 10 to 14 seers per rupee. Fodder and water sufficient.
		Bhola ...	0·14	
		Pirojpur ...	0 32	
		Patuakhali ..	1·20	
	19	Mymensingh „ 18, '93	0·73	Weather—cloudy. Prospects of standing crops favourable. Common rice selling at from 11½ to 14½ seers per rupee. Condition of cattle good. Fodder and water available.
RAJSHAHI DIVN.	20	Dinajpur „ 18 '93	0·07	Weather—occasionally cloudy with easterly wind. Lands being prepared for *bhadoi* and jute. Prices of rice both at Sadar and Thakurgaon stationary. The Subdivisional Officer reports that 35 head of cattle died of cattle-disease, which has now disappeared. Elsewhere the cattle are in good condition. Fodder and drinking water continue sufficient.
		Thakurgaon ...	0·49	
	21	Rajshahi „ 18, '93	0·44	Weather—little cold and cloudy. Ploughing for next crops still going on. Manufacture and export of ganja continue. Some cases of cattle-pox reported from the Munda thana. Supply of water and fodder sufficient. Price of rice stationary.
		Nator ...	1·50	
		Naugaon ...	0·07	
	22	Rangpur „ 18, '93	0·28	Weather—seasonable. *Aus* is being sown; lands under preparation for jute. Price of rice 12 to 15 seers per rupee.
		Kurigram ...	1·07	
		Nilphamari ...	0·17	
		Gaibanda ...	Nil	
		Ulipur ...	0·76	
	23	Bogra „ 18, '93	0·30	Weather—seasonable. Lands are being ploughed for rice and jute. Common rice sells at 12¾ seers per rupee. Fodder and water sufficient.
		Sherpur ...	0·34	
		Naukhila ...	0·02	
	24	Pabna „ 18, '93	0·56	Weather—unsettled and getting hot. Ploughing of land continues. Rice selling at 12¼ seers per rupee at Pabna and at Rs. 3 to Rs. 4-8 per maund at Sirajganj. Condition of cattle good. Water-supply and fodder sufficient.
	25	Darjeeling „ 18, '93	1·26	Weather—changeable. *In the hills :—Bhutta*, wheat, barley and potatoes progressing favourably. *Chota marua* coming up in some places. *In the Terai :*—Ploughing of land goes on. Barley ripening and tobacco in flower. Prices of coarse rice :— Srs. Hills ... ... 11 } Terai ... ... 13 } per rupee.
		Siliguri ...	0·31	
	26	Jalpaiguri „ 18, '93	1·26	Weather—getting hot in day, cold at night. Ploughing for *bhadoi* crops in progress. Harvesting of tobacco still going on. Hailstone has injured tobacco to some extent. Price of common rice stationary. Fodder and water-supply sufficient. No cattle-disease.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.			
Bhagalpur Divn.			
27	Monghyr March 18, '93 Begusarai ... Jamui ...	0·05 0·09 Nil	Weather—getting warmer. Damage to *rabi* crop estimated to amount to 4 annas throughout the district. Late rain has done much good to indigo. Common rice sells at from 12 to 16 seers per rupee.
28	Bhagalpur „ 18, '93 Banka ... Madhipura ... Supaul ...	Nil Nil 0·25 0·11	Weather—growing hot during the day; cool mornings and evenings. Except for the damage done by the late rain, the outturn of the *rabi* would have been excellent: as it is there will be at least a 12-anna yield. Outturn of linseed estimated as follows:— Sadar ... ... 12 annas. Banka ... ... 10 „ Madhipura ... ... 12 „ Supaul ... ... 12 „
29	Purnea „ 18, '93 Kishanganj ... Araria ...	0·01 0·83 1·85	Weather—cloudy with a tendency to rain. Getting warm. *Rabi* prospects good. Harvesting of linseed and sugarcane in progress; that of tobacco retarded by rain. Rain has been injurious in the north to tobacco and mango blossoms. Indigo sowing in progress with favourable prospects. Cultivation for *bhadoi* extensive and forward. Fodder and water sufficient. Prices slightly rising.
30	Malda „ 18, '93 Shibganj ... Gajole ...	0·27 0·24 0·08	Weather—latter part of the week clear. Days getting warm; nights still cool. Lands are being prepared for *bhadoi* crops. Rice has been sown in some places in Khurba thana. *Rabi* crops promising well. Common rice selling at from 13½ to 16 seers per rupee. No want of fodder or drinking water.
31	Sonthal Parganas „ 18, '93 Deoghur ... Godda ... Jamtara ... Pakur ... Rajmahal ...	0·49 0·32 0·10 0·18 1·28 0·25	Slight rain. Towards the end of the week the weather has become hot and dry. The mango and *mahua* crops are now doing well, but suffered injury from the excessive rain. They are late. *Boro* rice being planted. Indigo sowing delayed. Price of rice still high. Fodder and water sufficient.
Patna Division.			
32	Patna „ 18, '93 Bihar ... Dinapore ... Barh ...	Nil 0·15 Nil 0·02	Weather—clear and becoming hot. *Rabi* crops on the whole good. Harvesting going on. Collection of opium during the week reported to have been very successful, the drug flowing freely, and the absence of west winds has enabled the capsules to stand a greater number of lancings than is usual, and thereby considerably increasing the outturn. Prices of common rice:— Srs. Sadar ... ... 16 } Bihar ... ... 16½ } per rupee. Dinapore ... ... 15 } Barh ... ... 11½ to 12 }
33	Gaya „ 18, '93 Nawada ... Aurangabad ...	0·19 0·09 0·18	Weather—cloudy and damp early in the week; clear and warm latterly. *Rabi* harvest progressing. Prospects improved by the clearing up of the weather. About three-fourths of opium collections done: yield and quality fairly good. Sugarcane planting begun. Common rice sells at 13½ seers per rupee. Water and fodder-supply sufficient.
34	Shahabad „ 18, '93 Buxar ... Sasaram ... Bhabhua ...	Nil 0·58 Nil 0·03	Weather—fine and clear; hot weather with light easterly winds. Great damage has been done in the Buxar subdivision within a limited tract by a hail-storm on the 11th. *Rabi* harvest is in full swing favoured by the fine weather; outturn all round will be about ¾ths of an average, should nothing unforeseen occur. Fodder and water abundant.
35	Darbhanga „ 18, '93	0·09	Weather—getting warm. Early part of the week cloudy. *Rabi* harvest commenced in places. Indigo sowings in progress. The rainfall of the week injured the mango blossoms to some extent. Poppy leaf manufacture closed. The drug flows pretty freely, but not as it would if the moisture was less. Condition of cattle good. Prices remain almost stationary.
36	Muzaffarpur „ 18, '93 Sitamarhi ... Hajipur ...	0·09 Nil Nil	Weather—somewhat unsettled. Standing crops continue to promise well. Opium flows pretty freely, but not as it would if the moisture was less. Manufacture of leaves closed. No cattle-disease. Fodder and water plentiful.

	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR—*concld.*				
PATNA DIVISION—*concld.*	37	Saran Mar. 18, '93 Siwan .. Gopalganj ..	0·09 0·11 Nil	Weather—hotter by day, but not seasonably hot yet; and nights cool. Fine weather of the last few days has improved the *rabi* crops; the harvesting of some of them has commenced. Condition of poppy crop reported by the Sub-Deputy Opium Agents to be good. Fodder and water abundant. Prices of common rice:— Srs. c. Chapra ... ... 14 8 } Siwan ... ... 13 2 } per rupee. Gopalganj ... ... 13 6 }
	38	Champaran „ 18, '93	0·07	Weather—unsettled; sometimes cloudy with high wind and frequent showers. *Rabi* doing well. Oats and barley being cut in some places. *China* and *jasaria* paddy are being sown. Indigo sowing in progress. Opium collection making good progress, and the yield is plentiful in the Sadar. In Bettiah 8 annas drug collected, and prospects favourable for a good outturn. No marked change in prices. No cattle-disease. Fodder and water sufficient.
ORISSA.				
ORISSA DIVN.	39	Cuttack „ 18, '93	1·34	Weather—warm. Outturn of mustard estimated at 16 annas. Supply of fodder and water ample. Price of rice stationary.
	40	Puri „ 18, '93 Khurda ... Banpur ...	0·31 2·03 0·20	Weather—cloudy with drizzling rain at intervals. Lands are being cultivated for the next *sarad* crop. *Dalua* paddy growing well. Rain has damaged the *rabi* crops. Common rice sells at from 14 seers 10 chitaks to 18 seers 6 chitaks per rupee.
	41	Balasore „ 18, '93	0·60	Weather—seasonable. Ploughing continues. The average outturn of sugar is estimated at 15 annas. Prices stationary.
CHOTA NAGPUR.				
South-West Frontier Agency.				
CHOTA NAGPUR DIVN.	42	Hazaribagh Mar. 18, '93 Giridi ...	1·25 0·79	Weather—bright and getting hot. *Rabi* crops injured by excessive rainfall; estimated outturn 8 to 12 annas. Prospects of *mahua* and mango indifferent. Seventy-five per cent. of opium harvested. The ultimate yield is not expected to fall far short of the estimate. Common rice 12 to 14 seers per rupee. Fodder and water sufficient.
	43	Lohardaga „ 18, '93	0·74	Weather—getting hot. Ploughing continues. Common rice is selling at 14 seers per rupee. Fodder and water sufficient.
	44	Palamau „ 17, '93	0·69	Weather—seems now to have cleared. Some damage has been caused to the *rabi* crops, especially to gram, by the continuous rain. Hail reported from some parts. Mangoes are blooming very sparsely, and the *mahua* has been retarded by the cold rainy weather. These crops are expected to be short. Prices rising.
	45	Singhbhum „ 18, '93	0·38	Weather—bright and getting hot. *Rabi* crops fairly good. Gram and pulse suffered much from the late wet, but wheat and barley were benefited by it. Price of common rice varies from 12 to 16 seers per rupee.
	46	Manbhum „ 18, '93 Gobindpur ...	1·29 0·10	Weather—getting warmer daily. Warm bright weather has been wanted for some days past. Mango and *mahua* have been damaged, but to what extent not yet known. Price of rice 10 to 13 seers per rupee. Fodder and water-supply sufficient.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 21st March, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

PRICES-CURRENT (*RETAIL*) OF FOOD-GRAINS, FIREWOOD AND SALT IN THE HEAD-QUARTERS STATION BAZARS OF THE DISTRICTS OF BENGAL DURING THE FORTNIGHT ENDING THE 15TH MARCH 1893.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the

QUANTITIES PER RUPEE IN

Division	Number.	DISTRICTS.	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum. (*Sorghum Vulgare.*) Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
BENGAL.			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Burdwan Division.	1	Burdwan ...	10 11	12 0	11 8	...	...	...	10 8	10 4	11 10	12 2	12 0	13 14	...	...	...
	2	Bankura ...	12 0	11 8	11 4	18 0	...	16 0	10 0	10 0	12 8	11 4	10 12	15 8	.	...	...
	3	Birbhum ...	10 4	10 4	10 8	9 0	9 0	...	11 0	11 0	11 4	14 4	14 4	13 8	...	...	...
	4	Midnapore ...	11 0	11 0	11 0	...	...	...	10 0	10 0	10 0	12 12	12 12	13 0	...	...	...
	5	Hooghly ...	11 0	11 0	13 0	11 0	11 0	...	8 0	8 8	8 0	10 0	10 0	13 0	...	...	...
	6	Howrah ...	...	...	...	...	...	...	9 6	9 6	10 0	10 0	11 6	13 0	...	...	...
Presidency Division.		Calcutta ...	11 5	11 4	11 2	17 0	17 0	15 13	7 4	7 4	8 1	10 0	10 0	11 10	18 3	18 3	16 :
	7	24-Parganas ...	11 4	11 0	10 8	16 0	16 0	16 0	8 0	8 0	8 0	12 0	12 0	13 0	16 0	16 0	...
	8	Nadia ...	13 1	15 10	12 1	...	...	20 0	10 0	10 0	10 10½	12 12	12 12	12 1	...	...	...
	9	Khulna ...	...	...	...	...	...	...	10 10	10 12	12 12	12 4	12 12	14 0	...	...	...
	10	Jessore ...	11 0	9 0	10 0	...	...	...	9 0	10 0	11 8	12 8	13 0	14 4	...	...	...
	11	Murshidabad ...	13 0	13 0	12 0	...	...	...	10 0	10 0	9 0	12 8	12 8	12 0	...	...	...
Chittagong Division.	12	Chittagong ...	8 12	9 12	9 4	...	...	...	11 8	11 0	9 0	12 12	13 0	11 15	...	...	...
	13	Noakhali ...	...	...	...	...	...	...	11 0	11 0	12 0	12 0	12 0	13 0	...	...	...
	14	Tippera ...	11 0	11 0	10 0	...	...	...	9 0	8 12½	10 0	12 0	12 5	13 5⅓	..	...	...
	15	Chittagong Hill Tracts.	...	...	...	...	...	...	...	...	...	10 0	10 0	11 2¼	...	...	...
Dacca Division.	16	Dacca ...	...	...	10 8	...	...	20 8	11 0	11 0	12 0	11 8	11 8	15 0	...	...	...
	17	Faridpur ...	11 4	11 0	16 0	20 0	20 0	12 0	8 0	8 0	10 0	12 0	12 0	14 0	...	...	...
	18	Backergunge ...	...	...	...	...	...	...	10 8	11 0	11 4	11 1	12 8	12 12	...	...	...
	19	Mymensingh ...	9 8	9 8	10 0	...	...	...	10 0	10 0	10 8	11 0	12 0	14 0	...	...	...
Rajshahi Division.	20	Dinajpur ...	10 12	1ı 12	10 13	15 12	15 12	18 0	10 12	10 0	8 6	14 6	14 0	11 0	...	...	...
	21	Rajshahi ...	10 0	10 8	13 8	26 4	...	26 4	11 4	10 8	10 8	12 12	12 0	11 10	...	...	...
	22	Rangpur	12 0	10 13	9 0	...	...	...	10 0	9 6	9 0	12 0	12 8	10 12	...	...	-

A In the subdivisions the retail prices of salt per rupee are :—Kalna 10 seers, Katwa 11¾ seers, and Raniganj 11 seers.
B At Vishnupur the retail price of salt is 11 seers per rupee.
C At Rampore Hát the retail price of salt is 11 seers per rupee.
D In the subdivisios the retail prices of salt per rupee are :—Contai 10 seers, Tamluk 11 seers 2 chitaks, and Garhbeta.(Ghatal) 10 seer 11 chitaks.
E In the subdivisions the retail prices of salt per rupee are :—Serampore (Bhaddreswar) 10 seers 14 chitaks and Jahanabad 10 seers 1 chitaka.
F At Ulubaria the retail price of salt is 10½ seers per rupee.
G In the mufassal marts the retail prices of salt per rupee are :—Chetla 11 seers 6 chitaks, Baduria 10 seers 11 chitaks, Magraha 10 seers 10 chitaks, and Barasat 10 seers 10 chitaks.
H In the mufassal marts the retail prices of salt per rupee are :—Bahadurkhali 10½ seers, Chuadanga 10 seers, Meherpur 10½ seers

Head-quarters Station Bazars of the Districts of Bengal on the 15th March, 1893.

Indian-corn or Maize (*Zea Mays.*)			Arhar or Thur, Cadjan Pea. (*Cajanus Indicus.*)			Firewood.			Salt.			Wholesale prices per maund of 40 seers. Salt.			Districts.	Number.	
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.			
															BENGAL.		
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.			
...	...	...	23 8	21 0	17 0	106 10	100 0	100 0	A 11 2½	11 12	11 4	3 6 8	3 6 6	3 6 8	Burdwan	1	Burdwan Division.
17 0	...	19 0	12 0	12 0	17 0	320 0	320 0	240 0	B 11 0	11 0	11 2	3 10 0	3 10 0	3 9 6	Bankura.	2	
22 0	22 0	...	11 0	11 0	11 4	200 0	200 0	200 0	C 10 12	10 12	10 8	3 12 6	3 12 6	3 10 0	Birbhum.	3	
...	...	...	20 0	20 0	10 0	240 0	240 0	120 0	D 11 7	11 7	10 8	3 7 0	3 7 0	3 8 0	Midnapore.	4	
...	...	...	11 0	11 0	11 0	120 0	160 0	120 0	E 11 4	11 0	10 0	3 6 0	3 6 0	3 12 0	Hooghly.	5	
...	...	...	11 0	10 10	12 8	105 0	105 0	100 0	F 10 10	10 10	10 8	3 8 0	3 8 0	3 6 0	Howrah.	6	
18 4	18 4	16 0	12 5	12 5	15 9	93 0	93 0	95 0	9 8	9 8	11 3	4 0 0	4 0 0	3 5 0	Calcutta.		Presidency Division.
20 0	20 0	...	18 0	18 0	18 0	100 0	100 0	100 0	G 11 0	11 0	11 0	3 4 6	3 4 6	3 4 6	24-Parganas.	7	
...	...	...	22 0	22 1	17 12½	128 0	128 0	128 0	H 10 0	10 0	10 10½	3 8 0	3 8 0	3 8 0	Nadia.	8	
...	...	...	9 1½	9 8	...	160 0	160 0	160 0	I 9 0	9 4	9 0	3 12 0	3 8 0	3 12 0	Khulna.	9	
...	...	...	13 0	13 0	19 0	120 0	120 0	120 0	J 9 14	9 14	9 2	3 10 0	3 10 0	3 10 0	Jessore.	10	
...	...	...	17 0	17 0	16 0	200 0	200 0	200 0	K 10 8	10 8	10 8	3 7 0	3 7 0	3 12 0	Murshidabad.	11	
...	...	...	...	...	...	106 0	110 0	110 0	L 10 0	10 0	10 8	3 13 0	3 12 0	3 8 0	Chittagong.	12	Chittagong Division.
...	..	...	...	...	...	Not sold by weight.			M 10 0	10 0	10 0	3 12 0	3 12 0	3 12 0	Noakhali.	13	
...	...	...	12 0	11 0	8 0	Ditto.			N 10 13½	10 13½	10 0	3 12 0	3 12 0	3 12 0	Tippera.	14	
...	...	...	...	...	...	240 0	240 0	240 0	8 0	8 0	8 0	4 8 0	4 8 0	5 0 0	Chittagong Hill Tracts.	15	
...	...	...	...	...	14 0	130 0	130 0	120 0	O 10 0	10 0	10 0	3 10 0	3 10 0	3 8 0	Dacca.	16	Dacca Division.
...	...	...	...	...	13 0	...	...	...	P 10 12	10 12	10 0	3 12 0	3 12 0	4 0 0	Faridpur.	17	
7 0	Musuri 7 0	...	10 0	Mug. 10 0	...	82 0	82 0	80 0	Q 10 0	10 8	10 0	3 10 0	3 10 0	3 10 0	Backergunge.	18	
...	...	...	13 0	13 0	9 8	120 0	120 0	...	R 10 0	10 0	10 8	4 0 0	4 0 0	3 10 0	Mymensingh.	19	
...	...	...	14 12	13 8	19 3	160 0	160 0	160 0	10 8	10 8	10 4	3 12 0	3 12 0	3 14 0	Dinajpur.	20	Rajshahi Division.
...	...	...	20 11	18 4	21 6	240 0	240 0	240 0	S 9 9	9 9	9 9	3 10 8	3 10 8	3 10 8	Rajshahi.	21	
...	...	...	8 0	12 8	9 0	80 0	80 0	100 0	T 9 0	9 9	9 0	4 0 0	4 4 0	4 0 0	Rangpur.	22	

J In the subdivisions the retail prices of salt per rupee are :—Jhenida 9 seers 9 chitaks, Magura 10 seers, Narail 9 seers 10 chitaks and Bongaon 10 seers 11 chitaks.
K In the subdivisions the retail prices of salt per rupee are :—Kandi 10¾ seers and Jangipur 10½ seers.
L At Cox's Bazar the retail price of salt is 8 seers per rupee.
M At Fenny bazar the retail price of salt is 9 seers per rupee.
N In the subdivisions the retail prices of salt per rupee are :—Chandpur 9 seers and Brahmanbaria 9 seers 2 chitaks.
O In the mufassal marts the retail prices of salt per rupee are :—Madanganj 10 seers, Manikganj 9 seers 13 chitaks, Mirkadim 10 seers and Munshirhat 10 seers.
P At Madaripur and Goalundo the retail price of salt is 10 seers per rupee.
Q In the subdivisions the retail prices of salt per rupee are :—Pirojpur 10¼ seers, Patuakhali 9 seers, and Bhola 9 seers.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the Head-quarters

QUANTITIES PER RUPEE IN

Division	Number.	DISTRICTS	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum (*Sorghum Vulgare*). Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
BENGAL—*continued.*			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Rajshahi Division—*concld.*	23	Bogra ...	12 0	12 0	8 10	.	...	..	9 12	9 12	10 8	12 12	13 8	13 8	...	...	...
	24	Pabna	13 8	13 8	13 8	18 12	22 8	...	6 4	6 0	7 8	12 2	12 2	13 8	...		...
	25	Darjeeling	8 0	8 0	8 0	10 0	10 0	9 0	5 0	5 0	5 0	11 0	11 0	10 0	.	...	...
	26	Jalpaiguri	10 0	11 0	10 0	13 0	13 0	14 8	9 0	9 0	7 0	13 0	13 0	11 0	.	.	...
BIHAR.																	
Bhagalpur Division.	27	Monghyr ...	10 8 to 13 10½	12 1	14 2	15 12 to 16 13	12 10	19 15	7 14 to 9 0	10 8	8 6	14 3	13 10 to 15 12	11 0	18 6	...	15 12
	28	Bhágalpur ...	12 10	12 10	12 10	12 10	12 10	20 3	12 10	12 10	Old 8 13 New 10 1	15 2	15 2	Old 10 1 Now 11 6	..	...	...
	29	Purnea (Kasba)	8 0	10 0	11 0	...	...	...	13 0	13 0	10 0	14 0	14 0	11 0	.	..	...
	30	Malda (English Bazar.)	12 8	12 0	13 0	...	...	...	11 0	11 0	10 0	13 0	14 0	12 0	...	.	...
	31	Sonthal Parganas.	9 8	9 8	11 0	...	...	...	11 8	11 8	11 0	11 0	14 0	13 0	...	.	...
Patna Division.	32	Patna ...	14 0 / 13 0	Red. 14 0 White 13 4	15 0 / 13 8	20 0	19 0	22 0	9 8	10 0	10 8	16 0	16 0	14 0	20 0	20 0	22 0
	33	Gaya ...	11 8	10 8	13 4	18 8	18 4	19 0	10 0	10 0	10 8	13 8	14 0	12 0	18 12	19 8	...
	34	Shahabad ...	12 0	11 8	12 8	14 0	12 0	20 0	8 0	8 0	8 0	15 0	15 0	11 8	...	...	...
	35	Darbhanga ...	11 0	11 0	12 1	11 0	11 0	19 12	11 0	10 0	11 8	14 5	14 13	12 1	...	...	...
	36	Muzaffarpur	11 0	11 8	12 0	20 0	16 0	22 0	8 0	8 0	11 0	14 0	14 0	12 0	...	...	...
	37	Saran ...	12 0	11 9	12 8	22 0	19 8	24 0	10 0	12 0	8 8	14 8	11 9	12 8	...	...	...
	38	Champaran ..	10 8	11 0	10 4	...	...	20 8	8 8	8 8	8 8	15 0	15 8	13 8	...	...	...
ORISSA.																	
Orissa Division.	39	Cuttack ...	10 8	10 8	9 3	...	...	...	10 8	10 8	9 3	14 7	14 7	11 2	...	...	...
	40	Puri ...	9 3	9 3	9 3	...	...	..	9 3	7 14	9 6	14 7	14 7	14 7		...	...
	41	Balasore ...	11 0	11 0	11 0	10 0	10 0	10 0	10 0	10 0	12 0	15 0	16 0	15 0	...	...	...
CHOTA NAGPUR.																	
Chota Nagpur Division.	42	Hazáribágh	New 11 0 / 8 8	10 0	12 0	13 12	14 0	13 0	8 0	8 0	8 0	12 12	13 0	13 8	...	..	...
	43	Lohardaga .	6 0 to 7 0 / 5 0	Red. 8 0 White 6 8 to 7 0	10 0 / 7 0 to 8 0	11 0	12 0	13 0	11 0	12 0	12 0	Ordinary rice. 12 0; Coarse rice. 14 0	Ordinary rice. 14 0; Coarse rice. 15 0	Ordinary rice. 14 0; Coarse rice. 16 0	...	.	...
	44	Palámau ...	10 2	...	10 2	...	...	16 8	10 11	11 15	12 8	14 1	14 10	14 [illegible]	.		...
	45	Singhbhum ...	12 0	12 0	14 0	...	...	10 0	10 0	10 0	14 0	14 0	14 0	16 0	...		...
	46	Manbhum	11 8	11 8	11 0	..	...	...	9 0 to 9 8	9 0 to 9 8	13 0	11 0 to 12 0	11 8 to 13 8	17 0	...	...	...

U In the subdivisions the retail prices of salt per rupee are :—Nilphamari 10 seers, Kurigram 8 seers, and Gaibanda 10 seers.
V At Alipur the retail price of salt is 8 seers per rupee.
W At Begusarai and Jamui the retail price of salt is 10 seers per rupee.
X At Banka, Madhipura, and Supaul the retail price of salt is 10 seers per rupee.
Y At Kishanganj and Araria the retail price of salt is 10 seers per rupee.
Z In the subdivisions the retail prices of salt per rupee are :—Deoghur 8¾ seers, Godda 9½ seers, Jamtara 9 seers, Pakur 10¾ seers, and Rajmahal 10 seers.
a In the subdivisions the retail prices of salt per rupee are :—Bihar 10 seers, Barh 11 seers 8 chitaks, and Dinapore 10 seers.
b In the subdivisions the retail prices of salt per rupee are :—Jahanabad 10 seers, Aurangabad 10¼ seers, and Nawada 9 seers.

CALCUTTA,
The 21st March, 1893.

Station Bazars of the Districts of Bengal on the 15th March 1893—(concluded).

Indian-corn or Maize (*Zea Mays.*) Present return.	Indian-corn: Next preceding return.	Indian-corn: Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus indicus.*) Present return.	Arhar: Next preceding return.	Arhar: Corresponding return of last year.	Firewood. Present return.	Firewood: Next preceding return.	Firewood: Corresponding return of last year.	Salt. Present return.	Salt: Next preceding return.	Salt: Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt. Present return.	Wholesale Salt: Next preceding return.	Wholesale Salt: Corresponding return of last year.	Districts	Number.	
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
															BENGAL—*continued*		
...	...	...	...	...	...	90 0	90 0	90 0	9 10	9 15	9 9	3 13 4	3 13 4	3 13 4	Bogra.	23	Rajshahi Division—*concld.*
...	...	...	22 8	22 8	17 4	200 0	200 0	200 0	[U] 10 8	10 8	9 12	3 10 0	3 8 0	3 12 0	Pabna.	24	
12 0	12 0	12 0	8 0	8 0	8 0	120 0	120 0	120 0	8 0	8 0	8 0	4 10 0	4 10 0	5 0 0	Darjeeling	25	
...	...	...	9 0	8 0	8 0	120 0	200 0	200 0	[V] 10 0	10 0	10 0	4 0 0	4 0 0	4 0 0	Jalpaiguri.	26	
															BIHAR.		
19 8 to 21 0	23 2	19 6	15 11½ to 16 4	17 1	17 13	126 0 to 168 0	168 0	189 0	[W] 10 12	10 14	10 8	3 7 6	3 14 6	3 8 6	Monghyr.	27	Bhagalpur Division.
20 3	22 11	16 6	15 12	16 6	15 2	151 8	151 8	164 4	[X] 10 11	10 11	10 11	3 12 0	3 12 0	3 12 0	Bhagalpur.	28	
...	...	16 0	18 0	16 0	13 0	320 0	320 0	...	[Y] 10 0	10 0	10 0	3 10 2	3 10 2	4 0 0	Purnea.	29	
...	...	...	12 0	13 0	...	160 0	160 0	120 0	10 0	10 0	10 0	4 0 0	4 0 0	3 10 0	Malda	30	
23 0	23 8	16 0	22 8	21 8	16 0	200 0	200 0	200 0	[Z] 10 8	10 8	9 0	3 10 3	3 10 3	4 0 0	Sonthal Parganas	31	
21 0	22 0	21 8	20 0	20 0	21 0	130 0	130 0	120 0	[a] 11 8	11 8	11 8	3 8 0	3 8 0	3 8 0	Patna.	32	Patna Division.
18 0	18 8	...	19 0	20 0	18 0	120 0	120 0	160 0	[b] 10 0	10 0	10 0	3 12 0	3 13 0	3 14 0	Gaya.	33	
20 0	20 0	18 0	20 0	22 0	18 0	160 0	160 0	160 0	[c] 11 0	11 0	10 0	3 10 0	3 10 0	4 0 0	Shahabad.	34	
21 0	23 2	19 0	15 5	13 3	15 0	176 0	176 0	160 0	[d] 10 5	10 0	11 0	3 12 0	3 14 0	3 6 0	Darbhanga.	35	
21 0	21 4	20 0	17 0	15 0	15 0	160 0	160 0	160 0	[e] 11 0	11 0	11 0	3 10 0	3 10 0	3 10 0	Muzaffarpur.	36	
20 8	19 8	22 4	18 0	14 4	23 0	200 0	200 0	160 0	[f] 10 12	10 12	10 8	3 10 6	3 10 6	3 12 0	Saran.	37	
21 8	21 8	21 0	15 4	14 8	14 8	160 0	160 0	160 0	[g] 10 8	10 8	10 8	3 12 0	3 12 0	3 12 0	Champaran.	38	
															ORISSA.		
...	...	...	19 1	18 6	18 6	80 0	80 0	80 0	[h] 10 12	10 12	11 0	3 6 0	3 6 0	3 12 0	Cuttack.	39	Orissa Division.
...	...	...	15 12	14 7	15 12	80 0	80 0	80 0	11 8	11 8	11 13	3 5 0	3 5 0	3 5 0	Puri.	40	
...	...	...	10 12	10 12	...	160 0	160 0	140 0	[i] 11 0	11 0	10 8	3 10 0	3 10 0	3 14 0	Balasore.	41	
															CHOTA NAGPUR.		
17 0	20 0	18 0	15 0	15 0	16 0	240 0	210 0	240 0	[j] 9 0	9 0	9 0	3 15 0	3 14 6	4 0 0	Hazáribágh.	42	Chota Nagpur Division.
18 0	20 0	18 0	Big. 14 0 Small. 17 0	Big. 14 0 Small. 16 0	Big. 14 0 Small. 18 0	140 0	160 0	140 0 to 160 0	9 8	9 8	9 8	4 0 0	4 0 0	4 0 0	Lohardaga.	43	
24 8	...	23 0	19 2	...	...	...	...	...	8 4½	9 0	9 0	...	...	...	Palámau.	44	
...	...	20 0	14 0	14 0	16 0	100 0	100 0	160 0	9 0	9 0	9 0	4 6 0	4 6 0	4 3 0	Singhbhum.	45	
18 0	18 8	26 0	18 0	18 8	18 0	...	..	...	10 10	10 10	10 10	3 10 0	3 10 0	3 12 0	Manbhum.	46	

c In the subdivisions the retail prices of salt per rupee are:—Buxar 11 seers, Sasaram 10¾ seers, and Bhabhua 10 seers.
d In the subdivisions the retail prices of salt per rupee are:—Madhubani 11 seers and Somastipur 10 seers.
e In the subdivisions the retail prices of salt per rupee are:—Hajipur 10¼ seers and Sitamarhi 11 seers.
f In the subdivisions the retail prices of salt per rupee are:—Siwan 11 seers 5 chitaks and Gopalganj (Mirganj) 11 seers 13 chitaks.
g At Bettiah the retail price of salt is 10 seers per rupee.
h In the subdivisions the retail prices of salt per rupee are:—Jajpur 9 seers, Kendrapara 9 seers, and Banki 12 seers.
i At Bhadrak the retail price of salt is 9 seers per rupee.
j At Giridih the retail price of salt is 11 seers per rupee.

Published for general information.

H. H. RISLEY,
Secretary to the Govt. of Bengal.

***PRICES-CURRENT** (wholesale) of Food-grains, Firewood, and Salt*

Number.	MARTS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE COMMON.		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
1	Calcutta ...	3 7 0	3 7 0	3 5 5	2 5 0	2 5 0	2 4 3	5 9 0	5 9 0	4 10 0	4 0 0	4 0 0	3 2 7
2	Sirajganj ...	2 14 0	...	3 8 0	..	...	...	6 0 0	...	5 4 0	3 6 0	..	3 1 0
3	Dacca ...	...	..	3 12 0	...	...	1 9 0	3 10 0	3 10 0	3 4 0	3 6 0	3 6 0	2 10 0
4	Narayanganj	...	...	...	...	...	...	4 0 0	...	3 0 0	3 6 0	...	2 10 0
5	Chittagong	4 8 0	4 0 0	4 2 0	...	...	...	3 6 0	3 9 0	4 4 0	3 1 0	3 1 0	3 3 0
6	Patna ...	2 13 6 3 0 0	Red. 2 13 6 White. 3 0 0	2 10 6 2 15 3	2 0 0	2 1 3	1 13 0	4 3 10	4 0 0	3 13 0	2 8 0	2 8 0	2 13 8
7	Balasore ..	3 8 0	3 8 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 4 0	2 10 0	2 8 0	2 8 0
8	Puri ..	4 4 0	4 4 0	4 6 0	...	...	...	4 4 0	5 1 0	4 9 0	2 11 0	2 11 0	2 15 0
9	Cuttack ...	3 10 0	3 10 0	4 4 0	...	...	...	3 10 0	3 10 0	4 4 0	2 12 0	2 12 0	3 8 0

CALCUTTA,
The 21st March, 1893.

in the undermentioned Marts of Bengal on the 15th March 1893.

Gram, Chana, Chhola, Kadalay or Sunaga. (*Cicer Arietinum.*)			Indian-corn or Maize. (*Zea Mays.*)			Arhar or thur, Cadjan Pea. (*Cajanus indicus.*)			Firewood.			Salt.			Marts.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
2 11 6	2 11 6	2 5 7	2 0 0	2 0 0	2 4 0	3 3 0	3 3 0	2 5 3	0 7 0	0 6 0	0 5 9	4 0 0	4 0 0	3 5 0	Calcutta.
2 14 0	...	2 8 0	...	...	...	...	...	...	0 6 6	...	0 7 0	3 8 0	3 8 0	3 5 0	Sirajganj.
...	...	2 13 0	...	...	...	...	...	2 13 0	0 5 0	0 5 0	0 5 0	3 10 0	3 10 0	3 8 0	Dacca.
...	...	3 8 0	...	...	...	...	...	3 8 0	0 5 0	...	0 8 0	3 10 0	...	3 6 0	Narayanganj.
3 8 0	3 11 0	3 8 0	...	...	...	...	...	...	0 6 0	0 5 0	0 5 0	3 13 0	3 12 0	3 8 0	Chittagong.
2 3 6	2 8 0	1 13 6	1 14 6	1 13 0	1 13 6	2 0 0	2 0 0	1 14 5	0 5 0	0 5 0	0 5 4	3 8 0	3 8 0	3 8 0	Patna.
2 14 0	2 14 0	2 12 0	...	...	...	3 10 0	3 10 0	...	...	...	...	3 10 0	3 10 0	3 14 0	Balasore.
2 2 0	2 2 0	2 10 0	...	...	...	2 8 0	2 11 0	2 8 6	0 8 0	0 8 0	0 8 0	3 5 0	3 5 0	3 5 0	Puri.
2 0 0	(Kalai.) 2 0 0	2 5 0	...	...	...	2 0 0	2 4 0	2 2 0	0 8 0	0 8 0	0 8 0	3 6 0	3 6 0	3 12 0	Cuttack.

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Secretary to the Govt. of Bengal.

Meteorological Report of the Province of

Meteorological Division.	District.	Representative stations.	Air Pressure. Highest, 8 A.M., barometer reading.	Air Pressure. Lowest, 8 A.M., barometer reading.	Air Pressure. Mean, 8 A.M., reduced to 32°.	Air Pressure. Mean reduced to sea-level and constant gravity, Lat. 45°.	Air Pressure. Variation from normal mean.	Wind. Mean direction at 8 A.M.	Wind. Mean velocity in miles daily.	Temperature. Highest of month.	Temperature. Lowest of month.	Temperature. Mean daily maximum temperature.	Temperature. Mean daily minimum temperature.	Temperature. Mean daily temperature.	Temperature. Variation from normal mean.	Humidity. Mean, 8 A.M., humidity.	Humidity. Variation from normal mean.
			STATION OBSERVATIONS.														
Orissa.	Puri	Puri	30·093	29·932	30·011	29·960	—	N14°E	243	90·7	59·1	80·9	67·5	74·2	—	81	—
Orissa.	Puri	Gopalpur	30·089	29·906	30·008	[illegible]	+·004	N19°W	315	83·2	61·9	80·5	67·9†	74·2†	—0·3	85	—
Orissa.	Puri	False Point	30·100	29·937	30·020	29·983	+·007	N15°W	228	82·9	51·0	78·0	64·2	71·1	—2·5	86	—6
Orissa.	Cuttack	Cuttack	30·049	29·858	29·956	29·982	+·012	N63°E	65	88·1	57·3	81·9	65·0	73·5	—4·2	73	—7
Orissa.	Balasore	Balasore	30·089	29·882	29·997	30·001	+·023	N9°E	96	84·4	49·4	77·0	58·6	67·8	—3·6	84	—
South-West Bengal.	Midnapore	Midnapore	30·007	29·811	29·912	30·015	+·025	N12°E	221†	85·3	50·2	76·6	57·6	67·1	—3·6	73	—
South-West Bengal.	24-Parganas	Calcutta	30·131	29·927	30·034	30·002	+·020	N22°E	51	80·7	46·7	74·2	56·5	65·4	—5·5	83	—1
South-West Bengal.	24-Parganas	Saugor Island	30·116	29·915	30·025	29·994	+·022	N33°E	235	80·7	51·2	75·4	60·0	67·7	—5·5	80	—12
South-West Bengal.	Howrah	......															
South-West Bengal.	Hooghly	......															
South-West Bengal.	Nadia	Krishnagar	30·100	29·932	30·013	30·012	+·050	N20°W	95	81·4	41·3	73·7	53·3	63·5	—3·8	70	—
South-West Bengal.	Khulna	......															
South-West Bengal.	Jessore	Jessore	30·113	29·938	30·022	30·002	+·027	N21°E	65†	78·7	43·4	73·9	54·3	64·1	—5·0	85	+3
South-West Bengal.	Burdwan	Burdwan	30·056	29·883	29·968	30·020	+·033	N18°E	29	81·5	46·1	73·7	56·2	65·0	—5·8	73	+1
South-West Bengal.	Burdwan	Raniganj	29·849	29·653	29·772	30·037	+·025	N1°W	54	81·7	46·2	72·2	54·5	63·4	—5·8	77	—
South-West Bengal.	Bankura	Bankura	29·808	29·626	29·727	29·991	+·021	N30°W	55	83·1	48·3	73·9	56·0	64·9	—4·5	77	—
South-West Bengal.	Birbhum	......															
South-West Bengal.	Murshidabad	Berhampore	30·076	29·906	29·990	30·000	+·024	N67°W	49	78·6	43·1	72·2	54·2	63·2	—6·7	91	+16
North Bengal.	Pabna	Sirajganj	30·053	29·932	30·000	29·998	+·028	N66°W	27	77·7	40·0	71·6	50·9	61·2	—4·1	90	—
North Bengal.	Bogra	Bogra	30·044	29·920	29·977	29·995	+·048	N39°W	55	79·3	41·2	72·8	50·9	61·9	—3·3	82	—
North Bengal.	Rajshahi	Rampur Boalia	30·058	29·914	29·983	30·007	+·048	N58°W	76	78·6	40·7	71·8	51·8	61·8	—3·1	82	—
North Bengal.	Malda	Malda	30·075	29·890	29·982	30·019	—	N84°W	88	78·6	38·3	72·7	50·3	61·5	—	72	—
North Bengal.	Dinajpur	Dinajpur	30·016	29·842	29·930	30·009	+·021	N85°W	67	78·6	41·0	71·9	50·8	61·4	—2·5	84	—
North Bengal.	Rangpur	Rangpur	30·010	29·841	29·925	30·010	+·029	N87°W	46	77·7	40·6	71·5	49·5	60·5	—2·5	89	—
North Bengal.	Jalpaiguri	Jalpaiguri	29·862	29·662	29·767	30·023	+·042	N37°E	46	76·4	42·1	70·2	49·7	60·0	—2·8	89	—
North Bengal.	Kuch Bihar	......															
North Bengal.	Darjeeling	Darjeeling	23·123	22·808	22·932	—	—·001	N84°E	163	47·0	26·6	40·7†	31·1	35·9†	—3·9	88	+17
North Bengal.	Sikkim	Gnatong	19·183	18·956	19·091	—	—	N53°W	155	41·3	0·1	28·7	8·0	18·4	—	68	—
East Bengal.	Chittagong	Chittagong	30·057	29·809	29·958	29·997	+·011	N27°E	47†	83·7	46·6	79·0	57·0	68·1	—1·8	87	0
East Bengal.	Chittagong Hill Tracts	Demagri	Observations not received.														
East Bengal.	Backergunge	Barisal	30·194	29·953	30·040	29·996	+·011	N18°E	65	80·3	46·1	76·0	56·0	66·0	—2·0	88	—
East Bengal.	Noakhali	Noakhali	30·092	29·948	30·015	30·007	+·027	N11°E	107	80·6	42·0	76·0	54·0	65·1	—2·5	84	—
East Bengal.	Faridpur	Faridpur	30·107	29·947	30·023	30·019	+·033	N3°E	56	73·5	45·0	71·5*	53·7	63·4*	—3·2	86	—
East Bengal.	Dacca	Dacca	30·109	29·953	30·026	29·997	+·021	N18°E	82	80·6	46·2	74·0	54·9	64·5	—5·6	84	+4
East Bengal.	Tippera	Comilla	30·089	29·942	30·014	29·998	+·027	N16°E	43	81·4	40·9	76·0	53·5	64·7	—3·4	84	—
East Bengal.	Mymensingh	Mymensingh	30·071	29·912	29·986	30·004	+·012	N22°W	69	77·8	41·7	71·9	52·3	62·1	—3·3	87	—
North Bihar.	Purnea	Purnea	30·015	29·819	29·925	30·013	+·033	S74°W	48	77·2	41·3	71·0	49·3	60·2	—4·7	90	+20
North Bihar.	Bhagalpur	Bhagalpur	29·986	29·792	29·888	30·010	+·043	S53°W	27†	78·3	42·5	71·0	51·2	61·1	—3·5	77	
North Bihar.	Darbhanga	Darbhanga	30·016	29·782	29·890	30·020	+·034	S74°W	101	75·0	44·4	69·4	50·4	59·9	—5·0	89	+18
North Bihar.	Muzaffarpur	Muzaffarpur	29·997	29·780	29·878	30·022	—	N68°W	110	74·2	42·2	68·7	50·2	59·4	—	93	—
North Bihar.	Champaran	Motihari	29·913	29·688	29·805	30·003	+·035	S72°W	144	75·2	39·0	69·8	48·0	59·0	—2·8	89	—
North Bihar.	Saran	Chapra	29·984	29·768	29·872	30·019	+·049	S45°W	115	76·4	44·2	69·9	50·4	60·1	—3·8	84	—
South Bihar.	Shahabad	Dehri	29·775	29·583	29·689	30·016	+·023	S24°W	75	78·3	45·0	72·0	52·1	62·1	—3·3	74	—
South Bihar.	Shahabad	Buxar	29·912	29·704	29·814	30·024	+·026	S76°W	111	77·6‡	42·4	70·1‡	48·7	60·8‡	—3·9	75	—
South Bihar.	Shahabad	Arrah	29·936	29·769	29·859	30·011	+·018	S84°W	70	76·1	42·0	70·7	49·8	60·3	—4·0	84	—
South Bihar.	Gaya	Gaya	29·762	29·553	29·672	30·025	+·026	S10°E	131	81·2	43·8	72·5	51·2	61·9	—6·9	73	+19
South Bihar.	Patna	Bankipore	29·980	29·788	29·882	30·028	+·033	S63°W	117	84·0	40·7	69·9	50·3	60·1	—5·2	77	+9
South Bihar.	Monghyr	......															
South Bihar.	Sonthal Parganas	Naya Dumka	29·647	29·449	29·550	30·030	+·012	N38°W	58	79·6	44·0	71·3	52·3	61·8	—5·0	79	—
Chota Nagpur.	Hazaribagh	Hazaribagh	27·876	28·048	27·974	30·023	+·005	S84°W	268	80·7	43·1	69·3	49·3	59·3	—6·6	72	+24
Chota Nagpur.	Lohardaga	Ranchi	27·920	27·754	27·842	30·012	+·004	N45°W	165	78·0	42·4	68·6	49·9	59·3	—6·0	80	—
Chota Nagpur.	Palamau	......															
Chota Nagpur.	Singhbhum	Chaibassa	29·346	29·149	29·239	30·005	+·029	N14°E	34	83·9	47·2	75·9	56·1	66·0	—3·0	83	—
Chota Nagpur.	Manbhum	......															
Assam	Sibsagar	Sibsagar	29·823	29·650	29·721	30·024	+·005	N63°E	32	77·9	43·9	69·2	53·1	66·1	—1·7	97	+2
Assam	Goalpara	Dhubri	30·028	29·846	29·932	30·009	+·019	S84°E	91	76·8	47·1	71·0	53·2	62·1	—3·6	87	+7
Assam	Cachar	Silchar	30·028	29·905	29·957	30·018	+·021	0	2	80·2	43·4	75·4	55·7	65·4	—2·5	90	+5

* Mean of 25 days. | † Mean of 27 days | ‡ Mean of 24 days.

Bengal for the month of February 1893.

Cloud.			District Observations.										
			Rainfall.										
			Of month.					Since 16th October 1892.					
Mean cloud amount, 8 A. M.	Variation from normal mean, 8 A. M.	Rainfall.	Mean of district.	Normal mean.	Variation from mean.	Number of rainy days.	Normal mean number of rainy days.	Mean of district.	Normal mean.	Variation.	Mean number of rainy days.	Normal mean number of rainy days.	District.
3·5 3·0 4·9	— — +1·5	3·09 1·58 1·29	3·10	0·83	+2·27	3·50	1·39	12·39	7·89	+4·50	14·75	9·20	Puri.
5·1	+3·2	2·27	1·86	0·81	+1·05	4·00	1·28	9·69	5·40	+4·29	16·20	7·75	Cuttack.
3·0	—	4·11	3·42	1·06	+2·36	6·17	1·68	11·01	4·39	+6·62	17·17	6·79	Balasore.
4·3	—	4·35	4·29	1·08	+3·21	6·00	1·60	12·65	4·52	+8·13	13·75	5·54	Midnapore.
4·5 4·7	+2·3 +1·6	4·30 2·29	5·26	1·29	+3·97	5·71	2·03	13·12	4·71	+8·41	14·42	6·79	24-Parganas.
			5·09	1·27	+3·82	6·50	2·14	8·92	3·93	+4·99	14·00	6·28	Howrah.
			5·78	1·25	+4·53	6·33	1·90	13·53	3·72	+9·81	14·00	5·81	Hooghly.
4·4	—	6·51	5·37	1·04	+4·33	7·20	1·56	9·97	3·43	+6·54	12·70	5·10	Nadia.
			5·38	1·12	+4·26	6·67	1·80	12·46	4·46	+8·00	16·67	6·65	Khulna.
5·1	+2·8	4·12	4·44	1·10	+3·34	7·20	1·71	13·95	3·91	+10·04	15·00	5·88	Jessore.
5·6 2·2	+3·7 —	5·51 4·49	4·80	1·07	+3·73	8·00	1·52	9·82	3·46	+6·36	15·00	4·80	Burdwan.
4·5	—	4·36	4·82	0·73	+4·09	6·75	1·60	10·17	3·19	+6·98	15·25	5·61	Bankura.
			4·90	0·90	+4·00	6·67	1·38	8·94	2·98	+5·96	12·66	4·88	Birbhum.
4·2	+2·4	4·06	4·02	0·79	+3·23	5·50	1·44	6·52	2·96	+3·56	10·34	4·50	Murshidabad.
3·7	—	3·95	4·45	1·05	+3·40	8·00	1·49	6·17	3·69	+2·48	13·50	5·67	Pabna.
3·9	—	3·03	2·85	0·78	+2·07	5·00	1·29	4·11	3·22	+0·89	9·00	4·31	Bogra.
3·8	—	4·09	3·96	0·70	+3·26	6·33	1·20	4·96	2·72	+2·24	9·67	4·25	Rajshahi.
3·1	—	3·10	2·60	0·59	+2·01	6·50	1·39	3·65	2·53	+1·12	9·50	3·73	Malda.
4·3	—	1·13	1·68	0·18	+1·20	3·80	1·14	2·55	2·19	+0·34	6·60	3·43	Dinajpur.
1·5	—	1·12	0·93	0·43	+0·50	2·50	1·11	2·68	2·78	—0·10	7·00	3·58	Rangpur.
4·9	—	1·01	1·08	0·28	+0·80	3·00	1·05	2·76	3·77	—1·01	9·60	3·96	Jalpaiguri.
			0·77	0·42	+0·35	2·50	1·16	2·32	3·48	—1·16	7·25	4·32	Kuch Bihar.
5·9	+1·3	0·73	1·05	0·67	+0·38	2·75	2·01	6·45	4·49	+1·96	11·50	6·04	Darjeeling.
3·5		2·63											Sikkim.
3·8	+1·8	1·07	0·58	0·73	—0·15	1·50	1·31	13·44	6·59	+6·85	12·50	7·56	Chittagong.
			1·49	0·89	+0·60	5·00	2·00	10·10	6·07	+4·03	17·00	8·55	Chittagong Hill Tracts.
4·7	—	4·26	3·52	1·05	+2·47	5·50	1·54	11·72	5·46	+6·26	15·50	6·94	Backergunge.
2·2	—	1·33	2·30	1·05	+1·25	6·00	1·65	17·97	6·81	+11·16	19·50	7·58	Noakhali.
4·0	—	5·63	4·69	1·20	+3·49	7·00	1·82	12·13	3·83	+8·30	13·67	6·16	Faridpur.
3·8	+2·0	3·38	3·78	1·20	+2·58	6·50	1·96	12·88	4·33	+8·55	14·75	6·84	Dacca.
3·3	—	2·40	2·57	1·02	+1·55	7·00	2·01	11·47	4·39	+7·09	17·00	7·37	Tippera.
3·8	—	3·30	2·84	0·92	+1·92	4·40	1·30	6·25	3·74	+2·51	9·20	5·34	Mymensingh.
3·1	+2·0	1·31	1·41	0·51	+0·90	3·67	1·11	2·23	2·56	—0·33	6·34	3·51	Purnea.
5·0	—	3·24	2·14	0·48	+1·66	5·25	1·12	3·49	2·38	+1·11	8·00	3·98	Bhagalpur.
3·5	+1·9	0·73	1·21	0·40	+0·81	3·33	0·98	2·72	2·00	+0·72	6·00	3·42	Darbhanga.
3·9	—	1·52	1·48	0·39	+1·09	4·33	1·18	2·60	·13	+0·56	6·33	4·08	Muzaffarpur.
4·4	—	1·90	1·57	0·38	+1·19	4·50	1·11	2·31	1·57	+0·74	6·00	3·49	Champaran.
4·5	—	1·40	1·13	0·15	+0·98	4·33	1·01	2·62	2·22	+0·40	7·65	4·09	Saran.
3·4 4·8 6·7	— — —	1·80 1·56 2·50	1·82	0·40	+1·42	4·75	1·02	2·95	2·67	+0·28	9·15	4·65	Shahabad.
4·5 5·5	+2·2 +3·1	2·70 1·63	2·87	0·42	—2·45	6·75	1·07	3·94	2·24	+1·70	1[illegible]·[illegible]6	4·16	Gaya.
			2·14	0·41	+1·73	4·75	1·11	2·93	2·43	+0·50	7·25	4·27	Patna.
3·5	—	2·98	3·45	0·54	+2·91	7·00	1·31	5·20	2·45	+2·74	9·65	4·15	Monghyr.
5·5	+3·7	3·75	3·13	0·47	+2·66	7·17	1·12	5·33	2·30	+3·03	12·01	3·93	Sonthal Parganas.
4·5	—	5·49	3·34	0·59	+2·77	6·80	1·28	8·27	2·46	+5·81	11·55	5·[illegible]3	Hazaribagh.
5·3	—	6·01	4·71	0·80	+3·91	7·50	1·39	11·85	3·25	+8·60	15·00	6·27	Lohardaga.
			1·84	0·4[illegible]	+1·35	5·00	1·26	3·48	2·78	+0·70	1[illegible]·00	5·19	Palamau.
			6·01	0·[illegible]4	+5·17	8·00	1·35	12·54	3·44	+9·10	15·00	6·55	Singhbhum.
			4·52	0·94	+3·58	8·50	1·43	8·57	2·82	+6·05	16·50	4·97	Manbhum.
5·8	0	1·67											Sibsagar.
4·6	+3·1	0·52											Goalpara.
4·4	+1·1	2·26											Cachar.

Table of Rainfall recorded at stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Orissa ..	Puri ...	Puri ...	...	...	...	...	...	...	...	0·29	...	...	...	...	...	...	2·29	...	...	...	...	...
		Khurda ...	...	...	...	...	...	...	...	1·00	...	...	...	...	...	...	0·03	...	...	...	...	...
		Banpur ...	...	...	...	...	...	...	...	0·13	...	...	...	...	...	...	0·60	...	...	...	...	...
		False Point ...	...	...	...	...	...	...	...	0·13	...	...	...	...	...	...	0·[illegible]4	...	...	...	...	...
		Gop ..	...	...	...	...	...	...	...	0·70	...	...	...	...	...	...	0·60	...	...	...	...	...
		Satpara ..	...	...	...	...	...	...	...	0·60	...	...	...	...	...	...	0·60	...	...	...	...	...
		Pipli ...	...	...	...	...	...	...	...	0 57	...	...	...	...	...	...	0·23	...	...	...	...	...
	Cuttack ..	Jagatsingpur	...	...	...	...	...	...	...	0·30	...	...	...	...	...	...	0·73	...	0·12	...	...	...
		Banki ..	...	...	...	...	...	...	...	0·28	...	...	...	...	...	...	...	...	...	...	1 20	0·36
		Cuttack ..	...	...	...	...	...	...	...	0·41	...	...	...	...	...	...	...	...	...	...	0·52	...
		Kendrapara .	...	...	...	...	...	...	...	0·14	...	...	...	...	...	...	...	...	...	...	0·51	...
		Jajpur ...	...	...	...	...	...	...	...	0·13	...	...	...	...	...	...	...	...	0·50	...	...	...
		Dharmsalla ...	...	...	...	...	...	...	...	0·50	...	...	...	...	...	...	0·50	...	...	...	0·32	...
		Saipur ...	...	...	...	...	...	...	...	0 20	...	...	...	...	...	...	0·28	...	...	...	1·20	0·30
		Pal Lahara ...	...	...	...	...	...	...	...	...	...	...	...	...	0·03	...	...	...	1·00	0·10	0·15	0 07
	Balasore ..	Akhyapada ...	...	...	...	...	...	...	...	0 21	...	...	...	...	...	...	...	...	0·09	...	...	...
		Chandbali ..	...	...	...	...	...	...	...	0·18	...	...	...	...	...	...	0·45	...	0·08	...	...	...
		Bhadrak ..	...	...	...	...	...	...	...	0·05	...	...	...	...	...	0·20	...	...	2·75	...	...	0·70
		Soro ...	...	...	...	...	...	...	...	0·80	...	...	...	...	...	...	...	...	...	...	...	0·30
		Balasore ...	...	...	...	...	...	...	...	1·45	...	...	...	...	0·02	0·41	...	...	0·10	...	0·03	0·66
		Jellasore ..	...	...	...	...	...	...	...	0 74	...	...	...	...	0·13	0·20	...	...	0·50	0·18	0·90	...
		Baripodah ...	...	...	...	...	...	...	...	...	...	...	...	...	0·09	0·40	0·04	...	1·50	0·05	0·28	...
South-West Bengal.	Midnapore ..	Contai ...	...	...	...	...	...	...	...	0·73	...	...	...	...	...	0·25	0·03	...	...	0·19	0·01	1·24
		Tamluk ..	...	...	...	...	...	...	...	0·40	...	...	...	...	...	0·32	...	...	...	0·30	...	1·46
		Midnapore ..	...	...	...	...	...	...	...	0·22	...	...	...	...	...	1·35	...	...	...	...	...	0·65
		Ghatal ..	...	...	...	...	...	...	...	0·28	...	...	...	...	0·01	1·86	...	...	...	0·02	0·14	1 30
		Kukrahaty ...	...	...	...	...	...	...	...	0·85	...	...	...	...	...	0·14	...	...	...	0·05	...	1·42
		Garhbeta ...	...	...	...	...	...	...	...	0 22	...	...	...	...	...	1·50	...	...	...	...	...	0·38
	24-Parganas...	Saugor Island	...	...	...	...	...	...	...	0·07	...	...	...	...	...	0·16	...	...	...	0·48	...	0·11
		Diamond Harbour.	...	...	...	...	...	...	...	1·33	...	...	...	...	...	0 15	...	...	...	...	...	2·74
		Canning Town	...	...	...	...	...	...	...	0·70	...	...	...	...	...	0·76	...	...	...	...	...	[illegible]
		Alipore (Observatory).	...	...	...	...	...	...	...	0·47	...	...	...	...	...	1·20	...	...	...	0·11	...	1·41
		Barrackpore...	...	...	...	...	...	...	...	1·00	...	...	...	...	...	3·45	...	...	...	0·16	...	1·02
		Dum-Dum ...	...	...	...	...	...	...	...	1·24	...	...	...	...	...	1·69	...	...	...	...	...	1·67
		Barasat ...	...	...	...	...	...	...	...	0·93	...	...	...	...	...	2·36	...	...	...	...	...	1·21
		Basirhat ..	...	...	...	...	...	...	...	0·43	...	...	...	...	...	2·21	...	...	...	1·05	...	2,50
	Howrah ..	Howrah ...	...	...	...	...	...	...	...	0·48	...	...	...	...	...	1·04	0·19	...	...	...	...	1·80
		Mohesreka ...	...	...	...	...	...	...	...	0·29	...	...	...	...	...	2 10	...	...	...	0·31	...	1·60
		Ulubaria ...	...	...	...	...	...	...	...	0·28	...	...	...	...	...	1.12	...	...	...	0·25	...	0·90
	Hooghly ...	Serampore ...	...	...	...	...	...	...	...	0·86	...	...	...	...	...	3·45	...	...	...	0·08	...	1·00
		Hooghly ..	...	...	...	...	...	...	...	1·05	...	...	...	...	...	1·15	...	...	...	1·20	...	1·04
		Jahanabad ...	...	...	...	...	...	...	...	0·32	...	...	...	...	...	1·00	...	...	...	0·06	...	1·11
	Nadia ..	Ranaghat ..	...	...	...	...	...	...	...	0·32	...	...	...	...	...	0·47	...	...	...	1·68	...	1·25
		Krishnagar ...	...	...	...	...	...	...	0·11	0 19	...	...	...	...	0·06	0·34	...	...	...	1·56	...	0·85
		Chuadanga ..	...	...	...	...	...	...	0·81	0·62	...	...	...	...	...	...	...	...	...	0·33	...	0·41
		Meherpur ...	...	...	...	...	...	...	1·60	1·15	...	...	...	...	0·18	0·50	0·04	...	...	0·10	...	1·23
		Kushtia ..	...	...	...	...	...	...	0·25	1 20	...	...	...	...	0·02	0·67	...	...	...	...	...	0·87
	Khulna ..	Satkhira ..	...	...	...	...	...	...	...	0·44	...	...	...	...	...	3·38	...	...	...	0·23	...	1·31
		Bagerhat ...	...	...	...	...	...	...	...	0·60	...	...	...	...	...	1 80	...	...	...	0·25	...	1·08
		Khulna ..	...	...	...	...	...	...	...	0·73	...	...	...	...	...	2·01	...	...	...	1·44	...	1·11
		Nakipur ...	...	...	...	...	...	...	...	0·36	...	...	...	...	...	0·55	...	...	...	...	...	1·65
		Rampal ...	...	...	...	...	...	...	...	0 50	0·20	...	...	...	...	1·20	...	...	...	...	...	1·67
	Jessore ...	Narail ...	...	...	...	...	...	...	...	0·61	...	...	...	...	...	0·42	...	...	...	0·23	...	0·70
		Jessore ...	...	...	...	...	...	...	...	0 72	...	...	...	...	...	0·33	...	...	...	0·67	...	0·98
		Jhenidah ...	...	...	...	...	...	...	0·40	0·62	...	...	...	...	...	0·22	...	...	...	0·65	...	0·53
		Magura .	...	...	...	...	...	...	...	1·26	...	...	...	...	...	0·10	...	...	...	0·70	...	0·48
		Bangaon ...	...	...	...	...	...	...	...	1·40	...	...	...	...	...	0·80	...	...	...	1·00	...	0·32
	Burdwan ..	Kalna ..	...	...	...	...	...	...	...	0·30	...	...	...	...	0·08	0 70	...	...	...	0·62	...	0·71
		Burdwan ...	...	...	...	...	...	...	...	[illegible]	...	...	...	...	0·30	0·97	...	...	...	0·50	...	1·09
		Katwa ...	...	...	...	...	...	...	0·03	0·47	...	...	...	...	0·14	0·68	0 02	...	...	0·33	...	0·71
		Kalnganj ..	...	...	...	...	...	...	0·05	0·18	...	...	...	...	0·31	0 57	0·01	...	...	0·36	...	0·50
		Mankur ...	...	...	...	...	...	...	...	0·12	...	...	...	...	...	0·79	...	...	...	0·35	...	0·59
	Bankura ..	Bankura ...	...	...	...	...	...	...	...	0·08	...	...	...	...	...	1·00	0 01	...	...	0·21	...	0·42
		Vishnupur ...	...	...	...	...	...	...	...	0·21	...	...	...	...	0·32	0·84	...	...	...	0·32	...	0·53
		Maliara ..	...	...	...	...	...	...	...	...	...	...	...	...	0·55	0·33	...	...	...	0·58	...	0·47
		Khatra ...	...	...	...	...	...	...	...	0·31	...	...	...	...	...	1·34	...	...	...	0·06	...	0·90
		Indas ...	...	...	...	...	...	...	...	0·04	...	...	...	...	0·38	1·07	...	...	...	...	...	0·72
		Kotalpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·28	...	...	...	...	...	0·55
		Aada ..	...	...	...	...	...	...	...	...	...	...	...	...	0·50	0 30	...	...	...	0·40	...	0·39
		Gangajalghati	...	...	...	...	...	...	...	...	...	...	...	...	...	0·80	...	...	...	...	...	0·62
		Raipur ...	...	...	...	...	...	...	...	0·17	...	...	...	...	0·36	1·87	...	...	...	...	...	1·35
		Sonamukhi ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·97	...	...	...	0·18	...	0·82
	Birbhum ..	Suri ..	...	...	...	...	...	...	0·84	0·91	...	...	...	...	0·78	0·14	...	...	0·02	0·53	...	0·85
		Hetampur ..	...	...	...	...	...	...	0·53	0·51	...	...	...	...	0 11	1·13	...	...	0·01	0·09	...	0·63
		Rampur Hat	...	...	...	...	...	...	0·15	0·33	...	...	...	...	0·06	0·51	0·02	...	...	...	...	0·54
		Bolpur ...	...	...	...	...	...	...	0·10	0·02	...	...	...	...	0·61	0·60	...	...	...	0·31	...	0·75
		Murarai ..	...	...	...	...	...	...	0·07	0·10	...	...	...	...	...	0·94	...	...	...	0·35	...	0·52
	Murshidabad	Kandi ...	...	...	...	...	...	...	0·56	0·90	...	...	...	...	...	1·25	...	...	...	...	...	1·05
		Berhampore...	...	...	...	...	...	...	0·21	0·45	...	...	...	...	0·11	0·65	...	...	...	...	...	0·78
		Lalbagh ...	...	...	...	...	...	...	0·16	0·34	...	...	...	...	...	0 52	...	...	...	...	...	0·57
		Azimganj ...	...	...	...	...	...	...	0·10	0·24	...	...	...	...	...	0·83	...	...	...	...	...	0·40
		Jangipur ...	...	...	...	...	...	...	0·08	0·06	...	...	...	...	0·45	0·66	...	...	0·30	0·12	...	0·38
		Lalgola .	...	...	...	...	...	...	...	...	...	...	...	...	...	0·75	...	...	0·20	...	...	0·45
		Akhriganj ...	...	...	...	...	...	...	...	0·22	...	...	...	...	...	0·70	...	...	0·11	0·07	...	0·45
		Patkabari ...	...	...	...	...	...	...	0·49	0·20	...	...	...	...	0·10	0·70	...	...	...	...	...	0·70
North Bengal.	Pabna ...	Pabna ...	...	...	...	...	...	...	0·42	1·56	...	...	...	...	...	0·71	...	...	...	0·10	...	0·66
		Sirajganj ..	...	...	...	...	...	...	0·33	0·30	...	...	...	...	...	0·65	...	...	0·12	0·22	...	0·20
	Bogra ...	Sherpur ...	...	...	...	...	...	...	0·10	0·14	...	...	...	...	...	0·70	...	...	...	0·39	...	0·11
		Nowkhilla ...	...	...	...	...	...	...	...	0 09	...	...	...	...	...	0·78	...	...	...	0·15	...	0·10
		Bogra ..	...	...	...	...	...	...	0·03	0·[illegible]4	...	...	...	...	0·02	0·71	...	...	0·32	0 20	...	0·03
		Panchbibi ...	...	...	...	...	...	...	...	0·16	...	...	...	...	...	0·35	...	...	...	0·10	...	...
	Rajshahi ..	Boalia ...	...	...	...	...	...	...	0·06	0·32	...	...	...	...	...	0·47	...	...	0·36	0·09	...	0·41
		Nator ...	...	...	...	...	...	...	0·22	0·33	...	...	...	...	...	0·52	...	...	0·80	0·44	...	0·26
		Naogaon ...	...	...	...	...	...	...	0·05	0·05	...	...	...	...	...	0·80	...	...	0·15	0·42	...	...
		Lalpur ...	...	...	...	...	...	...	0·35	0·46	...	...	...	...	...	0·57	...	...	0·40	0·08	...	0·54
		Mande ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·17	...	...	0·25	...	...	0·80

in Bengal in February 1893.

21	22	23	24	25	26	27	28	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 16th October 1892 to 28th February 1893.	Average rainfall from 16th October to 28th February.	Station.	District.	Meteorological division.
0·02	...	...	0·01	...	0·48	...	...	3	1·20	3·09	0·86	2·29	15·12	8·63	Puri ...	Puri ...	ORISSA.
0·23	0·02	0·02	...	0·05	0·29	...	...	3	1·32	1·64	0·68	1·00	7·36	6·03	Khurda.		
0·82	3·20	...	...	...	1·60	...	..	5	1·60	6·35	0·89	3·20	13·71	7·83	Banpur.		
0·25	...	...	0·04	...	0·87	...	...	3	1·45	1·33	0·81	0·87	13·13	8·99	False Point.		
0·29	...	...	0·50	...	0·70	...	...	5	?	2·79	?	0·70	11·58	?	*Gop.*		
0·18	...	...	0·03	...	1·25	...	...	4	?	2·66	?	1·25	11·21	?	*Satpara.*		
0·07	0·06	...	0·72	...	0·30	...	...	4	?	1·05	?	0·72	8·56	?	*Pipli*		
...	...	...	...	...	...	...	...	3	0·84	1·15	0·62	0·73	12·15	5·31	Jagatsingpur.	Cuttack.	
...	0·33	0·02	...	0·27	0·41	...	...	6	1·43	2·87	0·65	1·20	8·02	5·65	Banki.		
...	...	...	...	...	1·01	...	...	3	1·30	1·94	0·71	1·01	12·19	5·28	Cuttack.		
...	...	...	0·03	0·02	0·54	...	...	3	1·26	1·24	0·73	0·54	9·18	5·59	Kendrapara.		
...	...	0·05	0·58	0·42	0·40	...	...	5	1·58	2·08	1·25	0·58	6·92	5·09	Jajpur.		
...	...	...	1·45	1·17	...	...	...	5	?	3·94	?	1·45	9·12	?	*Dharmsala.*		
...	...	...	...	...	0·90	...	...	5	?	2·88	?	1·20	9·02	?	*Salipur.*		
0·05	0·07	1·70	1·70	...	...	...	...	5	?	4·87	?	1·70	8·42	?	Pal Lahara.		
...	...	0·05	0·37	...	0·69	...	...	3	?	1·41	?	0·69	5·83	?	Akhyapada ...	Balasore.	
...	0·10	...	0·56	...	0·34	...	...	5	1·19	1·71	1·01	0·56	7·46	5·73	Chandbali ...		
...	...	0·10	0·20	...	0·70	...	...	6	1·89	4·70	1·24	2·73	12·18	4·86	Bhadrak.		
...	0·15	0·10	0·65	...	...	...	...	5	1·69	2·00	0·84	0·80	9·78	3·75	Soro.		
...	...	0·79	0·09	...	0·51	...	...	6	2·20	4·06	1·36	1·43	14·90	5·56	Balasore.		
...	...	0·64	...	0·30	...	...	...	8	1·14	3·34	1·02	0·90	8·22	3·17	Jellasore.		
...	1·42	0·11	0·04	0·51	...	...	...	6	1·64	4·44	0·80	1·50	12·61	3·21	Baripada.		
0·01	...	0·18	0·64	...	0·28	...	...	7	1·65	3·56	1·33	1·24	14·24	7·24	Contai ...	Midnapore ...	SOUTH-WEST BENGAL.
...	...	0·84	0·09	...	0·40	...	...	6	1·58	3·81	1·22	1·46	9·61	4·48	Tamluk.		
..	...	1·85	0·21	...	0·22	...	...	6	1·40	4·50	0·89	1·85	12·68	3·98	Midnapore.		
...	...	1·53	0·02	0·01	0·02	...	...	5	1·77	5·30	0·89	1·86	14·07	2·31	Ghatal.		
...	...	1·12	0·74	...	0·52	...	...	6	?	4·84	?	1·42	9·75	?	*Kukrahaty.*		
...	...	1·75	0·12	...	0·35	...	...	6	?	4·32	?	1·75	8·33	?	*Garhbeta.*		
...	...	0·31	0·18	...	0·38	...	...	7	1·70	2·29	1·13	0·67	17·83	7·04	Saugor Island.	24-Parganas.	
...	...	0·50	0·88	...	0·52	...	...	6	2·63	6·12	1·65	2·74	13·42	5·16	Diamond Harbour.		
...	...	0·56	1·12	...	0·33	...	...	6	?	4·63	?	1·16	14·55	?	*Canning Town.*		
...	...	0·60	0·36	...	0·15	...	...	7	2·05	4·30	1·47	1·41	9·85	4·83	Alipore (Observatory.)		
...	...	0·76	0·06	0·03	..	...	...	5	1·95	6·48	1·27	3·45	14·98	3·83	Barrackpore.		
...	...	0·84	...	...	0·20	...	...	5	1·95	5·64	1·13	1·69	10·25	3·92	Dum-Dum.		
...	...	0·74	...	...	0·18	...	...	5	2·11	5·42	1·29	2·30	12·22	4·37	Barasat.		
...	...	0·35	...	...	...	...	...	5	1·84	6·54	1·04	2·50	13·21	3·85	Basirhat.		
0·08	...	0·71	0·15	...	0·16	...	...	7	1·90	4·61	1·09	1·80	7·99	4·19	Howrah ..	Howrah.	
...	...	1·05	0·04	...	0·18	...	...	6	2·37	5·57	1·44	2·10	9·83	3·61	Mohesreka		
...	...	0·80	0·14	...	0·18	...	...	7	?	3·67	?	1·12	7·83	?	*Ulubaria.*		
...	...	0·76	0·11	...	0·14	...	...	6	2·00	6·40	1·24	3·45	15·86	3·82	Serampore ...	Hooghly.	
0·18	..	1·00	...	...	0·22	...	...	7	1·80	5·84	1·25	1·20	14·21	3·53	Hooghly.		
...	...	1·79	0·37	...	0·37	...	...	6	1·89	5·11	1·27	1·79	10·53	3·80	Jahanabad.		
...	...	0·83	0·81	...	0·15	...	...	7	1·60	5·51	0·93	1·68	11·76	3·42	Rangahat ...	Nadia.	
...	...	0·86	2·40	...	0·14	...	...	8	1·55	6·51	1·04	2·40	12·79	2·77	Krishnagar.		
..	...	0·82	0·49	...	0·07	...	...	6	1·45	3·55	1·12	0·82	?	3·71	Chuadanga.		
...	...	1·37	0·33	..	0·13	...	...	9	1·55	6·63	1·03	1·60	9·02	3·12	Meherpur.		
...	..	0·90	0·64	0·03	0·08	...	...	6	1·65	4·66	1·11	1·20	8·13	4·15	Kushtia.		
...	...	0·36	0·03	...	0·12	...	...	6	1·84	5·87	0·93	3·38	11·11	3·78	Satkhira ...	Khulna.	
...	...	...	0·38	...	0·10	...	...	6	1·87	4·30	1·31	1·80	12·95	5·26	Bagerhat.		
0·15	...	0·23	0·19	...	0·10	...	...	8	1·68	5·96	1·12	2·01	13·30	4·36	Khulna.		
...	...	0·08	0·61	...	...	...	...	4	?	3·25	?	1·65	8·77	?	*Nakipur.*		
...	...	...	0·30	...	0·10	...	...	6	?	3·97	?	1·67	10·72	?	*Rampal.*		
...	...	0·34	0·55	...	0·22	...	...	7	2·00	3·07	1·16	0·70	12·55	4·28	Narail ...	Jessore.	
...	...	0·48	0·72	...	0·22	...	...	7	1·75	4·12	1·09	0·98	18·36	4·40	Jessore.		
...	...	1·33	1·60	...	0·13	...	...	8	1·72	5·48	1·10	1·60	14·29	3·81	Jhenidah		
...	...	0·44	1·55	...	0·11	...	...	7	1·72	4·64	1·05	1·55	11·94	3·14	Magura.		
...	...	0·63	0·58	...	0·15	...	...	7	1·35	4·88	1·10	1·40	12·65	3·90	Bangaon		
...	...	1·55	0·79	...	0·12	...	...	7	1·53	4·87	1·08	1·55	12·64	3·40	Kalna ...	Burdwan.	
...	...	0·88	1·41	0·01	0·21	...	...	8	1·30	5·51	0·86	1·41	11·38	3·55	Burdwan.		
...	...	1·32	0·38	0·01	0·24	...	...	8	1·68	4·33	1·16	1·32	8·60	3·78	Katwa.		
...	0·07	1·74	0·38	0·14	0·18	...	...	9	1·35	4·49	1·19	1·74	6·63	3·05	Raniganj.		
...	...	1·78	0·95	0·11	0·19	...	...	8	?	4·88	?	1·78	7·00	?	*Mankur.*		
...	0·01	1·50	0·90	0·02	0·21	...	...	6	1·75	4·36	0·87	1·50	10·03	3·44	Bankura ...	Bankura.	
...	...	1·56	0·70	...	0·24	...	...	8	1·20	4·72	0·70	1·56	11·23	2·83	Vishnupur.		
...	...	2·05	0·51	0·08	0·22	...	...	7	1·89	4·79	0·58	2·05	6·61	2·83	Malhara.		
...	0·84	1·80	0·17	...	...	...	...	6	1·55	5·42	0·58	1·80	12·77	3·47	Khatra.		
...	...	1·32	0·95	...	0·12	...	...	6	?	4·60	?	1·32	10·51	?	*Indus.*		
...	...	2·21	...	...	1·50	...	...	4	?	5·54	?	2·21	9·66	?	*Kotalpur.*		
0·43	0·92	0·75	0·84	0·07	0·43	...	...	9	?	5·02	?	0·92	10·35	?	*Anda.*		
...	...	2·15	0·63	0·04	0·14	...	...	5	?	4·38	?	2·15	6·75	?	*Gangajalghati.*		
...	...	2·18	...	...	...	...	...	5	?	5·93	?	2·18	14·77	?	*Raipur.*		
...	...	1·41	2·38	...	0·24	...	...	6	?	7·00	?	2·38	13·21	?	*Sonamukhi.*		
...	...	2·15	0·03	0·09	0·02	...	...	7	1·45	6·36	0·91	2·15	8·87	3·28	Suri ..	Birbhum.	
...	...	1·71	0·07	0·03	0·05	...	...	6	1·40	4·87	0·97	1·71	10·25	2·43	Hetampur.		
...	...	1·45	0·24	0·12	0·04	...	...	7	1·29	3·46	0·83	1·45	7·64	3·23	Rampur Hát.		
...	...	1·70	0·30	0·10	0·14	...	...	10	?	5·53	?	1·70	8·19	?	*Bolpore.*		
...	...	1·10	...	...	0·11	...	...	6	?	3·19	?	1·10	4·73	?	*Morarai*		
...	...	2·07	0·06	...	0·08	...	...	5	1·60	5·07	0·89	2·07	9·37	2·91	Kandi ...	Murshidabad.	
...	...	1·69	0·04	0·05	0·08	...	...	6	1·65	4·06	1·00	1·69	6·37	3·32	Berhampore.		
...	...	1·47	0·03	0·06	0·07	...	...	5	1·27	3·22	0·72	1·47	6·94	2·57	Lalbagh.		
...	...	1·78	...	0·18	...	...	...	6	1·56	3·53	0·76	1·78	5·42	2·90	Azimganj.		
...	...	0·95	0·05	0·04	0·07	...	...	6	1·42	3·16	0·71	0·95	5·13	2·85	Jangipur.		
...	0·95	1·75	...	0·07	...	...	...	5	1·12	4·17	0·65	1·75	5·87	3·17	Lalgola.		
...	...	1·30	0·91	0·06	0·07	...	...	6	?	3·80	?	1·30	5·23	?	*Akhriganj.*		
...	...	1·20	0·20	...	0·10	...	...	8	?	3·60	?	1·20	6·40	?	*Patkabari.*		
...	...	0·84	0·45	0·06	0·14	...	...	8	1·50	4·94	1·09	1·56	7·65	3·48	Pabna	Pabna ...	NORTH BENGAL.
...	...	1·31	0·73	0·01	0·08	...	...	8	1·47	3·95	1·01	1·31	4·67	3·39	Sirajganj. ..		
...	...	1·52	0·80	...	0·09	...	...	7	1·20	3·85	0·90	1·52	5·21	3·69	Sherpur ...	Bogra.	
...	...	1·60	0·03	0·04	...	...	...	5	1·38	3·39	0·85	1·60	4·34	3·65	Nowkhilla.		
...	...	1·51	0·46	0·04	...	...	...	4	1·35	3·05	0·85	1·51	4·21	3·29	Bogra.		
...	...	0·47	0·04	...	...	...	...	4	1·23	1·12	0·52	0·47	2·14	2·23	Panchbibi.		
...	...	1·21	1·00	0·03	0·07	...	...	6	1·35	4·02	0·79	1·21	5·55	2·80	Boalia ...	Rajshahi.	
...	...	1·46	0·96	...	0·16	...	...	8	1·26	4·75	0·89	1·46	5·76	3·49	Nato		
...	...	1·50	0·10	...	0·05	...	...	5	1·00	3·12	0·35	1·50	3·60	1·79	*Nargaon.*		
...	...	1·25	0·31	...	0·14	...	...	8	?	4·08	?	1·25	5·06	?	*La pur.*		
...	...	1·60	...	0·07	...	...	...	4	?	2·89	?	1·60	3·33	?	*Manda.*		

Table of Rainfall recorded at Stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
NORTH BENGAL—concld.	Malda ...	Malda ...	...	...	...	...	...	...	0·09	0·08	...	...	...	...	0·16	0·67	0·01	...	0·31	0·43	...	...
		Chanchal ...	...	...	...	...	...	...	0·06	[illegible]	...	...	...	...	0·20	0·41	...	...	0·18	0·10	...	...
		Gajol ...	...	...	...	...	...	...	0·02	0·02	...	...	...	...	...	0·01	...	...	0·20	0·13	...	...
		Sibganj ...	...	...	...	...	...	...	0·20	...	...	...	...	...	0·10	1·15	...	...	0·97	0·08	...	...
	Dinajpur ...	Mohadebpur	...	...	...	...	...	...	0·06	0·06	...	...	...	...	...	0·60	...	...	0·18	0·34	...	...
		Churamon ...	...	...	...	...	...	...	0·02	0·02	...	...	...	...	0·12	0·42	...	...	0·13	0·02	...	0·01
		Raiganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·42	...	...	0·10	0·03	...	...
		Dinajpur ...	...	...	...	...	...	...	...	...	...	...	...	...	0·12	0·22	...	...	0·04	...	...	0·05
		Baloorghat ...	...	...	...	...	...	...	...	0·08	...	...	...	...	0·11	0·42	...	...	0·07	...	...	0·06
		Thakurgaon ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·35	...	...	...	...	...	...
	Rangpur ...	Bhawaniganj (*Gyabanda*).	...	...	...	...	...	...	...	...	...	...	...	...	0·02	0·20	...	...	...	...	...	...
		Rangpur ...	...	...	...	...	...	...	...	...	...	...	...	...	0·18	0·24	...	...	...	...	...	0·12
		Kurigram ...	...	...	...	...	...	...	...	...	...	...	...	...	0·08	...	...	...	...	0·02	...	...
		Bagdogra (*Nilphamari*)	...	...	...	...	...	...	...	...	...	...	...	...	0·02	0·35	0·01	...	...	...	...	...
		Ulipur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·23	...	...	...	...	...	...
	Jalpaiguri ...	Jalpaiguri ...	...	...	...	...	...	...	...	...	...	...	...	...	0·18	[illegible]	...	...	...	...	...	...
		Alipore Duar	...	...	...	...	...	...	...	...	...	...	...	...	0·44	...	...	...	...	...	...	...
		Falacotta ...	...	...	...	...	...	...	...	...	...	...	...	...	0·35	...	...	...	...	...	...	...
		Debiganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bhagatpur (Nagrakatta).	...	...	...	...	...	...	...	...	...	...	...	...	...	0·27	...	...	...	...	...	...
	Kuch Bihar ...	Dinhatta ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·22	...	...	...	...	...	...
		Kuch Bihar ...	...	...	...	...	...	...	...	0·21	...	...	...	...	...	0·32	...	...	...	...	...	...
		Mekliganj ...	...	...	...	...	...	...	...	...	...	...	...	...	0·14	0·37	...	...	...	...	...	...
		Mathabhanga	...	...	...	...	...	...	...	...	...	...	...	...	0·03	0·10	...	...	...	...	...	...
	British Bhutan	Pedong ...	...	...	...	...	...	...	...	0·05	...	...	...	...	...	0·15	0·05	...	...	...	...	...
	Sikkim ...	Gnatong ...	...	...	...	0·08	...	...	0·20	...	0·01	0·03	...	...	[illegible]	0·47	0·05	...	...	...	0·08	...
	Darjeeling ...	Buxa ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·38	0·03	...	...	...	...	...
		Siliguri ...	...	...	...	...	...	...	...	...	...	...	...	...	0·22	0·22	...	...	...	...	...	...
		Darjeeling ...	...	...	...	...	...	...	0·08	...	...	...	...	...	0·08	0·10	...	...	...	...	...	...
		Kalimpong ...	...	...	...	...	...	...	...	...	...	...	...	...	0·14	0·11	...	...	...	...	...	...
		Kurseong ...	...	...	...	...	...	...	0·07	...	...	...	...	...	0·30	0·21	...	0·07	...	...	...	...
		Mongpoo ...	...	...	...	...	...	...	...	...	...	...	...	...	[illegible]	0·04	...	0·01	...	...	...	...
EAST BENGAL	Chittagong ...	Cox's Bazar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·04	...	...	...	...	0·08
		Chittagong ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·28	...	...	...	...	0·31
		Kutubdia ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·36
		Satkanya ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·61
		Kodala ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·23	...	...	...	...	0·90
		Fenoa ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	...	0·45
		Mirsarai ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·19	0·21	...	...	0·05	...	0·50
	Chittagong Hill Tracts.	Rangamati ...	...	...	...	...	...	...	...	0·21	...	...	...	...	...	0·25	0·15	...	...	0·14	...	0·58
		Bandarban ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·07	...	...	...	...	...	0·36
		Demagiri ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·58	...	...	...	...	0·32
	Backergunge...	Patuakhali ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·25	...	...	...	...	1·37
		Firojpur ...	...	...	...	...	...	...	...	0·16	...	...	...	...	...	0·80	0·65	...	...	0·85	...	1·79
		Barisal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·81	...	...	...	0·22	...	1·33
		Gournaddi ...	...	...	...	...	...	...	...	0·16	...	...	...	...	...	0·82	0·08	...	...	0·25	...	0·80
		Bhola ...	...	...	...	...	...	...	...	0·07	...	...	...	...	...	1·32	0·43	...	...	0·18	...	0·88
		Doulatkhan ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·48	...	...	...	0·09	...	1·10
		Bauphal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·54	...	...	0·18	...	1·60
	Noakhali ...	Noakhali ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·67	0·22	...	...	0·29	...	0·66
		Fenny ...	...	...	...	...	...	...	...	0·06	...	...	...	...	...	0·48	0·39	...	...	0·35	...	0·84
		Harishpur ...	...	...	...	...	...	...	...	0·02	...	...	...	...	...	0·35	0·05	...	...	0·06	...	1·05
		Ramganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·93	0·24	...	...	0·08	...	0·90
	Faridpur ...	Madaripur ...	...	...	...	...	...	...	...	0·33	...	...	...	...	...	0·83	...	...	...	0·25	...	1·05
		Faridpur ...	...	...	...	...	...	...	...	1·10	...	...	...	...	...	0·20	...	...	...	0·30	...	1·07
		Goalundo ...	...	...	...	...	...	...	0·41	1·50	...	...	...	...	...	0·44	...	...	...	...	...	1·15
	Dacca ...	Munshiganj	...	...	...	...	...	...	...	0·43	...	...	...	...	...	0·16	0·09	...	...	0·23	...	1·15
		Dacca ...	...	...	...	...	...	...	...	0·83	...	...	...	...	...	0·29	...	...	...	0·05	...	0·54
		Narainganj	...	...	...	...	...	...	...	0·50	...	...	...	...	...	0·12	0·04	...	...	0·14	...	0·63
		Manikganj	...	...	...	...	...	...	0·65	2·40	...	...	...	...	...	0·21	0·05	...	...	0·08	...	0·83
		Joydebpur ...	...	...	...	...	...	...	...	1·09	...	...	...	...	...	0·27	0·06	...	...	0·17	...	0·46
	Hill Tippera	Agartola ...	...	...	...	...	...	...	...	0·43	...	...	...	...	...	0·11	...	...	...	...	...	0·40
	Tippera	Comilla ...	...	...	...	...	...	...	...	0·10	...	...	...	...	...	0·12	0·10	...	...	0·02	...	0·40
		Chandpur ...	...	...	...	...	...	...	...	0·18	...	...	...	...	...	0·64	...	...	...	0·50	...	1·00
		Brahmanbaria	...	...	...	...	...	...	...	0·45	...	...	...	...	...	0·15	0·05	...	...	0·20	...	0·40
		Ramchandrapur.	...	...	...	...	...	...	...	0·40	...	...	...	...	...	...	...	...	...	...	...	...
		Nasirnagar ...	...	...	...	...	...	...	...	0·49	...	...	...	...	...	0·50	...	...	...	0·28	...	0·10
		Daudkandi ...	...	...	...	...	...	...	...	0·20	...	...	...	...	...	...	...	...	...	...	...	1·50
		Kasba ...	...	...	...	...	...	...	...	0·50	...	...	...	...	...	...	...	...	...	...	...	0·10
		Laksham ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·32	0·22	...	...	0·30	...	0·70
	Mymensingh	Kishoreganj	...	...	...	...	...	...	...	0·08	...	...	...	...	...	0·29	...	...	...	...	...	0·21
		Atia (*Tangail*)	...	...	...	...	...	...	0·58	0·38	...	...	...	...	...	0·51	...	...	...	0·31	...	0·19
		Mymensingh	...	...	...	...	...	...	...	0·24	...	...	...	...	...	0·77	0·03	...	...	0·13	...	0·02
		Jamalpur ...	...	...	...	...	...	...	0·03	...	...	...	...	...	...	0·56	...	...	...	0·19	...	...
		Netrokona ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·98	...	...	...	0·12	...	...
		Subarnakhali	...	...	...	...	...	...	...	0·19	...	...	...	...	...	0·46	...	...	...	0·24	...	0·09
		Durgapur	...	...	...	...	...	...	...	...	...	...	...	...	...	0·44	...	...	...	...	...	...
		Sherpur Town	...	...	...	...	...	...	...	0·18	...	...	...	...	...	0·52	...	...	...	0·08	...	...
		Dewanganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·39	...	...	...	...	...	...
NORTH BIHAR	Purnea ...	Kishanganj ...	...	...	...	...	...	...	...	0·15	...	...	...	...	0·10	0·49	...	...	...	...	...	...
		Araria ...	...	...	...	...	...	...	...	...	...	...	...	...	0·04	0·27	...	...	0·02	...	...	...
		Purnea ...	...	...	...	...	...	...	0·02	...	...	...	...	...	...	0·34	...	...	0·17	...	...	...
		Gondwara (Korah).	...	...	...	...	...	...	...	...	...	...	...	...	...	0·38	...	...	0·21	0·08	...	...
		Barsee ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·40	...	...	0·10	...	...	...
		Forbesgunj ...	...	...	...	...	...	...	...	0·12	...	...	...	...	0·24	0·22	...	...	...	...	...	...
		Kaliaganj ...	...	...	...	...	...	...	...	...	...	...	...	...	0·11	0·20	...	...	...	...	...	...
	Bhagalpur ...	Madhipura ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·28	...	...	...	0·22	...	...
		Bongaon (Sytabad).	...	...	...	...	...	...	...	...	...	...	...	...	...	0·26	...	...	...	...	...	...
		Supaul ...	...	...	...	...	...	...	...	0·18	...	...	...	...	0·12	0·15	...	...	0·12	...	...	...
		Protabganj ...	...	...	...	...	...	...	...	0·26	...	...	...	...	0·40	...	...	...	...	...	...	...
		Bhagalpur ...	...	...	...	...	...	...	0·09	0·16	...	...	...	...	0·27	0·24	...	...	0·58	0·47	...	...
		Banka ...	...	...	...	...	...	...	...	0·07	...	...	...	...	0·09	0·24	...	...	0·22	...	...	0·07
		Kotgong ...	...	...	...	...	...	...	·005	0·10	...	...	...	...	0·20	0·28	...	...	0·50	0·39	...	...

in Bengal in February 1893—*continued.*

21	22	23	24	25	26	27	28	Number of rainy days.	Average number of rainy days.	Total rainfall of the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 16th October 1892 to 28th February 1893.	Average rainfall from 16th October to 28th February.	Station.	District.	Meteorological division.
...	0·07	0·98	0·02	0·20	0·18	...	...	6	1·10	3·10	0·52	0·98	4·57	2·93	Malda	Malda	North Bengal—*concld.*
...	...	0·60	0·36	0·05	0·10	...	...	7	1·67	2·09	0·66	0·60	2·71	2·12	Chanchal.		
...	...	0·70	0·10	0·03	0·07	...	...	5	?	1·88	?	0·70	2·26	?	*Gajol.*		
...	...	1·34	0·20	...	0·06	...	...	6	?	4·10	?	1·34	5·46	?	*Sibganj.*		
...	...	1·25	...	0·07	...	...	...	4	1·18	2·56	0·64	1·25	3·17	2·27	Mohadebpur	Dinajpur.	
...	...	0·63	0·29	0·02	0·08	...	...	5	1·10	1·76	0·42	0·63	2·45	1·88	Churamon.		
...	...	0·60	...	...	...	...	...	3	1·15	1·15	0·51	0·60	2·71	1·74	Raiganj.		
...	...	0·57	0·05	0·01	0·01	...	...	3	1·25	1·07	0·50	0·57	1·95	3·01	Dinajpur.		
...	...	0·78	0·22	0·04	0·07	...	...	4	1·00	1·85	0·26	0·78	2·47	1·97	Baloorghat.		
...	...	0·56	...	...	...	...	...	2	?	0·91	?	0·56	1·47	?	*Thakurgaon.*		
...	...	0·70	0·10	...	0·02	...	...	3	1·21	1·04	0·51	0·70	1·62	2·78	Bhawaniganj (*Gyabandu*).	Rangpur.	
...	...	0·58	...	...	...	...	...	4	1·00	1·12	0·39	0·58	5·15	3·81	Rangpur.		
...	...	0·49	...	...	...	...	...	1	0·93	0·59	0·31	0·49	1·25	2·14	Kurigram.		
...	...	0·59	...	...	...	...	...	2	1·28	0·97	0·52	0·59	2·36	2·11	Bagdogra. (*Nilphamari.*)		
...	...	0·43	...	...	...	...	...	2	?	0·66	?	0·43	1·06	?	*Ulipur.*		
...	...	0·58	...	...	...	...	...	3	1·05	1·08	0·23	0·58	2·76	3·77	Jalpaiguri	Jalpaiguri.	
...	...	0·23	...	...	...	...	...	2	?	0·67	?	0·44	2·87	?	*Alipore Duar.*		
...	...	0·45	...	...	...	...	...	2	?	0·80	?	0·45	2·45	?	*Falacotta.*		
...	...	0·80	...	...	...	...	...	1	?	0·80	?	0·80	2·05	?	*Debiganj.*		
...	...	0·36	...	...	...	...	...	2	?	0·63	?	0·36	8·33	?	*Bhagatpur (Nagrakatta).*		
...	...	0·35	...	...	...	...	...	2	1·18	0·57	0·41	0·35	1·55	2·98	Dinhatta	Kuch Bihar.	
...	...	0·30	...	...	...	...	...	3	1·11	0·83	0·29	0·32	2·56	2·58	Kuch Bihar.		
...	...	0·39	...	...	...	...	...	3	1·18	0·90	0·53	0·39	2·50	2·82	Mickliganj.		
...	...	0·34	...	...	...	...	...	2	1·18	0·77	0·45	0·40	2·34	2·62	Matabhanga.		
...	...	0·47	0·43	...	...	...	...	3	1·60	1·15	0·83	0·47	?	?	Pedong	British Bhutan	
0·10	0·04	0·90	0·22	...	0·06	0·09	...	6	?	2·63	?	0·90	?	?	Gnatong	Sikkim.	
...	...	0·34	...	...	0·04	0·04	...	2	2·30	0·83	0·86	0·38	15·46	7·06	Buxa	Darjeeling.	
...	[illegible]	0·48	...	...	...	...	...	3	2·85	0·92	0·24	0·48	3·83	2·04	Siliguri.		
...	...	0·83	0·10	...	0·04	...	...	3	2·65	1·23	0·82	0·83	2·79	6·00	Darjeeling.		
...	...	0·97	...	...	...	...	...	3	2·25	1·22	0·65	0·97	3·65	2·76	Kalimpong.		
...	...	0·81	...	...	...	...	...	3	?	1·46	?	0·81	4·64	?	Kurseong.		
...	0·22	0·51	...	...	...	...	...	3	?	1·08	0·72	0·51	?	?	Mongpoo.		
0·03	...	...	...	...	...	...	...	Nil	1·16	0·15	0·49	0·08	13·30	7·56	Cox's Bazar	Chittagong	East Bengal.
0·39	...	...	...	...	...	...	...	3	1·45	1·01	0·96	0·39	13·56	5·61	Chittagong.		
0·26	...	...	...	...	...	...	...	2	?	0·62	?	0·36	19·79	?	*Kutubdia.*		
...	...	...	...	...	...	...	...	1	?	0·61	?	0·61	9·41	?	*Satkanya.*		
0·38	...	...	...	...	...	...	...	3	?	1·51	?	0·90	?	?	Kodali.		
...	0·40	...	...	...	...	...	...	4	?	1·14	?	0·45	?	?	Fenoa.		
0·12	...	0·01	...	...	0·02	...	...	4	?	1·16	?	0·50	?	?	Mirsarai.		
0·31	...	...	0·03	...	...	...	...	5	2·00	1·49	1·10	0·58	10·10	6·25	Rangamati	Chittagong Hill Tracts.	
0·10	...	...	...	...	...	...	...	2	?	0·46	?	0·36	9·16	?	*Bandarban*		
0·90	0·12	...	...	0·08	...	...	...	4	?	2·00	1·23	0·90	?	?	Demagiri.		
0·30	...	...	...	...	0·26	...	...	4	1·12	3·18	1·13	1·37	12·16	5·94	Patuakhali	Backergunge.	
0·08	...	0·05	0·13	...	0·13	...	...	7	1·89	4·64	1·29	1·79	12·69	5·54	Pirojpur.		
0·37	...	...	0·24	...	...	...	...	5	1·75	2·07	1·00	1·33	10·36	5·27	Barisal.		
0·16	...	0·08	0·17	...	0·18	...	...	7	?	2·70	?	0·82	8·53	?	*Gournaddi.*		
0·28	...	...	...	...	0·14	...	...	6	1·38	3·30	0·78	1·32	11·68	5·09	Bhola.		
0·07	...	0·63	...	...	0·17	...	...	3	?	2·94	?	1·48	14·54	?	*Doulatkhan.*		
...	...	0·04	0·24	...	0·18	...	...	5	?	2·78	?	1·60	11·69	?	*Bauphal.*		
0·11	...	0·03	0·09	...	0·15	...	...	6	1·60	2·22	0·91	0·67	18·56	5·94	Noakhali	Noakhali.	
0·10	...	...	0·06	...	0·18	...	...	6	1·69	2·37	1·19	0·84	17·35	7·68	Fenny.		
0·86	...	...	...	...	0·06	...	...	3	?	2·45	?	1·05	22·12	?	*Harishpur.*		
0·40	...	...	...	...	0·22	...	...	5	?	3·77	?	1·93	14·50	?	*Ramganj.*		
0·09	...	0·17	0·61	...	0·17	...	...	7	1·68	3·60	0·97	1·05	9·61	3·51	Madaripur	Faridpur.	
...	...	0·58	1·62	...	0·16	...	...	7	2·05	5·63	1·41	1·62	16·52	4·12	Faridpur.		
...	...	0·53	0·70	...	0·20	...	...	7	1·72	4·93	1·22	1·50	10·25	3·85	Goalundo.		
...	...	0·37	0·92	...	0·15	...	...	7	2·08	3·50	1·35	1·15	10·76	5·02	Munshiganj	Dacca.	
...	...	0·65	0·94	...	0·18	...	...	6	1·90	3·39	1·15	0·94	15·44	3·28	Dacca.		
0·03	...	0·56	1·21	...	0·21	...	...	7	2·00	3·44	0·99	1·21	13·57	5·12	Narainganj.		
0·02	...	0·37	0·67	...	0·10	...	...	6	1·88	4·78	1·15	2·40	11·71	3·74	Manikganj		
...	...	0·37	0·47	0·01	0·16	...	...	7	?	3·06	?	1·09	7·20	?	*Joydebpur.*		
...	...	0·47	0·86	...	...	...	...	5	1·75	2·27	1·03	0·86	9·68	5·09	Agartola	Hill Tippera.	
0·35	...	0·42	0·53	...	0·19	...	...	8	2·00	2·33	0·87	0·53	11·55	4·10	Comilla	Tippera.	
0·10	...	0·12	0·30	...	0·20	...	...	8	2·00	3·04	0·89	1·00	11·05	3·81	Chandpur.		
...	...	0·50	0·66	...	0·24	...	...	7	2·27	2·65	1·30	0·66	13·59	4·53	Brahmanbaria.		
...	...	0·09	0·09	...	...	...	...	1	?	0·58	?	0·40	8·71	?	*Ramchandrapur.*		
...	...	0·58	0·60	...	0·10	...	...	7	?	2·56	?	0·60	13·62	?	*Nasirnagar.*		
...	...	0·30	0.82	...	0·32	...	...	5	?	3·14	?	1·50	7·84	?	*Daudkandi.*		
...	...	0·15	0·60	...	...	...	...	4	?	1·35	?	0·60	14·04	?	*Kasba.*		
1·10	...	0·10	...	...	0·10	...	...	7	?	2·84	?	1·10	12·01	?	*Laksham.*		
...	...	0·60	0·81	...	...	...	...	4	1·53	1·99	0·86	0·81	8·54	3·51	Kishoreganj.	Mymensingh	
...	...	0·63	0·33	...	...	...	...	7	1·47	2·93	1·18	0·63	6·17	3·85	Atia (*Tangail*).		
...	...	1·29	0·73	...	0·09	...	...	5	1·30	3·30	1·01	1·29	4·48	4·03	Mymensingh.		
...	...	1·88	0·08	...	...	...	...	3	1·47	2·74	1·07	1·88	4·77	3·87	Jamalpur.		
...	...	2·05	0·08	...	...	...	...	3	0·71	3·23	0·40	2·05	7·31	3·32	Netrokona.		
...	...	1·50	0·75	...	...	...	...	5	?	3·53	?	1·50	4·22	?	*Subornakhali.*		
...	...	1·00	0·50	...	...	...	...	3	?	1·94	?	1·00	4·41	?	*Durgapur.*		
...	...	1·36	0·56	...	0·04	...	...	4	?	2·74	?	1·36	6·25	?	*Sherepur Town*		
...	...	1·20	...	...	...	...	...	2	?	1·59	?	1·20	2·37	?	*Dewanganj.*		
...	...	0·76	...	...	0·17	...	...	4	1·22	1·57	0·44	0·76	2·33	2·42	Kishanganj	Purnea	North Bihar.
...	...	0·60	0·04	...	0·32	...	...	4	1·00	1·35	0·53	0·60	1·96	2·37	Araria.		
...	...	0·60	0·02	0·05	0·07	...	...	3	1·11	1·31	0·56	0·60	2·40	2·58	Purnea.		
...	...	0·46	...	0·10	...	...	...	4	?	1·23	?	0·46	2·69	?	*Gondwara (Korah).*		
...	...	0·58	0·03	0·05	...	...	...	3	?	1·16	?	0·58	1·16	?	*Barsoe.*		
...	...	0·38	0·32	...	0·17	...	...	6	?	1·47	?	0·38	2·05	?	*Forbesganj.*		
...	...	0·66	...	...	...	...	...	3	?	0·97	?	0·66	1·32	?	*Kaliaganj.*		
...	...	0·70	...	0·45	...	...	...	4	1·21	1·65	0·56	0·70	2·60	2·56	Madhipura	Bhagalpur.	
...	...	0·78	...	0·13	...	...	...	3	?	1·17	?	0·78	2·27	?	Bongaon. (Syfabad).		
...	...	0·28	...	...	...	...	...	5	0·89	0·85	0·39	0·28	2·32	2·02	Supaul.		
...	...	0·26	...	...	0·46	...	...	4	?	1·38	?	0·40	2·11	?	*Protabganj.*		
...	...	1·04	0·09	0·20	0·10	...	...	8	1·25	3·24	0·48	1·04	4·02	2·21	Bhagalpur.		
...	...	1·72	...	0·40	...	...	...	4	1·11	2·81	0·50	1·72	4·98	2·77	Banka.		
...	...	0·90	0·05	0·19	0·06	...	...	7	?	2·73	?	0·90	4·02	?	*Kolgong.*		

Table of Rainfall recorded at Stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
NORTH BIHAR—concld.	Darbhanga ...	Tajpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·32	...	...	0·30	...	...	...
		Darbhanga ...	...	...	...	...	...	...	...	0·03	...	...	...	...	0·04	0·16	0·02	...	0·16	...	...	...
		Madhubani ...	...	...	...	...	...	...	...	0·31	...	...	...	...	0·41	...	...	...	0·34	...	...	...
		Bahera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·19	...	...	0·13	...	...	...
		Roshera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·25	...	...	0·22	...	...	...
	Muzaffarpur	Sitamarhi ...	...	...	...	...	...	...	...	0·32	...	...	...	...	0·59	0·20	...	...	0·04	...	...	...
		Muzaffarpur	...	...	...	...	...	...	...	...	...	...	...	...	0·15	0·12	...	...	0·23	0·03	...	...
		Hajipur ...	...	...	...	...	...	...	0·04	0·50	...	...	...	...	0·03	0·22	...	...	0·24	...	...	...
		Paru ...	...	...	...	...	...	...	...	...	...	...	...	...	0·25	0·25	...	...	0·26	...	...	...
		Mahua (Chitwarra).	...	...	...	...	...	...	0·10	...	...	...	...	...	0·38	...	...	...	0·62	...	...	...
		Siuhar ...	...	...	...	...	...	...	...	...	...	...	...	...	0·06	0·03	...	...	...	...	...	...
		Pupri ...	...	...	...	...	...	...	...	0·85	...	...	...	...	0·60	0·20	...	...	0·10	...	...	...
	Champaran ...	Motihari ...	...	...	...	...	...	...	...	0·12	...	...	...	...	0·37	0·39	...	...	0·19	...	...	...
		Bettiah ...	...	...	...	...	...	...	...	0·20	...	...	...	...	0·18	0·18	...	...	0·07	...	...	...
		Bagaha ...	...	...	...	...	...	...	0·05	0·19	...	...	...	...	0·10	0·12	...	...	0·06	...	...	...
		Burhurwa ...	...	...	...	...	...	...	...	0·07	...	...	...	...	0·45	0·26	...	...	0·11	...	0·02	...
	Saran ..	Gopalganj ...	...	...	...	...	...	...	...	0·14	...	...	...	...	0·68	0·08	...	...	0·12	...	...	...
		Siwan ...	...	...	...	...	...	...	0·09	...	...	...	...	...	0·27	0·24	0·02	...	0·24	...	...	...
		Chapra ...	...	...	...	...	...	...	0·03	0·33	...	...	...	...	0·08	0·19	...	...	0·20	...	...	...
SOUTH BIHAR	Shahabad ...	Buxar ...	...	...	...	...	...	...	0·12	...	...	...	...	...	0·09	0·29	...	...	0·19	...	...	...
		Dehri ...	...	...	...	...	...	...	...	...	...	...	...	...	0·03	...	...	...	...	...	...	...
		Bhabhua ...	...	...	...	...	...	...	0·06	...	...	...	...	...	0·11	0·08	...	...	...	...	...	...
		Sasaram ...	...	...	...	...	...	...	...	...	...	...	...	...	0·11	0·12	...	...	...	...	...	...
		Arrah ...	...	...	...	...	...	...	0·18	...	...	...	...	...	0·35	...	...	...	0·97	...	...	0·04
		Mohaniah ...	...	...	...	...	...	...	...	...	...	...	...	...	0·03	...	...	...	...	...	0·01	...
		Khiri ...	...	...	...	...	...	...	0·23	...	...	...	...	...	0·14	0·30	...	...	...	...	...	...
		Ageaon ...	...	...	...	...	...	...	0·16	...	...	...	...	...	...	...	...	0·70	...	...	...	...
		Ramnagar ...	...	...	...	...	...	...	0·20	...	...	...	...	0·11	...	0·31	...	...	0·19	...	...	...
		Koath ...	...	...	...	...	...	...	0·15	...	...	...	...	...	0·06	0·25	...	...	...	...	0·01	...
		Sikroul ...	...	...	...	...	...	...	0·20	...	...	...	...	...	0·40	...	...	...	0·19	...	...	...
		Bassawan ...	...	...	...	...	...	...	...	...	...	...	...	...	0·15	0·15	...	...	...	...	...	...
		Manaharpur	...	...	...	...	...	...	0·20	...	...	...	...	...	0·16	0·31	...	...	0·20	...	...	...
	Gaya ..	Aurungabad...	...	...	...	...	...	...	0·01	...	...	...	...	...	0·18	0·12	...	...	...	...	...	...
		Gaya ...	...	...	...	...	...	...	0·02	...	...	...	...	0·32	0·12	...	...	...	...	...	...	...
		Nawada ...	...	...	...	...	...	...	0·03	0·11	...	...	...	...	0·29	0·18	...	...	0·32	...	...	...
		Jahanabad ...	...	...	...	...	...	...	0·15	0·09	...	...	...	...	0·14	0·34	...	...	0·10	...	...	...
		Arwal ...	...	...	...	...	...	...	0·13	...	...	...	...	...	...	0·40	...	...	0·10	...	...	0·05
		Daudnagar ...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	0·15	...	...	...	...	...	...
		Sherghati ..	...	...	...	...	...	...	...	...	...	...	...	...	0·20	0·07	...	...	...	...	...	...
		Rajauli ...	...	...	...	...	...	...	...	...	...	...	...	...	0·25	0·09	...	...	...	...	...	...
		Pakri Barawan.	...	...	...	...	...	...	...	0·10	...	...	...	...	0·38	0·11	...	...	0·43	...	...	...
	Patna ..	Patna ...	...	...	...	...	...	...	0·09	0·08	...	...	...	...	0·05	0·23	...	...	0·24	...	...	0·03
		Dinapore ...	...	...	...	...	...	...	0·07	0·09	...	...	...	...	0·09	0·19	...	...	0·13	...	...	0·04
		Bihar ...	...	...	...	...	...	...	0·11	0.25	...	...	...	...	0·21	0·22	...	...	0·09	...	...	...
		Barh ...	...	...	...	...	...	...	0·26	0·10	...	...	...	...	0·09	0·30	0·03	...	0·22	...	...	0·08
		Bickram ...	...	...	...	...	...	...	0·17	...	...	...	...	...	...	0·44	...	...	0·69	...	...	...
		Hilsa ...	...	...	...	...	...	...	0·15	0·04	...	...	...	...	0·09	0·30	...	...	0·86	...	...	...
	Monghyr ..	Begusarai ...	...	...	...	...	...	...	0·15	0·08	...	...	...	...	0·11	0·35	...	...	0·65	...	...	...
		Monghyr ...	...	...	...	...	...	...	0·10	0·10	...	...	...	...	0·18	0·39	...	...	1·07	0·50	...	...
		Jamui ...	...	...	...	...	...	...	...	0·06	...	...	...	...	0·13	0·25	...	...	0·60	...	...	0·03
		Gogri ...	...	...	...	...	...	...	...	...	...	...	...	...	0·34	1·87	...	...	3·47	3·13	...	...
		Sheikpura ..	...	...	...	...	...	...	...	...	...	...	...	...	0·27	0·97	...	...	...	...	...	...
		Chahai Bamda	...	...	...	...	...	...	0·07	0·05	...	...	...	...	0·23	0·54	...	...	0·22	0·10	...	...
	Sonthal Parganas.	Rajmahal ...	...	...	...	...	...	...	0·19	0·11	...	...	...	...	0·14	0·55	...	...	0·41	0·32	...	0·05
		Godda ...	...	...	...	...	...	...	0·08	0·06	...	...	...	...	0·10	0·37	...	...	0·41	...	...	0·08
		Pakour ...	...	...	...	...	...	...	0·06	...	...	...	...	...	0·08	0·96	...	...	0·29	0·13	...	0·15
		Naya Dumka	...	...	...	...	...	...	0·16	0·20	...	...	...	...	0·52	0·32	0·01	...	...	...	...	0·60
		Deoghur ...	...	...	...	...	...	...	0·09	0·40	...	...	...	...	0·20	0·30	...	...	0·20	...	...	0·15
		Jamtara ...	...	...	...	...	...	...	0·23	0·34	...	...	...	...	...	0·28	...	...	...	0·61	...	0·50
		Belbadda ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·80	...	...	0·85	0·45	...	...
		Nanihat ...	...	...	...	...	...	...	...	0·28	...	...	...	...	0·10	0·62	...	...	...	...	...	0·18
CHOTA NAGPUR.	Hazaribagh ..	Pachamba (*Giridi*).	...	...	...	...	...	...	0·30	0·05	...	...	...	...	0·34	0·10	0·02	...	...	0·84	...	0·85
		Hazaribagh ...	...	...	...	...	...	...	0·62	0·24	...	...	...	...	0·26	0·27	...	...	...	...	...	...
		Seimtagurah ...	...	...	...	...	...	...	0·52	0·18	...	...	...	...	0·35	0·14	...	...	...	...	...	0·43
		Mahudi Hills	...	...	...	...	...	...	0·36	0·24	...	...	...	...	0·39	0·09	...	...	...	...	...	...
		Jhoomrah Hills	...	...	...	...	...	...	0·40	...	...	...	...	...	0·30	...	...	...	...	...	...	...
		Barhi ...	...	...	...	...	...	...	...	0·53	...	...	...	...	0·31	...	...	...	...	...	...	0·62
		Chatra ..	...	...	...	...	...	...	0·16	0·11	...	...	...	...	0·28	0·04	...	...	...	...	...	0·47
		Karagdeha ...	...	...	...	...	...	...	0·17	0·16	...	...	...	...	0·12	0·13	0·02	...	...	...	...	0·29
		Ramghar ...	...	...	...	...	...	...	0·05	0·25	...	...	...	...	0·85	0·24	...	...	...	0·22	...	0·17
	Lohardaga ..	Lohardaga ...	...	...	...	...	...	...	0·18	...	...	...	...	...	0·51	0·62	...	...	...	0·10	...	0·73
		Ranchi ...	...	...	...	...	...	...	...	0·32	...	...	...	...	0·95	0·79	0·02	...	...	...	...	0·60
		Silli ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·90	...	...	...	0·35	...	...
		Surguja ...	...	...	...	...	...	...	3·00	...	...	...	1·00	...	...	...	1·35	...	...	...	1·25	...
		Jashpur ..	...	...	...	...	...	...	0·67	...	...	...	...	...	1·92	0·21	...	...	0·83	...	...	...
		Gangpur ...	...	...	...	...	...	...	...	...	...	...	...	0·10	...	...	...	1·60	0·05	...	0·10	...
	Palamau ...	Palamau (*Daltonganj*).	...	...	...	...	...	...	0·06	...	...	...	...	...	0·17	0·10	...	...	...	...	...	...
		Balumat ...	...	...	...	...	...	...	0·41	0·54	...	...	...	...	1·20	0·10	0·01	...	...	...	...	...
		Hoseinabad ...	...	...	...	...	...	...	0·12	...	...	...	...	...	...	...	...	...	...	...	...	...
		Garwah ...	...	...	...	...	...	...	0·20	...	...	...	...	...	0·22	0·07	...	...	...	...	...	0·07
	Singhbhum ..	Chaibassa ...	...	...	...	...	...	...	...	0·38	...	...	...	...	...	2·15	...	...	0·10	...	...	0·16
		Chakradharpur.	...	...	...	...	...	...	...	0·85	...	...	...	...	...	1·69	...	...	...	...	...	0·35
		Ghatsila ...	...	...	...	...	...	...	...	0·45	...	...	...	...	1·28	1·00	...	...	...	...	...	1·00
		Baharagura																				0·30
	Manbhum ..	Purulia ...	...	...	...	...	...	...	0·03	0·30	...	...	...	...	...	1·25	...	...	...	0·40	...	0·27
		Gobindpur ...	...	...	...	...	...	...	0·07	0·55	...	...	...	...	0·31	0·19	...	...	...	0·18	...	0·18
		Raghunathpur.	...	...	...	...	...	...	...	0·07	...	...	...	...	...	0·59	...	...	...	...	...	0·24
		Barrabhum ..	...	...	...	...	...	...	...	...	...	...	...	...	...	0·80	...	...	...	...	...	1·10
		Jhalda ...	...	...	...	...	...	...	...	0·15	...	...	...	...	0·74	0·40	...	...	...	0·22	...	0·22
		Chas ...	...	...	...	...	...	...	...	0·22	...	...	...	...	0·22	0·20	...	...	...	0·23	...	0·20
		Pandra ..	...	...	...	...	...	...	0·08	0·40	...	...	...	...	0·37	0·30	...	...	0·02	0·55	...	0·33
	Orissa Tributary Mahals.	Keonjher ...	...	...	...	...	...	...	0.20	...	...	...	...	0·50	0·36	...	...	0 30	...	0·07	...	0·70
		Anandpur ...	...	...	...	...	...	...														
		Talcher ...	...	...	...	...	...	...														
		Narsingpur ...	...	...	...	...	...	...	0·20	...	...	...	...	...	...	...	...	...	...	0·70	0·05	...
		Angul ...	...	...	...	...	...	...	0 44	...	...	...	...	...	...	...	...	...	...	...	0·84	...
		Dhenkanal ...	...	...	...	...	...	...	0·24	0·19	...	...	...	...	...	...	...	...	...	...	0·88	...
		Bispara ...	...	...	...	...	...	...	...	...	...	...	...	...	0·60	...	...	...	...	...	...	...
		Kunjbongar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Baramba ...	...	...	...	...	...	...	...	1·00	...	...	...	...	...	...	0·15	...	...	...	0·33	0·86

in Bengal in February 1893—*concluded.*

21	22	23	24	25	26	27	28	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 16th October 1892 to 28th February 1893.	Average rainfall from 16th October to 28th February.	Station.	District.	Meteorological Division.
...	...	0·52	...	...	...	...	...	3	0·84	1·14	0·38	0·52	1·98	1·99	Tajpur ...	Darbhanga.	NORTH BIHAR—*concluded.*
...	...	0·24	...	0·03	..	.	...	3	1·32	0·74	0·43	0·29	2·73	2·02	Darbhanga		
...	...	0·19	...	...	...	...	...	4	0·77	1·75	0·31	0·81	3·42	1·99	Madhubani		
...	...	0·39	...	...	...	..	...	3	?	0·62	?	0·39	2·39	?	*Bahera.*		
...	...	0·31	...	...	...	...	...	3	?	0·78	?	0·31	1·42	?	*Roshera.*		
...	...	0·38	0·07	...	0·35	...	...	5	1·11	1·95	0·30	0·39	3·40	1·69	Sitamarhi	Muzaffarpur	
...	...	0·23	...	...	..	...	...	4	1·26	0·76	0·41	0·23	2·09	2·63	Muzaffarpur		
...	...	0·62	...	0·06	0·02	...	...	4	1·17	1·74	0·46	0·62	2·59	2·09	Hajipur		
...	...	0·27	...	...	...	...	...	4	?	1·03	?	0·27	1·70	?	*Paru.*		
...	...	0·45	...	...	...	...	...	4	?	1·55	?	0·62	2·49	?	*Mahua* (Chitwarra.)		
...	...	0·15	0·03	...	..	..	...	1	?	0·27	?	0·15	0·41	?	*Siuhar.*		
...	...	0·40	...	...	0·22	...	...	6	?	2·37	?	0·85	3·79	?	*Pupri.*		
...	...	0·83	...	...	...	...	...	5	1·06	1·90	0·35	0·83	2·58	1·57	Motihari	Champaran.	
...	...	0·60	.	...	..	...	...	4	1·17	1·23	0·41	0·69	2·03	1·58	Bettia		
...	...	0·54	0·03	...	0·13	...	...	5	?	1·22	?	0·54	2·63	-	*Bagaha.*		
...	...	0·38	.	...	...	...	...	4	.	1·24	?	0·43	1·78	?	*Burhurwa.*		
...	...	0·46	...	0·03	...	...	...	4	1·18	1·50	0·53	0·63	2·34	1·79	Gopalganj	Saran.	
...	...	0·37	...	0·05	.	...	...	4	1·05	1·31	0·48	0·37	2·67	2·27	Siwan.		
...	...	0·35	...	0·04	0·23	...	...	5	0·89	1·48	0·33	0·38	2·85	2·30	Chapra.		
..	0·30	0·28	...	0·11	0·18	...	...	7	1·10	1·56	0·34	0·30	2·99	2·66	Buxar ...	Shahabad	SOUTH BIHAR.
...	0·45	1·04	...	0·24	0·04	...	...	3	0·67	1·30	0·20	1·04	3·14	2·58	Dehri.		
...	0·73	0·68	..	0·35	...	...	.	4	1·21	2·01	0·40	0·73	2·52	3·05	Bhabhua.		
...	0·38	0·72	...	...	...	...	...	4	1·46	1·33	0·46	0·72	2·29	2·65	Sasaram.		
...	...	0·68	0·12	0·07	...	...	..	5	0·85	2·41	0·45	0·97	3·29	2·35	Arrah.		
...	0·90	..	0·39	..	...	...	..	2	?	1·24	?	0·90	1·33	?	*Mohaniah.*		
...	0·80	0·20	0·30	...	...	...	..	6	?	1·97	?	0·80	2·47	?	*Khiri.*		
...	...	...	...	0·10	..	...	...	3		0·95	?	0·70	1·30	?	*Ageaon.*		
...	...	0·73	...	0·47	0·12	...	...	7	?	1·83	?	0·73	3·33	?	*Ramnagar.*		
...	0·15	0·75	...	0·39	...	..	...	5	?	1·67	?	0·75	3·01	?	*Koath.*		
...	0·78	...	..	0·20	..	..	...	5	?	1·77	?	0·78	2·37	?	*Sikroul.*		
...	1·50	..	0·17	0·25	...	...	...	5	?	2·22	?	1·54	3·65	?	*Bisswain.*		
...	0·35	0·56	...	0·30	...	.	...	7	?	2·08	?	0·56	2·90	?	*Manaharpur.*		
...	0·52	0·84	..	0·46	0·02	...	...	5	1·16	2·15	0·33	0·84	3·81	1·96	Aurungabad ...	Gaya.	
...	0·15	1·39	...	0·69	0·10	..	..	6	1·10	2·70	0·50	1·39	3·57	2·47	Gaya.		
...	0·36	1·56	0·03	0·68	0·20	..	.	8	0·84	3·70	0·46	1·56	4·07	2·33	Nawada.		
...	0·16	1·45	...	0·22	0·22	...	...	8	1·18	2·87	0·49	1·45	3·31	2·22	Jahánabad.		
...	...	1·10	...	0·21	0·12	...	...	6	?	2·11	?	1·10	2·54	?	*Arwal.*		
...	0·55	0·70	...	.	...	...	...	4	?	1·50	?	0·70	1·85	?	*Daudnagar.*		
...	0·43	2·69	...	0·63	..	...	...	4	?	3·33	?	2·69	5·96	?	*Sherghati.*		
...	0·20	2·37	...	0·79	0·19	...	...	5	?	3·89	.	2·37	7·24	?	*Rajauli.*		
...	...	1·28	...	0·59	0·23	...	...	7	?	3·12	.	1·28	3·74	?	*Pakri Barawan.*		
...	0·02	0·73	...	0·08	0·08	..	...	3	1·09	1·63	0·38	0·73	2·69	2·38	Patna	Patna.	
...	0·06	0·57	.	0·08	0·06	.	..	3	0·95	1·38	0·39	0·57	2·20	2·22	Dinapore.		
...	...	1·77	0·02	0·22	0·14	..	..	7	1·42	3·03	0·52	1·77	3·58	2·71	Behar.		
...	...	1·27	0·03	0·15	..	...	...	6	1·05	2·53	0·43	1·27	3·33	2·39	Barh.		
...	0·10	0·95	...	0·15	0·09	...	...	6	?	2·59	?	0·95	3·35	?	*Bickram.*		
...	1·43	...	...	0·20	...	..	..	5	?	3·07	?	1·43	3·81	?	*Hilsa.*		
...	..	1·48	..	0·16	...	...	...	6	1·27	2·98	0·53	1·48	5·73	2·71	Begusarai	Monghyr.	
...	...	1·1.	0·19	0·18	..	.	..	9	1·35	3·87	0·50	1·16	5·14	2·46	Monghyr.		
...	0·14	1·60	...	0·70	...	...	...	6	1·32	3·51	0·50	1·69	4·79	2·24	Jamui		
...	...	1·16	.	..	...	.	..	5	?	9·97	?	3·47	10·56	?	*Gogri.*		
...	...	1·15	...	0·58	...	...	...	4	?	2·97	?	1·15	4·62	?	*Sheikpura.*		
0·10	0·35	1·50	0·15	0·17	0·20	0·09	...	10	?	3·77	?	1·50	5·77	?	*Chahai Banda.*		
...	...	0·86	...	0·15	0·12	...	..	9	0·83	2·39	0·27	0·86	3·76	1·74	Rajmahal	Sonthal Parganas	
...	...	1·55	0·03	0·25	0·13	...	.	6	1·24	3·06	0·54	1·55	4·29	2·10	Godda.		
...	...	1·21	0·05	...	..	...	..	5	1·09	2·95	0·32	1·21	7·45	1·72	Pakour.		
...	...	0·95	0·03	0·11	0·08	...	...	7	1·44	2·78	0·72	0·95	5·23	5·01	Naya Dumka		CHOTA NAGPUR
...	...	1·10	..	0·25	0·15	...	...	8	1·22	2·79	0·63	1·10	3·96	3·16	Deoghur.		
...	...	1·75	0·14	0·17	0·04	..	...	8	1·00	4·06	0·35	1·75	7·37	2·3	Jamtara		
...	...	1·03	...	0·40	...	.	...	5	?	3·53	?	1·03	3·07	?	*Belbadla.*		
...	...	1·00	...	0·15	...	...	..	6	?	2·55	?	1·09	2·95	?	*Nanihat*		
...	0·13	0·40	0·08	0·32	0·08	...	...	8	1·32	3·81	0·66	0·85	7·46	2·48	Pachamba (*Giridi*).	Hazaribagh ..	
...	0·33	1·44	...	0·50	0·12	...	...	8	1·50	3·75	0·72	1·44	7·89	2·75	Hazaribagh.		
...	0·07	0·02	0·41	0·05	...	...	...	7	1·09	2·77	0·51	0·67	7·59	1·98	Seintaguran.		
...	1·48	...	...	0·60	...	...	...	5	1·18	3·16	0·58	1·48	9·01	2·44	Manudi Hills		
...	1·70	0·10	0·70	0·10	...	...	...	6	1·20	3·34	0·41	1·70	9·39	2·57	Jnoomran Hill		
...	0·45	1·07	...	0·52	0·03	...	...	6	?	3·53	?	1·07	5·33	?	*Barhi.*		
...	1·00	1·34	...	1·10	0·05	...	...	7	?	4·49	?	1·34	6·89	?	*Chatra.*		
...	0·19	0·87	0·03	0·40	0·13	...	...	9	?	2·51	?	0·87	4·28	?	*Karagdeha.*		
...	0·94	0·62	0·85	0·75	0·07	...	...	9	?	5·01	?	0·94	9·06	?	*Ramjnar.*		
...	0·58	0·08	0·14	0·98	...	...	...	8	0·83	3·92	0·49	0·98	11·03	3·17	Lohardaga	Lohardaga.	
...	1·14	0·91	0·07	0·81	0·09	...	...	7	1·94	5·50	1·10	1·14	13·66	3·31	Ranchi.		
1·20	2·40	...	...	0·59	0·30	...	0·20	9	?	11·29	? 0·16	3·09		?	*Silli.*		
0·12	1·16	0·12	0·12	1·04	...	...	...	9	?	6·19	0·29	1·92	?	?	Sirguja.		
...	1·20	0·15	...	0·34	...	...	...	6	?	3·54	0·90	1·69	?	?	Jashpur.		
													?	?	Gangpur.		
...	0·43	0·55	...	0·46	0·07	...	...	5	1·26	1·84	0·49	0·55	3·48	2·78	Palamau. (*Daltongunj*).	Palamau.	
...	0·65	0·77	0·01	0·82	0·03	...	...	7	?	4·54	?	1·29	9·16	?	*Balumat.*		
...	0·45	1·15	...	0·50	0·03	...	...	4	?	2·25	?	1·15	4·26	?	*Hoseinabad.*		
...	0·32	1·28	...	0·64	...	...	...	5	?	2·80	?	1·28	4·99	?	*Garwah.*		
...	0·81	2·09	0·02	0·19	0·20	...	...	8	1·35	6·01	0·84	2·15	12·54	3·44	Chaibassa	Singhbhum.	
...	1·23	1·70	...	0·35	0·30	...	...	7	?	6·47	?	1·70	12·81	?	*Chakradharpur.*		
...	0·90	1·50	...	0·12	...	...	...	7	?	7·15	?	1·90	12·15	?	*Ghatsila.*		
...	...	2·37	...	0·37	...	...	.		?		?			?	*Baharagura.*		
...	0·50	1·35	0·58	0·15	...	...	...	8	1·75	5·43	0·99	1·95	11·13	2·87	Purulia ...	Manbhum.	
...	0·60	1·25	0·15	0·12	...	...	...	9	1·11	3·69	0·88	1·25	6·54	2·76	Gobindpur.		
...	0·32	0·37	0·16	0·33	...	...	...	6	?	2·08	?	0·59	4·74	?	*Ragunathpur.*		
...	1·30	1·29	0·35	0·25	...	...	...	6	?	5·09	?	1·30	10·80	?	*Barrabhum.*		
...	0·60	0·60	0·27	0·25	...	...	...	9	?	3·46	?	0·74	5·94	?	*Jhalda.*		
...	0·75	1·04	0·05	0·15	..	...	...	8	?	3·09	?	1·04	6·81	?	*Chas.*		
...	0·19	1·26	0·21	0·11	0·02	...	...	9	?	3·91	?	1·26	6·02	1	*Pandra.*		
...	0·50	...	1·87	0·12	1·30	...	...	9	?	5·02	?	1·87			Keonjhar ...	Orissa Tributary Mahals.	
											? 0·74				Anundapur.		
...	0·07	...	...	0·14	...	...	...	3	?	1·16	0·06	0·70			Talcher.		
...	0·01	0·14	0·12	1·42	0·03	...	...	5	?	3·07	0·34	1·46			Narsingpur.		
0·40	....	0·02	...	0·35	0·15	...	...	6	?	2·43	0·72	0·88			Angul.		
...	0·13	0·33	...	...	...	...	0·24	4	?	1·35	0·2.	0·60			Dhenkanal.		
...	...	0·14	1·02	...	...	...	...	21	?	1·16	0·35	1·02			Bispara.		
...	...	...	...	...	0·46	...	...	5	?	2·80	?	1·00			Kunjabongar.		
															Baramba.		

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVATIONS TAKEN IN ASSAM, FOR THE MONTH OF FEBRUARY 1893.

THE important features in the meteorology of February in Bengal and Assam have been :—

1. The mean pressure for the month has been in very distinct excess of the normal over the whole area, except perhaps at Darjeeling. The excess has usually equalled from 0·02″ to 0·04″, and it has been largest at the central and north-western stations, and smallest at the southern and eastern stations. At Sibsagar, Chittagong and Gopalpur, indeed pressure has been almost normal.

2. Temperature has been most abnormally low almost throughout the month, the general defect for the whole of Bengal equalling 4·1°, while in Assam it has equalled 2·7°. This defect has been most largely developed in the day or maximum temperatures, which at such stations as Berhampore, Burdwan, Krishnagarh, Naya Dumka, Purnea, Ranchi, etc., have been from 8° to 10° below the normal; while, on the other hand, at a few stations the night or minimum temperatures have been in slight excess of the normal.

3. Humidity has been in large excess of the normal at all except a few of the south-western stations, the variation in some cases exceeding 20 per cent. Cloud proportion for the month has also been very largely in excess of the normal, the amount of cloud in many cases being about twice as great as is usual in February.

4. Winds have been north-westerly and northerly for the greater part of the month, and have hence been rather unusual, for during February southerly winds usually commence at the southern stations, but this has not been the case in the present year.

5. Weather has been of a most unusual character from the large number of barometric depressions and disturbances which have advanced from North-Western India through the province and which have also been of a very influential character. Thus one depression appeared in North-Western India on February 4th, and passed through Bengal from the 7th to the 9th, giving very unsettled weather. Another storm or disturbance advanced from North-Western India on the 12th, reaching and affecting Bengal from the 13th to the 15th. Another depression advanced from Central India on the 16th, and affected Bengal from the 17th to the 20th, and a fourth disturbance coming from North-Western India on the 21st, caused disturbed weather and rain in Bengal from the 23rd to the 25th. Hence for a large part of the month weather was quite unusual with rather heavily-clouded skies and rain, and indeed almost the reverse of the ordinary north-east monsoon weather.

6. Owing to the large number and influential nature of the disturbances which have affected the province, rainfall in February has been very abundant, the falls averaging nearly five inches in South-West Bengal, about four inches in Chota Nagpur, about three inches in Orissa, East Bengal and South Bihar, about two inches in North Bengal, and an inch and-a-half in North Bihar. These amounts generally equal from three to six times as much as usual. The number of rainy days in February has also generally been about four times as great as in ordinary years.

Meteorology of the month.—The month of January in Bengal had been decidedly more disturbed than usual, and there had been no less than five periods of disturbed weather, owing to the passage of barometric depressions from North-Western India either towards or through Bengal. One of these depressions had passed through the province at the close of the month and had disappeared from about January the 30th, and from the 1st of February weather was again fine and settled in Bengal, and the usual cold wave had established itself in the rear of the depression. Thus from the commencement of the month the cold weather conditions were strongly established in Bengal, and these continued up till the 6th or 7th instant without material change. A barometric depression had, however, entered North-Western India on the 4th, and a secondary depression was developed over the North-West Himalayas, and both of these advanced steadily in an easterly direction towards Bengal. On the 7th the two depressions had apparently joined together, and a large shallow depression covered Bengal and the neighbouring parts of the Central Provinces, when the ordinary cold season conditions were reversed, the sky became overcast, temperature was in excess of the normal by from 1° to 4°, and rain became general over Bihar, North Bengal, Chota Nagpur, and South-West Bengal. On the 8th the depression had passed over the Bay, and was some little distance to the south of the Sundarbans, and hence weather over Bengal continued very disturbed, and general rain was reported over the whole province. On the 9th the depression had either passed on in an easterly direction over Burma, or had perhaps filled up: the wave of cold air following in the rear of the depression flowed over Bengal, and winds became northerly and north-westerly. Hence from the 10th instant the sky became cloudless and rainfall ceased. Temperature on the 10th became from 3° to 6° below the normal, while humidity was also low, and hence the cold season conditions again became strongly pronounced.

From this date up till the 13th, the meteorological changes of Bengal were again of little importance, but on the 12th another barometric depression appeared over North-Western and Western India, which travelled rapidly in an easterly direction, and on

the 13th a shallow low pressure area existed over the Central Provinces and the west of Bengal, while a secondary depression had appeared over the Punjab. Conditions on the 13th, therefore, again changed in Bengal, temperature rose in front of the depression by 3° and 4,° the skies clouded over and rain commenced in the west and south of the province. On the 14th the depression had reached Orissa and the north-west of the Bay, where it was accompanied by a distinct cyclonic circulation of winds, and fairly general rain set in over almost the whole province. On the 15th the depression had apparently filled up or passed away in an easterly direction, and fine cool weather with little or no rain again set in for a day or two. On the 16th. however, another shallow depression had formed over the central parts of India, and moving in an easterly or south-easterly direction it rather largely affected Bengal on the 17th instant, when it again produced fairly general rain in Bihar and North Bengal. On the 18th the low pressure area had again moved in an easterly and south-easterly direction, and was affecting the south-eastern parts of Bengal and Orissa, and fairly general rain was received in South-West, East and North Bengal and Chota Nagpur. On the 19th the depression continued to affect the weather in Bengal, but on the 20th it had apparently passed over the Bay, and from the 19th to the 20th weather was very disturbed in Bengal, and rain had again fallen at many stations, in several cases accompanied by local storms and sometimes with hail. On the 21st the area of low pressure in the Bay had disappeared, and weather again became fine in Bengal, the sky cleared, and temperature fell, while rainfall almost ceased. On this date, however, a fresh barometric depression entered North-Western India, advancing in an easterly direction, and on the 22nd one barometric depression was over the Central Provinces, while a second large depression existed over the Punjab. On the 23rd the depression from the Central Provinces had reached Orissa, that in the Punjab had passed into the Himalayas, and a new depression had advanced from the westward into North-Western India. Hence again conditions became very disturbed in Bengal, and on the 23rd heavy rain was reported at many stations. The depression was still over Orissa on the 24th, but on the 25th it began to move away in a south-easterly direction, and on the 26th it had apparently passed away into the Bay and had ceased to affect Bengal. Hence again from the 23rd to the 25th conditions continued in a very disturbed state, and fairly general rain was received up to the 26th. In the rear of the depression, as usual, a wave of very cool air advanced over the province from the 26th, the sky cleared rapidly, and rainfall ceased, while a steady dry north westerly wind set in, which continued up to the close of the month, giving again very strongly pronounced cold weather conditions, which indeed were so marked that for the 24 hours from the 27th to the 28th of February, the mean temperature of the greater part of the province was from 10° to 12° below the normal.

Pressure.—At the beginning of the month the general pressure was nearly normal, and this continued to be the case up till about the 18th. For the week ending the 25th, however, the mean pressure had become very distinctly in excess of the normal, the excess equalling nearly 0·04". For the last few days of the month, however, pressure became in rather large excess of the normal, the excess equalling from a tenth to nearly a sixth of an inch. Hence the mean pressure for the month has been very distinctly in excess of the normal, the excess usually ranging from 0·02" to 0·04." Comparatively small excess pressures are shown in Orissa, South-East Bengal and Assam, and at Gopalpur, False Point, Chittagong, and Sibsagar the excess is not more than a hundredth of an inch. On the other hand, stations like Krishnagarh, Rampur Boalia, Bhagalpur, Arrah, and Chapra report excess pressures between 0·04" and 0·05".

Temperature.—The mean temperature of the province for the first week in February was 3·3° below the normal. The defect for the second week was also large, and equalled 2·8,° while in the third week it only averaged 1·8°. From this time till the end of the month the variation rapidly increased and became more than 4° in defect, and on the last day of the month the general temperature was about 10° to 11° below the normal of the day. Hence the mean temperature for the whole month has been largely in defect, and for the whole province the mean shows a temperature 4·1° lower than usual, while in South-West Bengal and Chota Nagpur the defects have averaged between 5° and 6°.

The following table shows generally the variation of the mean temperature from the normal, week by week, at nine typical stations in different divisions of the province, and from it the unusually large defect in the day or maximum temperatures will be seen, for in the week ending the 25th the day temperatures at most stations averaged about 10° below the normal:—

Stations.	Week ending 4th February 1893.			Week ending 11th February 1893.			Week ending 18th February 1893.			Week ending 25th February 1893.		
	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.
Cuttack	−6·2	−1·4	−3·7	−6 8	−1·7	−4·2	−6 7	+2·0	−2·4	−7·4	+2·2	−2·6
Calcutta	−4·7	−4·4	−4·6	−5·2	−3·8	−4·5	−5·6	−0·5	−3·0	−0·7	−2 8	−6·3
Dacca	−5·7	−4·9	−5·3	−6·9	−3·4	−5·2	−6·1	−0·7	−3·4	−10·4	−1·3	−5·9
Burdwan	−5·1	−4·1	−4·6	−5 9	−3·2	−4·4	−7·5	+1·5	−3·0	−14·1	−0·1	−7·1
Patna	−4·5	−4·3	−4·4	−5·0	−1·7	−3·5	−5·4	+0·2	−2·7	−11·7	−0·9	−6·3
Gaya	−5·2	−4·4	−4·8	−5·8	−4·5	−5·1	−7·1	−5·0	−6·1	−11·2	−2·9	−7·2
Purnea	−5·1	−3·4	−4·3	−5·5	−2·3	−4·0	−6·3	−1·3	−3·8	−11·4	+0·9	−5·2
Hazaribagh	−4·6	−5 4	−4·9	−5·9	−5·1	−5·5	−5·6	−1·7	−3·7	−10·4	−4·0	−7·1
Darjeeling	−5·8	−4·6	−5·2	−4·7	−1·3	−3·0	−3·6	−1·6	−2 7	−4·8	−3·8	−4·0

Rainfall.—The largest falls have been in South-West Bengal, which has received an average amount of about fivo inches, or nearly five times the normal fall for the month. In Chota Nagpur the fall has equalled about six inches, or six times as much as the normal. In East Bengal an average amount of three inches has been recorded, or about thr e times as much as usual. Orissa has also received nearly three inches, or three times as much as in normal years. South Bihar has received between two and-a-half and three inches, or again six times as large a fall as usual; while North Bengal has received a little more than two inches, or about four times as much as in normal years. The smallest fall of all has been in North Bihar with about an inch and-a-half, or rather less than four times the ordinary fall. The number of rainy days in February was also exceedingly large, and averaged between five and six days over the whole province, while the normal amount is one or two days only.

Notwithstanding the general abundance of the rainfall in February, the falls in the extreme south-east corner of the province have been scanty, and the fails in the Chittagong district have only averaged about half an inch, and have been less than the normal amount. Comparatively small falls were also received in Rangpurand Kuch Bihar.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the month of February 1893 :—

Meteorological Divisions.	Temperature.						Rainfall.							
	Highest observed during month.	Lowest observed during month.	Averages for month.			Average mean of month above or below normal mean of month.	Of month.			Rainy days.			Since 16th Oct. 1892.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in month.	Normal average number in month.	Variation.	Average.	Normal average.
Orissa	90·7	49·4	79·7	64·6	72·1	−2·6	2·81	0·91	+1·90	4·73	1·47	+3·26	10 92	5 66
South-West Bengal	85·3	41·3	74·0	55·8	64·9	−5·2	4·87	1·05	+3·82	6 52	1·69	+4·83	10 97	3·76
North Bengal	79·3	38·3	71·8	50·6	61 2	−3·1	2·15	0·57	+1·58	4·40	1·21	+3·19	3·47	2·80
East Bengal	83·7	40·9	74·9	54·5	64 8	−3 1	3·00	1·03	+1·97	5·56	1·67	+3·89	11·41	4 79
North Bihar	78·3	39·0	70·0	49·9	59 9	−3 9	1·57	0·44	+1·13	4·28	1·10	+3·18	2·75	2·19
South Bihar	84 0	40·7	71·1	50·7	61·2	−4·7	2·65	0·44	+2·21	6·05	1·12	+4·93	4·08	2·41
Chota Nagpur	80 7	41·1	69·7	50·5	60·1	−5·9	3·92	0·67	+3·25	7·18	1·33	+5·85	8·08	2·75
Assam	80·2	43·4	71·9	53·3	62 5	−2 7								

METEOROLOGICAL OFFICE, BENGAL ;
The 21*st March* 1893.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 12th to 18th March 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Temperature. Maximum.	Temperature. Range.	Temperature. Minimum.	Hygrometry. Mean wet bulb.	Hygrometry. Vapour tension.	Hygrometry. Dew point.	Hygrometry. Humidity.	Wind. Prevailing direction.	Wind. Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
March	12th	146 5	8·2	29·979	74·1	84·0	18·8	65·2	68·1	0·610	64·6	74	Variable and calm	33	0·29	Partially cloudy, o, p, t, <.
„	13th	100·9	Nil	·967	72·0	75·9	8·0	67·9	69·5	·692	68·2	88	SSW, SW and calm	44	Not measureable.	Cloudy, o, g, d.
„	14th	118·6	„	·915	72·5	79·1	12·5	66·6	68·8	·656	66·7	83	W and calm ...	19	0·01	Cloudy, o, d.
„	15th	127·5	1·0	·885	72·1	79·4	14·4	65·0	68·4	·649	66·4	83	ESE, variable and calm.	49	Nil	Chiefly cloudy, ▲.
„	16th	138·5	9·4	·846	72·4	83·2	20·1	63·1	66·6	·577	63·0	75	WNW and calm...	32	„	Partially cloudy, o, ▲, ≡.
„	17th	145 3	10·3	·793	75·7	86·6	20·6	66·0	70·2	·669	67·2	77	SSW and calm ...	85	„	Chiefly clear, ▲, ≡.
„	18th	143·7	10·2	·740	79·2	89·4	19·9	69·5	73·3	·741	70·2	74	SW and SSW ...	120	„	Chiefly clear, ▲.

	Inches.
The mean pressure of the seven days	29·875
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	29·831
	Hours.
The total number of hours of bright sunshine	39·1
The maximum possible number of hours of sunshine	82·7
	°
The mean temperature of the seven days	74 0
The average temperature of the corresponding period for 24 years, S.-G.'s Office	80·3
The extreme variation of temperature	26·3
The maximum temperature	89·4
	Miles.
The highest velocity of the wind in one hour	10
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	79
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	66
	Inches.
The total fall of rain from 12th to 18th March 1893	0·30
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·11
The total fall from 1st January to 18th March 1893	5·54
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	2·39

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; d, drizzling rain; p, passing temporary showers; t, thunder; <, lightning; ▲, dew; ≡, fog.

A. Pedler,
For Meteorological Reporter to the Govt. of India.

Meteorological Office, Govt. of India;
Calcutta, the 13th March 1893.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS. Air Pressure. Mean barometric height, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. Prevailing direction.	Mean wind velocity.	Temperature. Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa	Puri	Puri .	29·953	29·888	—	Calm	195	84·7	12th Mar.	68·1	14,16th Mar.	81·7	70·5	76·1
		Gopalpore	29·946	29·907	+·018	NNW	223	84·7	12th ,,	65·9	13,17th ,,	81·9	67·8	74·9
		False Point .	29·935	29·898	—·002	Wly	206	83·9	18th ,,	63·0	16th ,,	80·8	66·6	73·7
	Cuttack	Cuttack ...	29·876	29·901	+·012	Calm	43	92·6	18th ,,	65·3	16th ,,	84·2	67·7	76·0
	Balasore	Balasore ...	29·889	29·893	—·002	SWly	100	88·4	18th ,,	63·7	16, 17th ,,	81·3	66·4	73·9
South-West Bengal.	Midnapore	Midnapore .	29·807	29·903	+·007	Sly	207	91·3	18th ,,	63·2	16th ,,	84·0	65·8	74·9
	24-Parganas	Calcutta	29·927	29·894	+·065	Calm	45	84·2	13th ,,	63·2	16th ,,	81·1	66·0	73·7
		Saugor Island	29·917	29·887	—·005	SWly	237	84·2	18th ,,	64·9	12th ,,	79·6	70·0	74·8
	Howrah													
	Hooghly													
	Nadia	Krishnagar	29·900	29·897	+·028	Ely	92	87·3	18th ,,	62·4	17th ,,	81·3	65·3	73·3
	Khulna													
	Jessore	Jessore ..	29·917	29·898	—·009	Calm	54	86·5	18th ,,	62·5	16th ,,	81·6	65·8	73·7
	Burdwan ...	Burdwan ..	29·849	29·898	+·009	Calm	30	87·3	18th ,,	63·4	16th ,,	80·9	66·2	73·6
		Raniganj ...	29·607	29·914	+·005	Calm	12	89·7	18th ,,	61·0	12,16th ,,	81·9	65·6	73·7
	Bankura	Bankura ..	29·620	29·878	—·003	Calm	56	91·1	18th ,,	63·7	16th ,,	82·2	65·3	73·8
	Birbhum													
	Murshidabad	Berhampore...	29·881	29·898	+·015	Variable	65	87·1	18th ,,	62·2	16th ,,	80·9	64·7	72·8
North Bengal.	Pabna	Sirajganj ..	29·911	29·908	+·027	Variable	35	83·6	18th ,,	60·1	17th ,,	78·2	62·7	70·5
	Bogra	Bogra ..	29·901	29·917	+·054	Ely	53	84·2	18th ,,	59·2	17th ,,	81·1	61·9	71·5
	Rajshahi	Rampur Boalia.	29·873	29·894	+·025	SE	52	86·3	18th ,,	59·9	16th ,,	80·3	62·7	71·5
	Malda	Malda ..	29·869	29·903	—	Sly	78	87·8	18th ,,	59·4	17th ,,	82·1	61·7	71·9
	Dinajpur	Dinajpur ...	29·831	29·907	+·002	Variable	77	82·6	15th ,,	58·3	15th ,,	80·2	60·9	70·6
	Rangpur	Rangpur ..	29·849	29·921	+·026	Variable	79*	81·0	11th ,,	56·6	15th ,,	79·3	59·6	69·4
	Jalpaiguri	Jalpaiguri	29·691	29·939	+·040	NE	48	80·4	14th ,,	55·6	13th ,,	77·7	58·7	68·2
	Kuch Bihar													
	Darjeeling	Darjeeling ...	22·953	—	—·038	Ely	142	53·1	14th ,,	31·7	15th ,,	50·9	37·0	44·0
	Sikkim	Gnatong* ...	19·149	—	—	ESE	77	42·2	18th ,,	6·3	13th ,,	36·9	11·1	24·1
East Bengal.	Chittagong	Chittagong ...	29·882	29·919	—·009	Ely	65	89·2	13th ,,	61·1	17th ,,	84·9	65·2	75·1
	Chittagong Hill Tracts	Demagiri ...	Observations not received.											
	Backergunge	Barisal ..	29·941	29·900	+·012	Calm	51	86·3	18th ,,	60·1	12th ,,	82·5	64·7	73·6
	Noakhali	Noakhali ...	29·935	29·926	+·019	Wly	79	85·5	13th ,,	60·0	17th ,,	81·4	64·5	72·9
	Faridpur	Faridpur* ...	29·926	29·922	+·017	Calm	57	85·5	18th ,,	60·0	17, 18th ,,	80·4	64·1	72·3
	Dacca	Dacca ...	29·930	29·901	+·005	Variable	93	86·1	13th ,,	62·3	16, 17th ,,	81·0	64·1	72·6
	Tippera	Comilla ..	29·937	29·921	+·020	E	57	87·4	13th ,,	58·9	17th ,,	83·6	64·2	73·9
	Mymensingh	Mymensingh	29·903	29·919	+·013	Variable	91	81·2	13th ,,	59·6	17th ,,	79·6	63·7	71·6
North Bihar.	Purnea	Purnea ..	29·819	29·903	+·019	Calm	41	85·2	15,18th ,,	57·3	15th ,,	81·3	60·0	70·7
	Bhagalpur	Bhagalpur .	29·767	29·883	+·016	Calm	10	87·2	18th ,,	60·0	17th ,,	82·1	62·1	72·2
	Darbhanga	Darbhanga ...	29·780	29·907	+·023	Variable	76	84·7	14th ,,	59·5	15, 16th ,,	81·9	59·9	70·9
	Muzaffarpur	Muzaffarpur...	29·763	29·901	—	ESE	62	85·7	18th ,,	56·3	15th ,,	83·1	59·2	70·6
	Champaran	Motihari ..	29·709	29·899	+·033	Ely	105	85·2	18th ,,	53·9	14th ,,	81·8	57·0	69·4
	Saran	Chapra .	29·751	29·892	+·033	Ely	81	88·8	18th ,,	57·6	10th ,,	83·6	60·3	72·0
South Bihar.	Shahabad	Dehri ..	29·559	29·875	—·019	Variable	22	91·3	18th ,,	61·6	15th ,,	84·1	62·6	73·4
		Buxar ..	29·690	29·892	+·004	Ely	86	88·5	18th ,,	58·4	10th ,,	83·7	61·0	72·4
		Arrah ..	29·742	29·890	+·023	Variable	63	90·3	18th ,,	57·8	16th ,,	83·9	60·5	72·2
	Gaya	Gaya ...	29·547	29·889	—·006	Variable	119	91·2	18th ,,	59·7	15, 17th ,,	84·4	62·5	73·6
	Patna	Bankipore ...	29·758	29·899	+·011	Variable	91	88·2	18th ,,	59·3	16th ,,	83·3	60·7	71·9
	Monghyr													
	Sonthal Parganas ...	Naya Dumka	29·436	29·899	+·021	Ely	33	87·6	18th ,,	62·5	15, 16, 17th	80·4	63·6	72·0
Chota Nagpur.	Hazaribagh	Hazaribagh ...	27·891	29·884	—·022	SWly	141	86·4	18th ,,	55·2	16th ,,	77·9	59·2	68·6
	Lohardaga	Ranchi ...	27·769	29·877	—·020	Wly	125	85·5	18th ,,	56·1	14th ,,	76·3	58·6	67·5
	Palamau													
	Singhbhum	Chaibassa ...	29·168	29·895	+·015	SWly	33	89·2	18th ,,	61·7	14th ,,	82·2	64·0	73·1
	Manbhum													

* Mean of 6 days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period. The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01. rainfall: the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station district, *i.e.* the total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one or

for the week ending Saturday, the 18th of March 1893.

					DISTRICT OBSERVATIONS.										
					Of week.				Rainfall.						
									Since 1st of month.			Since 10th October 1892.			
Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.	District.
—	73·6	83	3·1	0·31		0·16		0·28		0·40			7·76		Puri.
—4·4	71·9	86	3·1	1·41											
—6·5	74·1	85	6·0	0·29											
—9·0	72·6	75	4·4	1·03		0·25		0·47		0·70			5·84		Cuttack.
—6·6	71·2	83	3·1	0·55		0·29		0·45		0·71			4·93		Balasore.
—6·4	71·3	81	3·1	0·25	0·45	0·18	1·50	0·28	0·56	0·73	—0·17	13·21	5·18	+8·03	Midnapore.
—6·5	71·1	90	6·0	0·30	0·51	0·18	1·14	0·35	0·78	0·59	+0·19	13·90	5·20	+8·70	24-Parganas.
—6·7	73·6	89	5·9	0·48											
					0·26	0·21	1·00	0·47	0·57	0·58	—0·01	9·35	4·38	+4·97	Howrah.
					0·87	0·15	1·67	0·28	1·07	0·57	+0·50	14·60	3·98	+10·62	Hooghly.
—5·3	70·3	86	6·1	0·20	0·21	0·25	1·00	0·31	0·86	0·72	+0·14	10·83	3·97	+6·86	Nadia.
					1·46	0·34	1·67	0·63	1·49	0·78	+0·71	13·94	5·23	+8·71	Khulna.
—6·9	70·5	92	7·4	0·44	0·56	0·40	1·20	0·57	0·84	0·96	—0·12	14·80	4·80	+10·00	Jessore.
—7·7	70·1	82	6·1	0·76	0·38	0·05	1·00	0·14	1·00	0·45	+0·55	10·82	3·61	+7·21	Burdwan.
—7·0	69·0	88	1·6	0·15											
—7·3	70·0	78	3·1	0·08	0·27	0·05	1·00	0·23	0·81	0·54	+0·27	10·98	3·38	+7·60	Bankura.
					0·52	0·02	1·00	0·08	0·93	0·29	+0·64	9·84	2·67	+7·17	Birbhum.
—6·3	67·3	93	6·3	0·10	0·49	0·07	0·83	0·16	0·81	0·36	+0·45	7·30	2·57	+4·73	Murshidabad.
—5·3	67·3	89	6·0	0·44	0·50	0·19	1·50	0·31	0·70	0·66	+0·04	6·87	3·91	+2·96	Pabna.
—3·9	67·3	83	3·6	0·30	0·65	0·20	1·00	0·28	1·09	0·39	+0·70	5·19	2·83	+2·86	Bogra.
—4·4	69·1	85	5·0	0·45	0·67	0·20	1·33	0·20	0·83	0·38	+0·45	5·78	2·87	+2·91	Rajshahi.
—	69·4	80	1·7	0·27	0·14	0·12	0·50	0·16	0·18	0·28	—0·10	3·83	2·59	+1·24	Malda.
—3·5	65·9	84	3·4	0·07	0·28	0·14	0·60	0·14	0·58	0·28	+0·30	3·17	2·11	+1·06	Dinajpur.
—3·7	66·8	79	1·3	0·28	0·42	0·31	1·25	0·47	0·71	0·76	—0·05	3·34	3·02	+0·32	Rangpur.
—3·5	64·6	82	5·1	1·68	1·26	0·59	2·00	0·53	1·68	0·99	+0·69	4·44	4·42	+0·02	Jalpaiguri.
					1·56	0·51	2·25	0·70	1·68	0·89	+0·79	4·01	2·94	+1·07	Kuch Behar.
—5·4	42·8	88	6·7	1·26	0·75	0·19	2·50	0·59	1·23	1·12	+0·11	7·20	5·00	+2·20	Darjeeling.
—	30·6	73	3·1	2·43											Sikkim.
—1·7	71·2	85	4·7	0·08	0·04	0·26	0·00	0·34	0·04	0·63	—0·59	13·48	7·64	+5·84	Chittagong.
					0·14	0·31	0·00	0·80	0·14	1·16	—1·02	10·24	7·84	+2·40	Chittagong Hill Tracts.
—4·4	70·0	92	7·1	0·20	0·44	0·33	1·25	0·56	0·44	0·77	—0·33	12·17	6·52	+5·65	Backergunge.
—3·8	71·7	86	2·7	0·08	0·25	0·31	1·50	0·71	0·25	1·24	—0·99	18·22	8·75	+9·47	Noakhali.
—6·0	68·4	95	5·4	0·26	0·34	0·18	1·33	0·74	0·54	1·41	—0·87	12·65	5·07	+7·58	Faridpur.
—6·6	69·7	88	6·4	0·87	0·28	0·46	0·75	0·52	0·30	1·39	—1·09	13·21	5·60	+7·61	Dacca.
—2·8	69·3	84	6·1	0·19	0·27	0·96	1·25	0·89	0·27	2·34	—2·07	11·75	6·77	+4·98	Tippera.
—1·8	67·4	84	6·4	0·73	0·99	0·37	2·00	0·65	1·07	0·93	+0·14	7·32	4·41	+2·91	Mymensingh.
—4·1	64·5	88	2·1	0·01	0·99	0·08	1·33	0·17	0·99	0·30	+0·69	3·22	2·58	+0·64	Purnea.
—4·0	69·0	77	2·7	0·02	0·10	0·05	0·50	0·11	0·37	0·17	+0·20	3·87	2·25	+1·62	Bhagalpur.
—4·3	67·6	77	1·4	0·09	0·03	0·03	0·00	0·09	0·03	0·22	—0·19	2·73	2·16	+0·57	Darbhanga.
—	66·6	95	1·4	0·09	0·05	0·08	0·33	0·12	0·07	0·22	—0·15	2·76	2·36	+0·40	Muzaffarpur.
—3·8	66·6	75	0·6	0·07	0·06	0·03	0·00	0·09	0·07	0·24	—0·17	2·39	1·88	+0·51	Champaran.
—4·1	68·6	74	2·3	0·09	0·07	0·02	0·33	0·08	0·07	0·09	—0·02	2·68	2·24	+0·44	Saran.
—3·4	69·4	70	1·4	Nil											
—4·4	68·6	70	1·9	0·58	0·16	0·04	0·40	0·07	0·32	0·28	+0·04	3·27	2·83	+0·44	Shahabad.
—4·3	68·4	75	1·1	0·20											
—5·9	68·1	77	2·9	0·19	0·12	0·05	0·50	0·12	0·30	0·22	+0·08	4·20	2·43	+1·83	Gaya.
—4·9	70·9	67	1·7	Nil	0·04	0·05	0·25	0·09	0·10	0·18	—0·08	3·06	2·41	+0·65	Patna.
					0·02	0·05	0·00	0·12	0·08	0·16	—0·08	5·28	2·60	+2·68	Monghyr.
—6·4	69·3	81	1·9	0·49	0·43	0·09	1·17	0·06	0·60	0·30	+0·30	5·94	2·39	+3·55	Sonthal Parganas.
—7·1	67·3	65	3·0	1·07		0·08		0·17		0·89			3·40		Hazaribagh.
—7·9	67·4	75	3·1	0·74	0·58	0·15	1·00	0·15	1·18	0·85	+0·33	13·05	4·17	+8·88	Lohardaga.
					0·62	0·12	2·00	0·26	0·87	0·45	+0·42	4·35	3·20	+1·15	Palamau.
—8·0	69·6	80	4·1	0·38	0·38	0·13	2·00	0·25	1·62	0·69	+0·93	14·16	4·23	+9·94	Singhbhum.
					0·70	0·07	1·50	0·14	1·21	0·50	+0·71	10·08	3·39	+0·78	Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 18th of March 1893.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 12th.	Monday, 13th.	Tuesday, 14th.	Wednesday, 15th.	Thursday, 16th.	Friday, 17th.	Saturday, 18th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th October 1892.	Average rainfall from 16th October to date.
ORISSA	Puri	Puri	...	0·18	0·13	...	...	...	...	2	0·31	0·04	0·67	0·16	15·99	8·31
		Khurda	...	1·85	0·13	...						0·28		0·55		6·10
		Banpur	...	0·55	0·07	...	0·28					0·06		0·36		7·32
		False Point	...	0·21	0·03	...	0·05	...	...	1	0·29	0·25	0·46	0·53	13·59	9·28
		Gop	...	0·10								?		?		?
		Satpara	...	0·40	0·05	...	0·05					?		?		?
		Pipli	...	0·13	0·10	...	0·85	...	...			?		?		?
	Cuttack	Jagatsingpore	...	0·15	·4	...	0·35					0·15		0·43		5·38
		Banki	...	0·39	0·15							0·14		0·89		5·76
		Cuttack										0·36		0·90		6·12
		Kendrapara	...	1·19	0·19	...	0·32	...	...	3	1·70	0·23	2·56	0·57	11·74	5·95
		Jajpur	...	0·27	0·35	...	0·07	...	...	2	0·69	0·35	1·57	0·70	8·40	5·87
		Dharmsala	...	0·10	0·28							?		?		?
		Salipore	...	0·48	0·24							?		?		?
		Pal Lahara										?		?		?
	Balasore	*Akhyapada*	...	1·02	0·23	...	0·30	...	...	3	1·55	?	1·94	?	7·77	?
		Chandbali	...	0·16	0·24							0·34		0·65		6·10
		Bhadrak	...	0·36	0·27	...	0·30	...	...	3	0·93	0·38	1·79	0·70	13·97	5·35
		Soro	...	0·30	0·20	...	0·10	...	...	3	0·60	0·34	0·98	1·04	10·76	4·93
		Balasore	...	0·24	0·22	...	0·14	...	...	3	0·60	0·24	0·74	0·78	15·64	6·22
		Jellasore										0·22		0·60		3·66
		Baripodah	...	0·18	...	...	...	...	...	1	0·18	0·20	0·36	0·50	12·97	3·34
SOUTH-WEST BENGAL.	Midnapore	Contai	...	0·09	0·17	...	0·06	...	...	1	0·32	0·16	0·41	0·43	14·65	6·95
		Tamluk	...	0·25	..	...	0·04	...	...	1	0·29	0·15	0·42	0·68	10·03	5·43
		Midnapore	...	0·21	0·07	...	...	...	...	1	0·28	0·11	0·43	0·68	13·11	4·83
		Ghatal	...	0·18	0·13	...	0·62	...	...	3	0·93	0·29	1·01	1·14	15·08	3·40
		Kukrahaty	...	0·97	0·05	...		...	...	1	1·02	?	1·10	?	10·85	?
		Garhbeta	...	0·15	0·05	...	0·08	...	...	1	0·28	?	0·98	?	9·31	?
		Panskura	...	0·11	0·03	...	0·03	...	...	1	0·17	?	0·17	?	?	?
	24-Parganas	Saugor Island	...	0·11	0·37	...	...	...	...	2	0·48	0·03	0·48	0·41	18·31	6·95
		Diamond Harbour	...	1·30	...	...	...	...	...	1	1·30	0·17	1·80	0·53	15·22	5·73
		Canning Town	...	0·32	0·16	...	...	...	...	2	0·48	?	1·28	?	15·83	
		Alipore (Observatory.)	...	0·29	0·01	...	...	...	...	1	0·30	0·12	0·54	0·72	10·39	5·57
		Barrackpore	...	...	0·25	...	...	...	...	1	0·25	0·17	0·45	0·59	15·43	4·47
		Dum-Dum	...	0·38	...	...	...	...	...	1	0·38	0·15	0·63	0·51	10·88	4·54
		Barasat	...	0·30	...	...	...	...	...	1	0·30	0·16	0·91	0·50	13·13	4·64
		Basirhat	...	0·54	...	...	...	...	...	1	0·54	0·41	0·66	0·34	13·87	4·55
	Howrah	Howrah	...	0·22	...	...	...	...	...	1	0·22	0·14	0·32	0·53	8·31	4·72
		Mohesreka	...	0·28	0·02	...	...	...	...	1	0·30	0·28	0·82	0·63	10·65	4·01
		Ulubaria	...	0·30	...	...	...	...	...	1	0·30	?	0·46	?	8·29	?
	Hooghly	Serampore	...	0·21	0·06	...	...	...	...	1	0·27	0·15	0·46	0·56	16·32	3·93
		Hooghly	...	0·10	1·75	...	..	...	...	2	1·85	0·17	2·14	0·55	16·35	4·14
		Jahanabad	...	0·11	0·04	...	0·35	...	...	2	0·50	0·12	0·63	0·58	11·16	3·89
	Nadia	Ranaghat	...	0·27	0·14	...	...	...	...	2	0·41	0·27	0·74	0·76	12·50	4·13
		Krishnagar	...	0·08	0·12	...	..	...	...	1	0·20	0·22	1·44	0·58	14·23	3·23
		Chuadanga	...	0·04	0·11	...	...	...	...	1	0·15	0·21	0·50	0·73	?	4·22
		Meherpore	...	0·07	0·03	...	0·04	...	...	Nil	0·14	0·25	0·69	0·72	9·71	3·91
		Kushtia	...	0·03	...	0·10	0·03	...	...	1	0·16	0·32	0·33	0·88	9·06	4·34
	Khulna	Satkhira	...	0·30	1·60	...	...	...	...	2	1·90	0·41	2·00	0·72	13·11	4·95
		Bagerhat	...	0·04	1·02	...	...	...	...	1	1·06	0·35	1·06	0·83	14·01	5·26
		Khulna	...	0·23	1·20	...	...	...	...	2	1·43	0·27	1·43	0·80	14·73	5·45
		Nakipur	...	0·20	...	...	...	0·32	...	2	0·72	?	0·72	?	9·49	
		Rampal	...	...	0·30	...	...	...	...	1	0·30	?	0·30	?	11·02	?
	Jessore	Narail	...	0·24	0·46	...	...	...	...	2	0·70	0·59	0·73	1·05	13·28	5·42
		Jessore	...	0·11	0·33	...	...	...	...	2	0·44	0·53	0·52	1·15	18·88	5·36
		Jhenidah	...	0·04	0·13	...	...	...	...	1	0·17	0·28	0·48	0·76	14·77	4·75
		Magura	...	0·06	0·05	...	...	...	...	Nil	0·11	0·34	0·96	1·17	12·90	4·23
		Baugaon	...	0·07	1·29	...	...	...	...	1	1·36	0·27	1·48	0·68	14·13	4·39
	Burdwan	Kalna	...	0·04	0·16	...	...	..	...	1	0·20	0·04	0·64	0·63	13·28	3·94
		Burdwan	...	0·34	0·09	...	0·32	0·01	...	2	0·76	0·09	1·92	0·52	13·30	3·66
		Katwa	...	0·06	...	...	0·36	...	...	1	0·42	0·05	1·08	0·35	9·68	3·69
		Raniganj	0·05	0·08	...	0·02	...	...	...	Nil	0·15	0·02	0·35	0·26	6·98	3·10
		Mankur	...	0·06	...	...	...	...	...	Nil	0·06	?	0·81	?	7·81	?
	Bankura	Bankura	0·02	0·06	...	...	.	...	...	Nil	0·08	0·05	0·39	0·72	10·42	3·93
		Vishnupur	...	0·25	...	...	...	...	...	1	0·25	0·17	0·70	0·63	11·93	3·47
		Maliara	0·03	0·15	...	0·11	...	...	...	2	0·29	0·09	1·27	0·38	7·88	2·52
		Khatra	...	...	...	...	...	...	...	Nil	Nil	0·06	0·40	0·42	13·17	3·62
		Indas	...	0·46	...	...	...	...	...	1	0·46	?	2·14	?	12·65	?
		Kotalpur	...	...	...	...	...	...	...	Nil	Nil	?	1·62	?	11·28	?
		Onda	0·15	0·27	...	...	...	...	...	2	0·42	?	1·18	?	11·53	?
		Gangajalghati	...	0·68	...	0·82	...	...	...	2	1·50	?	1·94	?	8·69	?
		Raipur	...	...	...	...	...	...	...	Nil	Nil	?	1·64	?	16·41	?
		Sonamukhi	...	0·56	...	...	...	...	...	1	0·56	?	0·99	?	14·20	?
	Birbhum	Suri	0·07	0·01	0·01	0·46	0·65	..	...	2	1·20	0·01	1·83	0·33	10·70	3·09
		Hetampore	0·07	0·03	0·01	0·01	..	...	...	Nil	0·12	0·03	0·42	0·14	10·67	2·19
		Rampur Hat	0·09	...	0·03	0·12	...	...	...	1	0·24	0·01	0·55	0·37	8·19	2·71
		Bolpur	...	0·11	..	...	...	...	...	1	0·11	?	1·39	?	9·49	?
		Murari	...	...	0·70	...	...	...	...	1	0·70	?	0·84	?	5·57	?
	Murshidabad	Kandi	0·04	...	...	0·06	...	...	...	Nil	0·10	0·05	0·52	0·31	9·89	2·73
		Berhampore	0·03	...	0·07	...	...	...	...	Nil	0·10	0·03	0·52	0·45	6·89	3·12
		Lalbagh	...	...	0·30	0·03	...	...	...	1	0·33	0·11	0·70	0·38	7·64	2·20
		Azimganj	0·04	...	1·30	0·20	...	...	...	2	1·54	0·01	1·83	0·33	7·25	2·64
		Jangipur	0·05	...	0·21	...	0·02	...	...	1	0·23	0·05	0·37	0·29	5·50	2·23
		Lalgola	...	...	...	0·60	...	...	...	1	0·60	0·12	0·95	0·37	6·82	2·44
		Akhriganj	...	...	1·48	0·07	...	...	...	1	1·55	?	1·76	?	6·99	?
		Patkabari	...	...	...	...	...	..	...	Nil	Nil	?	0·80	?	7·20	?
NORTH BENGAL	Pabna	Pabna	...	...	...	...	0·56	...	...	1	0·56	0·19	0·77	0·89	8·42	3·88
		Sirajganj	...	...	0·18	0·26	...	...	...	2	0·44	0·19	0·63	0·44	5·30	3·89
	Bogra	Sherepore	...	...	...	0·34	...	...	...	1	0·34	0·40	0·51	0·65	5·72	3·51
		Nowkhilla	...	...	0·02	...	...	...	...	Nil	0·02	0·14	0·19	0·27	5·03	2·92
		Bogra	...	...	0·30	...	...	...	...	1	0·30	0·14	0·42	0·26	4·63	3·03
		Panchbibi	...	...	1·26	...	0·70	...	...	2	1·96	0·12	3·25	0·36	5·39	1·81
	Rajshahi	Boalia	...	...	0·28	0·16	...	...	...	2	0·44	0·06	0·62	0·20	6·17	2·68
		Nator	...	...	0·08	1·30	0·12	...	...	3	1·50	0·12	1·69	0·35	7·45	3·26
		Naugaon	...	...	0·07	...	...	...	...	Nil	0·07	0·42	0·17	0·51	3·77	2·65
		Lalpore	...	...	0·18	0·80	1·00	...	...	3	1·98	?	2·18	?	7·24	?
		Manda					1·3					?		?		?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 18th of March 1893—contd.

Meteorological Division.	District.	Station.	Rainfall.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
			Sunday, 12th	Monday, 13th	Tuesday, 14th	Wednesday, 15th	Thursday, 16th	Friday, 17th	Saturday, 18th							
North Bengal—concld.	Malda ...	Malda ...	0·01	...	0·24	0·01	0·01	...	...	1	0·27	0·18	0·30	0·36	4·87	2·94
		Chanchal ...	...	...	...	...	...	...	...	Nil	Nil	0·06	0·05	0·18	2·76	2·16
		Gajol ...	...	...	...	...	0·08	...	...	Nil	0·08	?	0·11	?	2·37	?
		Sibganj ...	...	...	0·24	...	...	...	...	1	0·24	?	0·32	?	5·78	?
	Dinajpur ...	Mohadebpore	...	...	0·19	...	...	...	...	1	0·19	0·10	0·34	0·17	3·51	1·69
		Churaman ...	0·02	...	...	0·03	...	...	...	Nil	0·05	Nil	0·24	0·09	2·69	1·67
		Raiganj ...	...	...	...	...	...	...	...	Nil	Nil	0·14	0·55	0·30	3·26	1·82
		Dinajpur ...	0·07	...	...	...	...	...	...	Nil	0·07	0·28	0·29	0·53	2·24	3·61
		Balurghat ...	...	...	0·97	...	0·11	...	...	2	1·08	0·04	1·55	0·15	4·03	1·65
		Thakurgaon ...	0·09	...	...	...	0·40	...	...	1	0·49	?	0·94	?	2·41	?
	Rangpur ...	Bhawanigunge (*Gyabanda*)	...	...	...	...	0·16	...	...	1	0·16	0·31	0·49	0·65	2·11	3·14
		Rangpur ...	...	...	...	...	...	0·28	...	1	0·28	0·33	0·48	0·73	5·61	3·53
		Kurigaon ...	...	...	0·42	...	0·65	...	...	2	1·07	0·51	1·09	1·00	2·34	2·87
		Bagdogra (*Nilphamari*)	0·05	...	...	...	0·12	...	...	1	0·17	0·37	0·80	0·63	3·16	2·52
		Ulipore ...	...	...	...	0·31	0·45	...	...	2	0·76	?	0·76	?	1·82	?
	Jalpaiguri ...	Jalpaiguri ...	0·04	...	0·03	0·76	0·43	...	...	2	1·26	0·59	1·68	0·99	4·44	4·42
		Alipore Dooar	...	...	...	0·53	0·56	...	...	2	1·09	?	1·09	?	3·96	?
		Fallacotta ...	...	...	...	0·78	...	...	...	1	0·78	?	0·78	?	3·23	?
		Debiganj ...	0·05	...	...	...	0·70	...	...	1	0·75	?	0·85	?	2·90	?
		Bhagatpore (Nagrakatta)	0·32	...	...	0·10	0·17	...	...	3	0·59	?	1·13	?	9·96	?
	Kuch Bihar .	Dinhatta ...	0·08	...	...	1·86	0·11	...	...	2	2·05	0·50	2·19	0·89	4·04	3·01
		Kuch Bihar ...	0·18	...	...	1·48	0·84	...	...	3	2·50	0·52	2·50	1·00	5·06	2·98
		Mickliganj ...	0·11	...	...	0·19	0·51	...	...	2	0·71	0·23	1·01	0·58	3·51	2·75
		Mathabhanga	0·06	...	...	0·73	0·20	...	...	2	0·99	0·78	1·01	1·08	3·35	2·90
	Darjeeling ...	Buxa ...	0·20	...	...	0·20	0·11	...	...	3	0·51	0·74	0·58	1·76	16·04	7·36
		Siliguri ...	0·08	...	...	0·10	0·13	...	...	2	0·31	0·04	0·80	0·69	4·63	2·55
		Darjeeling ...	0·54	...	0·02	0·07	0·61	...	0·02	2	1·26	0·33	1·28	0·94	4·07	6·17
		Kalimpong ...	0·38	...	...	0·31	0·11	...	0·05	3	0·85	0·49	0·97	1·06	4·62	3·89
		Kurseong ...	0·35	...	0·08	0·22	0·33	...	...	3	0·98	?	1·48	?	6·12	?
East Bengal	Chittagong ..	Cox's Bazar ...	...	...	0·04	...	...	...	...	Nil	0·04	0·22	0·04	0·47	13·31	8·49
		Chittagong ...	...	...	0·04	...	...	...	...	Nil	0·04	0·29	0·04	0·78	13·62	6·70
		Kutubdia ...										?		?		?
		Satkanya ...										?		?		?
		Kodala ...	...	...	0·11	...	...	...	...	1	0·11	?	0·11	?	?	?
		Fenoa ...										?		?	?	?
		Mirsarai ...	...	...	0·14	...	...	...	...	1	0·14	?	0·14	?	?	?
		Chandpur ...										?		?	?	?
	Chittagong Hill Tracts.	Rangamati ...	...	...	0·08	...	...	...	0·06	Nil	0·14	0·31	0·14	1·16	10·24	7·84
		Bundarban ...	...	...	0·11							?		?		?
	Backergunge	Patuakhali ...	...	...	0·03	...	1·14	0·03	...	1	1·20	0·24	1·20	0·53	13·36	6·55
		Pirojpur ...	...	...	0·18	...	...	0·14	...	2	0·32	0·30	0·32	0·72	13·01	6·20
		Barisal ...	...	...	...	...	...	...	...	Nil	Nil	0·52	Nil	1·09	10·33	6·98
		Gournaddi ...	...	0·11	0·15	...	...	...	...	2	0·26	?	0·26	?	8·79	?
		Bhola ...	...	...	0·14	...	...	0·11	...	2	0·25	0·27	0·25	0·76	11·88	6·23
		Daulatkhan ...	...	...	...	...	...	0·20	...	1	0·20	?	0·20	?	14·74	?
		Bauphal ...	...	...	0·07	...	...	...	...	Nil	0·07	?	0·07	?	11·76	?
	Noakhali ...	Noakhali ...	...	0·02	0·06	...	...	...	...	Nil	0·08	0·36	0·08	1·41	18·64	7·91
		Fenny ...	...	...	0·10	...	...	0·17	0·15	3	0·42	0·26	0·42	1·07	17·77	9·53
		Harishpore ...	...	...	0·18							?		?		?
		Ramganj ...	...	0·06	0·23	...	...	...	...	1	0·29	?	0·29	?	14·79	?
	Faridpur ..	Madaripur ...	...	0·21	...	...	...	...	0·22	2	0·43	0·46	0·43	1·31	10·04	5·19
		Faridpur ...	...	0·08	0·18	...	...	...	...	1	0·26	0·58	0·72	1·73	17·24	5·44
		Goalundo ...	...	...	0·33	...	...	...	...	1	0·33	0·41	0·46	1·21	10·71	4·59
	Dacca ...	Munshiganj ...	...	0·08	0·06	...	...	...	0·04	Nil	0·18	0·89	0·18	2·00	10·94	7·25
		Dacca ...	...	0·06	0·18	0·03	...	...	0·02	1	0·29	0·78	0·29	1·69	15·73	5·10
		Narayanganj...	...	0·09	0·11	0·25	...	0·06	0·04	2	0·55	Nil	0·59	1·19	14·15	6·09
		Manikganj ...	...	0·05	0·04	...	...	...	...	Nil	0·09	0·17	0·13	0·67	11·84	3·83
		Joydebpore ...	...	0·06	0·14	0·02	...	0·40	...	2	0·62	?	0·65	?	7·85	?
	Hill Tippera	Agartola ...	...	...	...	...	...	0·43	...	1	0·43	1·15	0·43	2·80	10·11	7·53
	Tippera ...	Comilla ...	...	0·16	...	...	...	0·15	...	2	0·31	0·71	0·31	1·89	11·86	6·51
		Chandpore ...	...	0·10	0·11	...	...	...	...	2	0·21	0·70	0·21	1·85	11·26	5·33
		Brahmanbaria	...	...	0·05	...	...	0·06	...	Nil	0·11	1·29	0·11	2·84	13·70	7·68
		Ramchandrapore										?		?		?
		Nasirnagar ...	...	...	...	0·40	...	0·44	...	2	0·84	?	0·84	?	14·46	?
		Daudkandi ...	...	...	...	0·25	...	...	...	1	0·25	?	0·25	?	8·09	?
		Kasba ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	14·04	?
		Laksham ...	...	...	0·10	...	...	...	...	1	0·10	?	0·10	?	12·11	?
	Mymensingh..	Kishorganj ...	...	...	0·63	0·57	...	...	0·11	3	1·31	0·73	1·49	1·62	10·03	5·04
		Atia (*Tangail*)	...	...	...	1·69	...	0·48	...	2	2·17	0·09	2·17	0·48	8·34	3·97
		Mymensingh ...	...	0·52	...	0·21	...	...	...	2	0·73	0·60	0·80	1·16	5·28	4·71
		Jamalpur ...	...	...	...	...	0·12	...	...	1	0·12	0·35	0·25	0·52	5·02	4·00
		Netrakona ...	...	...	0·31	...	...	0·31	...	2	0·62	0·07	0·62	0·85	7·93	4·23
		Subornakhally	...	...	...	0·25	...	...	0·06	1	0·31	?	0·44	?	4·66	?
		Durgapore ...	...	...	0·40	...	0·30	...	...	2	0·70	?	0·70	?	5·11	?
		Sherepore Town	...	0·13	...	0·03	...	...	...	1	0·16	?	0·42	?	6·67	?
		Dewanganj ...	...	...	...	0·74	...	0·22	...	2	0·96	?	0·96	?	3·33	?
North Bihar	Purnea ...	Kishanganj ...	0·20	...	...	...	0·63	...	...	2	0·83	0·09	1·06	0·30	3·39	2·60
		Araria ...	...	...	1·50	0·05	0·30	...	...	2	1·85	0·05	1·89	0·34	4·33	2·36
		Purnea ...	0·01	...	...	...	...	...	...	Nil	0·01	0·09	0·01	0·25	2·76	2·84
		Gondwara (Korah) ...	...	...	...	...	...	...	...	Nil	Nil	?	0·17	?	1·40	?
		Barsoe ...										?		?		?
		Forbesganj ...	...	...	...	...	0·65	...	...	1	0·65	?	1·09	?	3·14	?
		Kaliaganj ...	...	...	...	0·41	0·70	...	...	2	1·11	?	1·30	?	2·68	?
	Bhágalpur ...	Madhipura ...	...	...	...	...	0·25	...	...	1	0·25	0·05	0·25	0·19	2·85	2·23
		Bongaon (Syfabad). ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·27	?
		Supaul ...	...	...	...	...	0·14	...	...	1	0·14	0·06	0·56	0·21	2·88	2·02
		Protabganj ...	...	...	...	...	0·06	...	...	Nil	0·06	?	0·52	?	2·63	?
		Bhagalpur ...	0·02	...	...	...	...	...	...	Nil	0·02	0·04	0·02	0·11	4·04	2·26
		Banka ...	...	...	...	...	...	...	...	Nil	Nil	0·05	0·05	0·15	5·63	2·44
		Colgong ...	...	...	...	...	...	...	...	Nil	Nil	?	0·01	?	4·93	?
	Darbhanga ...	Tajpur ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·17	1·98	2·01
		Darbhanga ...	...	...	...	...	0·09	...	...	Nil	0·09	0·02	0·09	0·10	2·82	2·19
		Madhubani ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·30	3·42	2·38
		Bahera ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·30	?
		Roshera ...	...	...	...	...	...	...	...	Nil	Nil	?	0·30	?	1·72	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 18th of March 1893—concld.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 12th.	Monday, 13th.	Tuesday, 14th.	Wednesday, 15th.	Thursday, 16th.	Friday, 17th.	Saturday, 18th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BIHAR—*concluded.*	Muzaffarpur...	Sitamarhi ...	...	...	...	...	0·14	...	...	1	0·14	0·06	0·14	0·31	3·54	2·01
		Muzaffarpur	...	...	...	...	...	...	...	Nil	Nil	0·10	0·03	0·19	2·12	2·93
		Hajipur .	...	...	...	...	...	...	...	Nil	Nil	0·07	0·03	0·14	2·62	2·07
		Paru ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·70	?
		Mahwa (Chilwarra.)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·40	?
		Siuhar ..	...	...	...	...	0·10	...	...	1	0·10	?	0·10	?	0·51	?
		Pupri ...	...	...	...	...	...	..	...	Nil	Nil	?	Nil	?	3·79	?
	Champaran ..	Motihari ..	0·05	...	...	...	0·02	...	...	Nil	0·07	0·04	0·09	0·26	2·67	1·83
		Bettiah ..	0·05	...	...	...	...	...	...	Nil	0·05	0·02	0·05	0·22	2·08	1·83
		Bagaha ...	..	...	...	...	0·13	...	...	1	0·13	?	0·13	?	2·76	?
		Burhurwa ...	0·09	...	...	...	0·09	...	...	Nil	0·18	?	0·20	?	1·98	?
	Saran ..	Gopalganj ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·03	2·34	1·84
		Siwan .	0·11	...	...	...	...	...	...	1	0·11	0·01	0·11	0·09	2·78	2·54
		Chapra ...	0·09	...	...	...	...	...	...	Nil	0·09	0·03	0·09	0·14	2·94	2·37
SOUTH BIHAR	Shahabad ...	Buxar ...	0·58	...	...	...	...	...	...	1	0·58	0·02	0·68	0·15	3·58	2·57
		Dehri ...	...	...	...	...	...	...	...	Nil	Nil	Nil	0·12	0·40	3·26	3·05
		Bhabhua ...	0·03	...	...	...	...	...	...	Nil	0·03	0·06	0·30	0·44	3·22	3·28
		Sasaram ...	...	...	...	...	...	...	...	Nil	Nil	0·04	0·21	0·19	2·50	2·69
		Arrah ...	0·18	...	...	...	...	...	...	1	0·18	0·06	0·29	0·19	3·58	2·41
		Mohanea ...	.	...	...	...	...	...	...	Nil	Nil	?	0·15	?	1·48	?
		Khiri ...	0·50	...	...	...	...	...	...	1	0·50	?	1·40	?	3·87	?
		Ageaon ...	...	...	...	...	...	...	...	Nil	Nil	?	0·21	?	1·51	?
		Ramagar ...	...	...	...	...	...	..	...	Nil	Nil	?	Nil	?	3·33	?
		Koath ...	0·35	...	...	...	...	...	...	1	0·35	?	1·27	?	4·28	?
		Sikroul ...	...	...	...	...	...	...	...	Nil	Nil	?	0·36	?	2·73	?
		Bassowan ...	...	...	..	...	...	...	...	Nil	Nil	?	0·25	?	3·91	?
		Monaharpur	...	...	...	...	...	...	...	Nil	Nil	?	0·87	?	3·77	?
	Gaya ...	Aurangabad ..	0·18	...	...	...	...	...	...	1	0·18	0·06	0·32	0·26	4·21	2·14
		Gaya ...	0·19	...	...	...	...	...	...	1	0·19	0·05	0·27	0·19	3·84	2·54
		Nawadah ...	0·09	...	...	...	...	...	...	Nil	0·09	0·04	0·30	0·22	5·27	2·52
		Jahanabad ...	...	...	...	...	...	...	...	Nil	Nil	0·04	0·28	0·19	3·58	2·?3
		Arwal ...	...	...	...	...	...	...	...	Nil	Nil	?	0·30	?	2·84	?
		Daudnagar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·85	?
		Sherghati ..	0·33	...	...	...	...	...	...	1	0·33	?	0·48	?	6·44	?
		Rajauli ...	0·70	...	...	...	...	...	...	1	0·70	?	0·80	?	8·04	?
		Pakri Barawan	...	...	...	...	...	...	...	Nil	Nil	?	0·29	?	4·03	?
	Patna ...	Patna ..	...	...	...	...	...	...	...	Nil	Nil	0·12	0·01	0·23	2·61	2·38
		Dinapore ...	...	..	...	...	...	...	...	Nil	Nil	0·05	0·02	0·14	2·22	2·16
		Bihar ...	0·15	...	...	...	...	...	...	1	0·15	0·02	0·35	0·19	3·93	2·71
		Barh ...	...	..	...	...	...	...	...	Nil	Nil	0·03	0·02	0·19	3·35	2·41
		Bickram ...	...	..	...	...	...	...	...	Nil	Nil	?	Nil	?	3·35	?
		Hilsa ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·81	?
	Monghyr ..	Begusarai ...	...	...	...	...	...	...	...	Nil	Nil	0·02	0·09	0·11	5·82	2·74
		Monghyr ...	0·05	...	...	...	...	...	...	Nil	0·05	0·02	0·05	0·13	5·15	2·54
		Jamui ..	...	...	...	...	...	...	...	Nil	Nil	0·10	0·08	0·21	4·87	2·49
		Goari ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	10·86	?
		Shaikpura ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	4·62	?
		Chahai Bamda	0·15	...	...	...	.	...	...	1	0·15	?	0·30	?	6·07	?
	Sontha Parganas.	Rajmahal ...	...	...	...	...	0·25	...	...	1	0·25	0·05	0·25	0·13	4·01	1·79
		Godda ..	0·10	...	...	...	...	...	...	1	0·10	0·08	0·45	0·26	4·65	2·01
		Pakour ...	..	...	1·28	...	...	...	...	1	1·28	0·10	1·44	0·28	8·89	1·74
		Naya Dumka	0·36	...	...	0·13	.	...	...	2	0·49	0·14	0·79	0·47	6·02	3·07
		Deoghur .	0·25	...	...	...	...	...	...	1	0·25	0·06	0·32	0·30	4·28	3·10
		Jamtara ...	0·15	0·03	...	...	...	...	...	1	0·18	0·09	0·29	0·36	7·66	2·62
		Belbodda ...										?		?		?
		Nunihat ...										?		?		?
CHOTA NAGPUR.	Hazaribagh ...	Pachamba (Giridih). ...	0·66	0·03	...	...	...	..	...	1	0·69	0·07	1·34	0·47	8·80	2·87
		Hazaribagh .	0·68	0·14	0·25	...	...	...	...	3	1·07	0·12	1·58	0·46	9·38	3·17
		Somtaguran .	0·42	0·28	...	...	...	...	...	2	0·70	0·11	1·54	0·74	9·13	3·02
		Mahudi Hills	...	...	...	...	...	...	...	Nil	Nil	0·08	1·11	0·56	10·12	3·09
		Jhumra Hill										Nil		2·20		4·79
		Barhi ...	0·23	...	0·65	...	...	...	...	2	0·88	?	1·11	?	6·47	?
		Chatra ...	0·40	...	0·25	...	...	...	.	2	0·65	?	1·04	?	7·84	?
		Karagdeha ..	1·41	...	...	...	...	...	...	1	1·41	?	1·54	?	5·82	?
		Ramgar ...	...	...	0·25	...	...	...	...	1	0·25	?	1·14	?	10·20	?
	Lohardaga	Lohardaga ...	...	...	0·33	...	...	...	...	1	0·38	0·17	0·98	1·03	12·01	4·15
		Ranchi ...	...	0·06	0·72	...	...	...	...	1	0·78	0·14	1·37	0·68	14·03	4·17
		Silli ...										?		?		?
	Palamau ...	Palamau (Daltonganj).	0·50	0·12	...	...	...	...	...	2	0·62	0·12	0·87	0·45	4·35	3·20
		Balumath	0·04	0·01	0·11	...	...	...	...	1	0·16	?	1·01	?	10·17	?
		Husainabad	0·21	...	...	...	...	...	...	1	0·21	?	0·57	?	4·83	?
		Garhwa .	0·56	...	0·05	...	...	...	...	1	0·61	?	1·07	?	6·06	?
	Singhbhum ..	Chaibassa ...	0·01	0·10	0·27	...	...	...	...	2	0·38	0·13	1·62	0·69	14·16	4·22
		Chakardharpur.										?		?		?
		Ghatsila .	...	...	0·30	...	..	...	...	1	0·30	?	2·40	?	14·55	?
		Baharagura	...	0·05								?		?		?
	Manbhum ...	Purulia ...	0·15	1·12	0·02	...	..	...	...	2	1·29	0·08	2·19	0·61	13·32	3·50
		Gobindpur .	0·10	...	...	...	...	...	...	1	0·10	0·05	0·22	0·37	6·80	3·00
		Raghunathpore	...	0·43	...	0·20	...	...	...	2	0·63	?	0·91	?	5·63	?
		Barahabhum	...	0·35	...	...	...	...	...	1	0·35	?	1·05	?	11·85	?
		Jhalda ...	0·15	0·07	0·27	...	...	...	...	2	0·49	?	0·90	?	6·84	?
		Chas ...	...	1·16	...	...	...	..	...	1	1·16	?	1·63	?	8·24	?
		Pandra ...	0·08	...	...	0·21	...	...	...	1	0·29	?	0·45	?	6·47	?

Explanation.— .. indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the* 21st *March* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 18TH OF MARCH 1893.

TOWARDS the close of the previous week a rapid fall of pressure was occurring over Bengal, and the unusually high pressure which had existed for some little time previously was gradually disappearing; but even on the 11th, or the last day of the week, pressure was still in excess by a tenth to a seventh of an inch. On the 12th pressure had fallen over the whole province, the fall being brisk over the western half, but pressure was still usually in excess by considerable amounts, though the distribution was a little irregular. Winds also were irregular in direction, for north-westerly winds were blowing at some of the western stations, north-easterly winds in the centre of the province, while at the western stations the directions were so irregular that at neighbouring stations winds were frequently of opposite direction. Hence weather conditions were rather disturbed, and from the 12th to the 13th numerous rain showers occurred over the greater part of the province except in Bihar. On the 13th pressure had again fallen slowly over the whole province, so that it was still in excess of the normal, but again winds over the whole province were decidedly irregular, and the disturbed conditions made themselves felt in the numerous showers which occurred between the 13th and 14th, for on the morning of the 14th almost all stations in Orissa, South-West Bengal, North and East Bengal and Chota Nagpur reported rain. On the 14th also a further slow fall of pressure had taken place, and pressure became relatively low over a considerable part of Bengal. This was followed by a further fal on the 15th and 16th, when pressure became below the normal of the day at the western and southern stations, though it was still in excess over the remainder of the province. A rather brisk fall of the barometer again occurred on the 17th, which brought pressure below the normal by amounts ranging up to about a tenth of an inch in the west of the province, and also made the pressure decidedly lower in Bihar and Chota Nagpur than over the eastern half of the province. On the 18th again a moderate to rapid fall of pressure occurred, and pressure became below the normal of the day by amounts ranging up to 0·16" at Dehri, while in the east of the province the defect only equalled about half this amount, and the actual pressures varied from 29·71" at Ranchi and Dehri to 29·83" at Chittagong. This distribution of pressure which obtained on the 18th instant, it will be seen, is that which characterises the hot season in Bengal. During these rather rapid changes in the distribution of pressure in Bengal conditions remained somewhat disturbed, and a few local showers occurred on almost all days up till the close of the week.

The main feature in the meteorological changes of the week has been the practical reversal of the pressure conditions which had previously obtained. At the end of the previous week and beginning of the week under review the pressure distribution was almost that of the cold weather, while at its close it was practically that of the hot season. Accompanying this change of conditions also there has been a steady increase in the temperature, and while on the first day of the week the mean temperature was from 6° to 8° and 9° below the normal, and while the defect continued large for the first five days, on the 18th, or the last day of the week, the general defect had been reduced to about 2° or 3°. The changes therefore of both pressure and temperature during the week have been large and important.

Pressure—Has been falling throughout the week, and was at its close rather largely in defect, but nevertheless the mean pressure for the whole period has been in excess at twenty-nine and in defect at eleven stations. As a rule the variations are not larger than from one to three-hundredths of an inch, and usually the defects are shown at the extreme western stations of the province, while the largest excess pressures are recorded at the north-eastern stations. The variations, however, at neighbouring stations are somewhat irregular

Temperature.—The changes of temperature during the week have been already alluded to. The mean for the period has again been largely below the normal value, and the defect equals no less than 5·4°. This defect has been largest at the western and south-western stations, and in the divisions of Chota Nagpur, South-West Bengal and Orissa it averages nearly 7°.

The distribution of temperature during the week and its variation from the normal value are best seen in the table below, where the average maximum, minimum and mean temperatures for the week at nine typical stations in different districts of the province are compared with the normal values for the period. The defect during the week again, it will be seen, has been most largely marked in the day or maximum temperatures, which at the majority of the stations given have been about 10° below the normal of the week:—

Rainfall—Has also been fairly frequent during the week, though the falls have usually not been heavy. Average falls of from three-quarters to one inch have occurred in Chota Nagpur and Orissa, and of about half to three-quarters of an inch in East, South-West and North Bengal. In Bihar, however, the falls have only averaged about a fifth of an inch. In all divisions except East Bengal the falls have been in considerable excess of the normal for the period. Indeed in Chota Nagpur the fall is seven times as much as usual, and in Orissa nearly four times as much, but in the other divisions the excess is not so large.

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 18th March 1893.

	Normal mean maximum temperature for the week ending 18th March.	Actual mean maximum temperature for the week ending 18th March 1893.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 17th March.	Actual mean minimum temperature for the week ending 18th March 1893.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 18th March.	Actual mean daily temperature for the week ending 18th March 1893.	Variation of actual mean from the normal.
Cuttack	96·7	84·2	—12·5	73·0	67·7	—5·3	84·9	76·0	—8·9
Calcutta	90·5	81·1	—9·4	69·8	66·0	—3·8	80·2	73·7	—6·5
Dacca	90·1	81 0	—9 1	68·3	64·1	—4·2	79·2	72·6	—6·6
Burdwan	93·7	80·9	—12 8	68·7	66·2	—2·5	81·2	73·6	—7·6
Patna	90·4	83·3	—7·1	63·2	60·7	—2 5	76·8	71·9	—4·9
Gaya	93·4	84·4	—9·0	65·6	62·5	—3·1	79·5	73·6	—5·9
Purnea	89·7	81 3	—8·4	59·9	60 0	+0·1	74·8	70·7	—4·1
Hazaribagh	88·1	77·9	—10·2	63·3	59·2	—4·1	75·7	68·6	—7·1
Darjeeling	56·3	50·9	—5·4	42·5	37·0	—5·5	49·4	44·0	—5·4

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 18th of March 1893 :—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.						RAINFALL.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th Oct. 1892.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	92·6	63 0	82·0	67·8	74 9	—6·5	0·85	0·24	+0·61	2·60	0·41	+2·19	1·67	0·62	12·72	6·00
South-West Bengal ...	91·3	62·2	81·5	66·1	73·8	—6·7	0·52	0·18	+0·34	1·15	0·31	+0·84	0·86	0·60	11·84	4·08
North Bengal	87·8	55·6	79·8	61·2	70·5	—4·1	0·62	0·27	+0·35	1·24	0·34	+0·90	0·87	0·53	4·34	2·87
East Bengal	89·2	58·9	81·9	64·4	73·0	—3 6	0·44	0·47	—0·03	1·24	0·65	+0·59	0·49	1·27	11·92	6·11
North Bihar	88·8	53·9	82·1	59·8	71·0	—4·1	0·20	0·05	+0·15	0·44	0·12	+0·32	0·28	0·20	3·06	2·24
South Bihar	91·3	57·8	83 3	61·8	72·6	—4·9	0·18	0·06	+0·12	0·55	0·10	+0·45	0·31	0·24	4·39	2·56
Chota Nagpur	89·2	55 2	78·8	60·6	69·7	—7·7	0·75	0·10	+0·65	1·64	0·19	+1 45	1·27	0·75	10·24	3·55

METEOROLOGICAL OFFICE, BENGAL,
The 21st March 1893.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 12th to 18th March 1893.

Month	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature. Daily mean.	Maximum.	Range.	Minimum.	Hygrometry. Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	Rainfall at 10 A.M. for past 24 hours.
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
March ...	12th ...	30·051	76·5	87·0	21·1	65 9	77·6	67·1	·522	60·1	55	...
" ...	13th ...	·036	72 3	76·4	8·3	68·1	74·1	71·6	·743	70·3	88	0·37
" ...	14th ...	29 996	73 4	79·9	13·0	66·9	74·4	7)·6	·700	68·6	82	0·02
" ...	15th ...	·941	73·2	80·9	15·5	65·4	75·2	69·6	·650	66·4	75	..
" ...	16th ...	·927	74·3	84·9	21·2	63·7	77·6	71·6	·694	68·3	74	...
" ...	17th ...	·853	77·1	88·0	21·9	66·1	81·6	74·5	·760	71·0	71	...
" ...	18th ...	·791	80·4	91·0	21·2	69·8	84·4	76·0	·785	71·9	66	...

				Inches.
The mean 10 A.M. pressure of the seven days	...	...	...	29·942
				°
The mean temperature of the seven days	...	...	...	75·3
The extreme variation of temperature	...	.	...	27·3
The maximum temperature	...	...	...	91·0
				%
The mean 10 A.M. relative humidity of the seven days			...	73
The total fall of rain from 12th to 18th March 1893		...	...	0·39 inch.

The daily mean temperatures are the crude means of maximum and minimum temperatures.

A. PEDLER,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 20th March 1893.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 18th March 1893, *as compared with the corresponding week of the previous year.*

Nature of Cargo.	Week ending Saturday, the 18th March 1893.			Week ending Saturday, the 19th March 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	802	1,91,775	3,106	564	1,83,060	3,276
Jute	57	24,525	451	4	1,125	22
Firewood	114	78,125	1,141	109	70,425	1,042
Other articles	905	2,78,655	4,228	868	2,55,650	3,902
Total ...	1,878	5,73,080	8,926	1,545	5,15,260	8,242

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 11th March 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*317,410	*3,31,705 8 0	29,29,721 20	6,65,428 15 0	18,351 2 0	10,15,485 9 0	75,420	113,070½	188,490½
Or per mile of railway	......	205 15 5	......	413 2 11	11 6 4	630 8 8	......	......	.....
For previous 9 weeks of half-year	2,745,496	31,47,086 10 0	2,51,78,912 30	56,56,996 11 0	1,55,303 3 0	89,59,386 8 0	707,620½	965,421⅔	1,673,042
Total for 10 weeks ...	3,062,906	34,78,792 2 0	2,81,08,634 10	63,22,425 10 0	1,73,654 5 9	99,74,872 1 0	783,040¼	1,078,492	1,861,532½
Comparison.									
Total for corresponding week of previous year	291,991½	3,04,646 6 9	28,71,512 20	6,82,973 13 1	17,237 6 6	10,04,857 10 4	77,869	111,013	188,882
Per mile of railway corresponding week of previous year ..	......	192 7 7	......	431 7 11	10 14 3	634 13 9	......	......	......
Total for corresponding 10½ weeks of previous year .. .	2,961,217	32,78,543 7 3	2,86,95,387 0	65,70,506 9 8	1,61,781 8 6	1,00,30,831 9 5	781,411	1,066,217	1,847,628

* The increase is partly due to running of troop extra trains and partly to development of traffic chiefly in B. District presumably on account of marriage parties.

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 11th March 1893, on 22¼ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ..	21,164	5,799 0 0	9,314 30	385 3 0	11 0 0	6,195 3 0	914	98	1,012
Or per mile of railway . ..	.. ...	269 10 1	......	17 5 0	0 7 11	278 7 0	......	......	......
For previous 9 weeks of half-year	*201,710	*52,121 12 0	†93,371 0	†3,601 13 0	‡95 0 0	55,818 9 0	7,905	1,011	8,916
Total for 10 weeks ...	222,874	57,920 12 0	1,02,685 30	3,987 0 0	106 0 0	62,013 12 0	8,819	1,109	9,928
Comparison.									
Total for corresponding week of previous year ...	23,987½	6,101 5 7	15,007 20	644 10 0	5 6 6	6,751 6 1	865	220	1,085
Per mile of railway corresponding week of previous year	......	274 3 6	......	28 15 6	0 8 11	303 6 11	......	......	......
Total for corresponding 10½ weeks of previous year ...	230,150½	58,549 14 11	2,00,602 30	6,710 2 9	121 5 9	65,381 7 5	9,092	1,211	10,303

* Added number of passengers 380 and Rs. 244 }
† Ditto Mds. 584 and ... ... ,, 21 } on account of difference between the approximate and audited figures for the week ended 4th February 1893.
‡ Deducted ... . ,, 3 }

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 11th March 1893, on 161⅜ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs A. P.			
Total traffic for the week ...	20,085	13,078 0 0	56,647 20	6,956 10 0	33 0 0	20,067 10 0	5,086½	3,091½	8,178
Or per mile of railway	... ..	81 0 5	......	43 1 8	0 3 3	124 5 4	......	......	......
For previous 9 weeks of half-year	*156,192	*1,02,771 6 0	†4,68,543 0	†74,790 10 0	‡326 0 0	1,77,888 0 0	46,894½	29,640½	76,535
Total for 10 weeks ...	176,277	1,15,849 6 0	5,25,190 20	81,747 4 0	359 0 0	1,97,955 10 0	51,981	32,732	84,713
Comparison.									
Total for corresponding week of previous year	16,533½	12,101 3 9	48,290 10	9,646 4 0	54 4 3	21,801 12 0	5,789	2,341	8,130
Per mile of railway corresponding week of previous year .	......	74 15 7	......	59 12 3	0 5 5	135 1 3	......	... ..	......
Total for corresponding 10½ weeks of previous year	149,572½	1,05,871 6 4	4,56,561 10	81,642 2 0	654 10 3	1,88,168 2 7	59,022	21,949	80,971

* Added number of passengers 1,004 and Rs. 199 }
† Ditto maunds 265 and ,, 2,879 } on account of difference between the approximate and audited figures for the week ended 4th February 1893.
‡ Deducted ,, 3 }

EASTERN BENGAL STATE RAILWAY.

(INCLUDING N. B., DACCA, K.-D., AND ASSAM-BEHAR SECTIONS.)

Approximate Return of Traffic for the week ended 11th March 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	196,683	a1,00,970 0 0	6,67,052 0	93,130 0 0	12,080 0 0	2,07,080 0 0	27,336	27,895	55,231
Or per mile of railway	253	130 0 0	858 0	120 0 0	*1 0 0	251 0 0	......	......	.....
For previous 9 weeks of half-year	1,712,794	8,09,190 0 0	63,36,707 0	9,10,080 0 0	1,42,030 0 0	18,61,300 0 0	249,566	261,259	510,825
Total for 10 weeks ...	1,909,477	9,10,160 0 0	70,03,759 0	10,03,510 0 0	1,54,710 0 0	20,68,380 0 0	276,902	289,154	566,056
COMPARISON.									
Total for corresponding week of previous year	197,501	82,914 0 0	6,28,268 0	69,184 0 0	7,761 0 0	1,59,859 0 0	27,067	28,912	55,979
Per mile of railway corresponding period of previous year ...	231	107 0 0	809 0	89 0 0	*1 0 0	197 0 0	......	......	......
Total to corresponding date of previous year	1,780,958	8,74,678 0 0	60,66,969 0	8,40,510 0 0	1,41,722 0 0	18,56,910 0 0	281,062	300,250	581,312

* Excluding steamer earnings.

a. The increase due to greater number of passengers carried for Daroani Mella than last year.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 11th March 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	35,497	13,280 0 0	62,265 0	4,770 0 0	60 0 0	18,110 0 0	3,800	1,890	5,690
Or per mile of railway	284	106 0 0	498 0	38 0 0	1 0 0	145 0 0	......	......	......
For previous 9 weeks of half-year	281,574	1,01,430 0 0	5,50,621 0	33,960 0 0	1,400 0 0	1,36,790 0 0	33,882	18,202	51,084
Total for 10 weeks ...	317,071	1,14,710 0 0	6,12,886 0	38,730 0 0	1,460 0 0	1,54,900 0 0	36,682	20,092	56,774
COMPARISON.									
Total for corresponding week of previous year	31,152	11,626 0 0	57,704 0	3,188 0 0	102 0 0	14,916 0 0	8,794	1,878	5,672
Per mile of railway corresponding week of previous year ...	249	93 0 0	462 0	25 0 0	1 0 0	119 0 0	......	......	......
Total to corresponding date of previous year	309,137	1,13,302 0 0	6,38,594 0	39,512 0 0	1,003 0 0	1,53,817 0 0	97,368	21,007	58,375

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 11th March 1893, on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	24,483	6,850 0 0	17,615 0	1,900 0 0	100 0 0	8,910 0 0	2,502	722	3,224
Or per mile of railway	285	80 0 0	205 0	23 0 0	1 0 0	104 0 0	......	......	.....
For previous 9 weeks of half-year	166,129	53,010 0 0	1,48,578 0	14,330 0 0	1,490 0 0	68,830 0 0	22,419	6,597	29,016
Total for 10 weeks ...	190,612	59,860 0 0	1,66,193 0	16,230 0 0	1,590 0 0	77,740 0 0	94,921	7,319	32,240
COMPARISON.									
Total for corresponding week of previous year	18,386	6,015 0 0	18,398 0	1,055 0 0	73 0 0	7,143 0 0	2,502	722	3,224
Per mile of railway corresponding week of previous year ..	214	70 0 0	214 0	12 0 0	1 0 0	83 0 0	......	.....	...
Total to corresponding date of previous year	177,515	59,132 0 0	1,33,333 0	11,528 0 0	1,485 0 0	72,215 0 0	25,687	7,415	33,102

BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

Approximate return of traffic for the week ending 11th March 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	103,610	42,340	4,75,380	66,010	11,340	1,19,690	13,643	17,536	31,179
Or per mile of railway ...	137·05	56·01	628·91	87·31	15·00	158·32	......	......	......
For previous 9 weeks of half-year	805,729	3,45,477	3,737,738	5,54,762	1,04,430	10,04,665	101,876	150,969	252,845
Total for 10 weeks ...	909,339	3,87,813	4,213,118	6,20,772	1,15,770	11,24,355	115,519	168,505	284,024
COMPARISON.									
Total for corresponding period of previous year on 755 miles open	84,556	33,514	339,046	51,605	7,951	93,070	11,200	18,186	29,396
Per mile of corresponding week of previous year	111·99	44·39	449·07	68·35	10·53	123·27	......	......	......
Total to corresponding date of previous year	822,335	3,53,378	34,20,391	4,82,279	1,04,093	9,39,750	119,183	175,058	294,241

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 4th March 1893	10,689	0	0
Corresponding period of 1892	11,536	0	0
Decrease	847	0	0
Receipts per mile for the week ending 4th March 1893	209	9	5
Corresponding period of 1892	226	3	1
Decrease	16	9	8
Receipts from 1st January to 4th March 1893...	90,772	0	0
Corresponding period of 1892	84,077	0	0
Increase	6,695	0	0

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 11th March 1893	10,077	0	0
Corresponding period of 1892	9,619	0	0
Increase	458	0	0
Receipts per mile for the week ending 11th March 1893	197	9	5
Corresponding period of 1892	188	9	8
Increase	8	15	9
Receipts from 1st to 11th March 1893	1,00,849	0	0
Corresponding period of 1892	93,696	0	0
Increase	7,153	0	0

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CONTENTS.

TRIAL BY JURY IN BENGAL.

NOTIFICATION.

THE following papers are published for general information.

By order of the Lieutenant-Governor of Bengal,

H. J. S. COTTON,
Chief Secretary to the Govt. of Bengal.

The 28*th March* 1893.

Report of the Commission appointed to consider and report on certain questions connected with trial by jury in Bengal.

We, the undersigned, have been appointed by the Government of India by a Resolution, dated the 23rd February, 1893, as Commissioners,

(1) to consider the classes of offences triable by jury in the several districts of Bengal in which the system of trial by jury has been introduced, and to report whether any, and, if so, what changes in the classification which now obtains are desirable;

(2) to consider and report whether any, and, if so, what modifications of the provisions of the Criminal Procedure Code relating to the trial of offences triable by jury before Courts of Session are desirable for the purpose of preventing miscarriage of justice.

2. We have read and considered the papers mentioned in the Resolution as well as papers placed at our disposal by the Government of Bengal and obtained from the High Court. These are specified in a Schedule attached to this Report. We have anxiously considered whether we should be materially assisted by the examination of witnesses, but, having regard to the ample information furnished by the large mass of official papers and statistics before us, supplemented by our own experience and knowledge of the subject, we have felt that the taking of oral evidence would not adequately compensate for the delay that it would necessarily entail.

3. Before proceeding to report the conclusions at which we have arrived, it is desirable that we should state briefly the origin and history of trial by jury in the Criminal Courts of Bengal outside the Presidency town of Calcutta, so as to show more clearly the grounds upon which our opinions have been formed.

i. Until the 1st of January 1862, when the Code of Criminal Procedure (Act XXV) of 1861 and the Indian Penal Code (Act XLV of 1860) came into operation, there was no regularly defined procedure in those Courts and the law administered, except where specially defined in regard to certain offences, was involved in some uncertainty.

ii. In 1793, Regulation IX was passed establishing certain Criminal Courts in Bengal under certain rules. Trials before the Courts of Session were held by an European Judge associated with a Mahomedan law officer, whose duty it was at the conclusion of the trial to deliver his *futwa* or exposition of the Mahomedan law applicable to the case. The law administered under the Mahomedan Criminal Code was modified from time to time in regard to certain offences by successive Regulations passed under the authority of Government to supply defects found to exist therein.

iii. Regulation VI of 1832 for the first time left it to the option of a Sessions Judge to dispense with the *futwa* of the Mahomedan law officer, and enabled a person under trial, who did not profess the Mahomedan faith, to claim exemption from trial under the Mahomedan Criminal Code, and in such a case the trial was to be held without the *futwa* of the law officer, and under one of three procedures described by that Regulation:

(*a*) The Sessions Judge might refer the case, or any point or points in it, to a Punchayet of respectable natives, who were empowered to carry on their inquiries "apart from the Court" and report to it the result, or

(*b*) The Sessions Judge might constitute two or more such persons assessors or members of the Court. These persons were required to give their opinions separately for discussion, and if any of the assessors or the Sessions Judge so desired it, the opinions of the assessors were to be recorded in writing on the proceedings, or

(*c*) The Sessions Judge might employ such persons "more nearly as a jury." It was left to the discretion of the presiding Judge to select the jurors, and to

fix the number to be employed, and the manner in which their verdict was to be delivered. After consultation, a verdict was to be delivered; but it was provided that, in all cases, the decision was vested exclusively in the presiding Judge.

If the *futwa* of the law officer was, in a trial so held, dispensed with, and the crime of which the prisoner was convicted was one not specially provided for by the Regulations, the Sessions Judge was not competent to pass sentence, but was directed to refer the case for the consideration of the Nizamut Adawlut. Trial by jury, therefore, under this Regulation, was a very different matter from what the use of that term would ordinarily imply, and we may add that this mode of trial was very seldom adopted.

iv. In 1859, on the Report of the Indian Law Commissioners, the Bill to introduce a Code of Criminal Procedure came before the Legislative Council of India. The Report of the Select Committee was considered by the Secretary of State for India in Council who, on the 31st December 1859, communicated the following despatch on the subject of the introduction of trial by jury in the form and to the extent proposed in the Report of the Select Committee:—

"4. The Law Commissioners appointed under the Indian Act of 1853, proposed to retain the mode of trial by jury in the Presidency towns, and in the case of British subjects in the mofussil; to extend it to certain other classes in the mofussil who have not hitherto enjoyed it; and to leave it to the discretion of the Government to extend it to such other places out of the Presidency town as it may think fit. All other trials before the Sessions Courts were to be conducted with the aid of two or more assessors as members of the Court.

"5. In jury-trials the verdict of the jury was to be binding on the Court. In trials with the aid of assessors the decision was to be vested exclusively in the Judge.

"6. The course proposed by the Commissioners appears to Her Majesty's Government to have been a very safe and judicious one. Under a system intended to be ultimately adapted to the whole of India, including the Presidency towns, it was necessary to secure the binding nature of the verdict of a jury as to matters of fact. This was done, and the trial by jury was to be at once extended as far as it appeared to the Commission it could be safely done by a mere act of the legislature. Beyond this it was proposed to associate natives of the country as assessors with the Judge, in conducting criminal trials, and thus to prepare them for taking hereafter a more decided and efficient part in the administration of criminal justice than they now appear to be prepared for; and in such cases, the decision was to be left with the Judge in order to provide against failures of justice arising out of religious or other prejudices.

"7. The Code as prepared by the Commissioners was laid before the Legislative Council and referred to a Select Committee who struck out the provision respecting assessors thus providing for a general system of trial by jury.

"8. The members of the Select Committee, however, appear to have had their misgivings on this subject; and they accordingly inserted a clause to the effect that the Sudder Court should have the power of over-ruling the verdict of a jury because, said Mr. Harrington in the Legislative Council, 'there was a difficulty in making any other provision without giving a power to native jurors, with which, for the present at least, it was thought that they could not be safely entrusted.'

"9. The clause proposed by the Select Committee was struck out by the Council, and the Bill as now approved by them places the whole of the territories in India, in which the Codes of Bengal, Madras and Bombay, prevail, under a system of trial by jury, the unanimous verdict of the jury being final and conclusive in questions of fact.

"10. Her Majesty's Government are of opinion that the course recommended by the Law Commissioners should be followed, that trials in the Sessions Courts should be generally conducted with the aid of assessors, and that trial by jury being settled by law in regard to

certain classes it should be left to the Government to extend it to localities as it may deem fit. Whatever objections there may be to such a course they appear to Her Majesty's Government to be far less than those which exist to the introduction of a general system of criminal administration for which the country is not prepared."

The Legislative Council accordingly modified their recommendations, and the Bill which became Act XXV of 1861, was passed, and came into operation on the 1st January, 1862. Under Section 322, the Local Government was empowered to order that the trial of all offences, or of any particular class of offences, by any Court of Session should be by jury in any district, and from time to time to revoke or alter such order. It was also empowered to direct that the jury in such trials should consist of five persons or of such number, being an uneven number, and not being less than five or more than nine, as it might direct in respect of any particular district or of any particular class of offences in that district. Accordingly the Government of Bengal fixed seven as the number of all juries in such trials, and also in the course of 1862 directed that trials should be held by jury in the Sessions Courts of the Districts of 24-Pergunnahs, Hooghly, Burdwan, Moorshedabad, Nuddea, Patna and Dacca in respect of offences under the following Chapters of the Indian Penal Code:—Chapter VIII (*Offences against the Public Tranquillity*); Chapter XI (*False Evidence and Offences against Public Justice*); Chapter XVI (*Offences affecting the Human Body*); Chapter XVII (*Offences against Property*); Chapter XVIII (*Offences relating to Documents and to Trade or Property Marks*); and also abetments of, or attempts to commit, any of those offences. Under Section 328, in order to constitute a legal verdict, the jurors were to be unanimous, or, if the jury consisted of five persons, a majority of four, if of seven, a majority of five, if of nine, a majority of six was necessary. In the event of a majority of a smaller number, the jury was to be discharged and a new trial was to take place, and if, on such new trial, a verdict by a legal majority was not obtained, the accused person was to be acquitted (Section 351). The verdict of the jury was final, except on a point of law, that is, on misdirection established on the part of the Sessions Judge.

v. The Code of Criminal Procedure came under revision by the Legislative Council in 1870, and, in introducing the Bill, the Hon'ble Mr. (now Sir) J. F. Stephen, on the 9th December, 1870, made the following observations:—

"The third and last alteration was with regard to trial by juries, the provisions regarding which appeared to be complicated. There were certain specified majorities which might convict a man of an offence; if a smaller majority wished to convict, the prisoner might be tried again. The Indian Law Commissioners observed that this was an extremely intricate way of proceeding, and that the concurrence of the Judge was a far better guarantee of the justness of the conviction than any specified majority of jurors; and the Bill was altered accordingly thus:—that if not less than two-thirds of the jury convicted a man, and if the Judge agreed with them, the accused was to be convicted; if there was not such a majority, or if the Judge did not agree with them, the accused would be acquitted."

Mr. Stephen then proceeded to state that according to his views trial by jury *primâ facie* was an institution unsuited to such a country as India, and he asked for information as to its working since 1862.

The reports of the local authorities consulted expressed a good deal of dissatisfaction with trial by jury in the seven districts of Bengal. The Select

Committee of the Legislative Council, on consideration of those reports, in their preliminary report on the Bill thus dealt with the subject:—

Resolution III.—"We think that if the jury system in the Mofussil is to be maintained, the Judge should, in cases in which he differs from the jury, have power to refer the case to the High Court, and that the High Court should be empowered to pass final order in the case."

On the 30th January, 1872, the Honourable Mr. Stephen, in presenting the preliminary report, made the following observations:—

"The third Resolution had reference to a question which was referred to the Local Governments when this Bill was introduced; it was a question connected with the jury system in the mofussil. The jury system, as the Council were aware, was introduced by the Criminal Procedure Code passed in 1861. It was then felt to be an experiment, because the whole system of trial by jury implied the existence of a state of things which was peculiar to a community of Englishmen, or a people with English ideas, and if it did succeed, it would succeed in spite of difficulties peculiar to India. The committee had considerable doubts as to the course which ought to be taken in regard to the jury system in the mofussil, and whether it ought to be maintained at all. There was, however, one point upon which they felt clear. They thought that the Judge, in cases in which he differed from the jury, should have power to refer the case to the High Court, and that the High Court should be empowered to pass final orders. In trials by jury, a degree of finality attached to the verdict which attached to the decisions of no other tribunal in the country, and which was entirely opposed to the general spirit of the administration of justice in India. If a man was convicted before a Sessions Judge, he had an appeal to the High Court where they discussed the whole matter, and if they thought justice had not been done, they would reverse the decision. In England this could not be done, and the effect was that an irregular appeal to the Home Secretary was in practice allowed, by which the ends of justice were often defeated. Here if a jury convicted, their verdict was absolutely final; and the only remedy available when a man was unjustly convicted in that way was a petition to the Local Government or to the Governor General in Council, as the case might be, for the exercise of the prerogative of mercy. That was a power to which Mr. Stephen thought there was the very strongest possible objection, the administration of the law was one thing, and the exceptional setting aside of the law was quite a different thing. He admitted that there might be exceptional cases where, owing to peculiar circumstances, it would be proper for the Government to interfere to mitigate sentences which the Judge was bound to pass. But it appeared to Mr. Stephen altogether improper that a man should be permitted to say, 'the Judge thinks I am guilty, but I tell you that I am innocent.' Substantially that was an appeal; but it was an appeal to a person who ought not to accept the appeal; such questions ought to be left to the judicial authorities. The information before the Committee upon this subject, and the experience of the members of the Committee, led strongly to the conclusion that failures of justice resulted from this circumstance."

A further report was made by the Select Committee on this subject:—

Paragraph 9.—"As to Resolution III, we do not recommend the abolition of the jury system, but we think that the opinion of a majority of the jurors with the concurrence of the Judge should decide the case, and that, if a Judge differs from the verdict of the majority of the jury, he should have power to refer the case to the High Court, which may pass such order thereon as it thinks fit."

vi. On the 16th April, 1872, the Hon'ble Mr. Stephen, in presenting this report, accepted the suggestions of the Select Committee and made the following observations:—

"I am aware that some of my honourable colleagues think that we have changed the spirit of the whole system so much by these alterations, that it would have been better to sweep it away altogether. I cannot myself think so. I certainly should not have suggested the introduction of the jury system into India, if I had not found it here, and I cannot say that the opinions given of it by those who have had experience of its working are at all favourable: They were not, however, so altogether unfavourable as to induce us to take the step of recommending its total abolition. In giving the Judge power to refer to the High Court cases in which he differs from the jury, we have no doubt made a considerable alteration upon English precedents. But the alteration, if adopted, will be entirely in harmony with the whole spirit of Indian criminal procedure, the very essence of which is control and

supervision by one set of Courts over another. We do not, of course, mean that the Judge should act in this manner in every case in which he has doubts as to the propriety of a verdict, or even in those cases in which he feels that, if he had been a juror, he would not have returned the same verdict. Our intention is, that he should exercise the power in question in those cases only in which it is necessary to do so in order to prevent a manifest failure of justice, and having regard to the strong motive which the Judge always has for avoiding all future trouble by accepting the view taken by a jury, I think there is little reason to fear that the power will be abused."

And the Lieutenant-Governor of Bengal, Sir George Campbell, said :—

" Another subject to which he would draw the attention of the Council was the difficult subject of juries. It was His Honor's opinion that, in this country, juries framed on an English model were not altogether beneficial instruments in the administration of criminal justice; at the same time he had not been willing to abandon the jury system altogether, because, although he did not think that trial by jury was an unmixed good, he believed that the system had a great effect on the political education of the people. It was a very great object to induce the natives of the country to take a part in self-government and in the administration of justice, and it was in that respect only that he regarded the maintenance of the jury system in criminal trials to be of some value."

vii. The Code of 1872 modified that of 1861 in respect of the finality of the verdict of a jury. Section 263 declared that—

" If the Sessions Court does not think it necessary to dissent from the verdict of a majority of the jurors, it shall give judgment accordingly . . . . If the Court disagrees with the verdict of the jurors and considers it necessary for the ends of justice to do so, it may submit the case to the High Court, and may either remand the prisoner to custody, or admit him to bail. The High Court shall deal with the case so submitted as with an appeal, but it may convict the accused person on the facts, and if it does so, shall pass such sentence as might have been passed by the Court of Session."

viii. (An unimportant alteration in expression amounting to more accurate drafting was made in 1874, together with some other amendments in the Code which we need only mention in passing to the real matters in issue.)

ix. It will be observed that, while the Legislature enabled the Sessions Judge to suspend the verdict of a jury by submitting the case for the orders of the High Court, it permitted a verdict by a bare majority of the jurors, that is, by a majority of one juror. The Legislature apparently considered that if the Sessions Judge did not so disagree from the jurors, it was not necessary to have the absolute majority provided for by the Code of 1861. The orders of Government regarding the offences triable by jury, and the districts in which such trials were to be held, remained unaltered. The number of the jurors was in 1873, with the concurrence of the High Court, reduced from seven to five.

x. The Code of Criminal Procedure came again under discussion before the Legislative Council in 1881, and the system of trial by jury again became the subject of many reports, which were duly considered by that Council. But still, though those reports were not altogether favourable, no alteration was made in the Code of 1872 with the exception of a slight alteration of Section 263. Instead of the words quoted above, the corresponding Section (307) of the Code of 1882 provided—

" If in any such case the Sessions Judge disagrees with the verdict of the jurors or of a majority of the jurors, on all or any of the charges on which the accused has been tried, so completely that he considers it necessary for the ends of justice to submit the case to the High Court, he shall submit the case accordingly, recording the grounds of his opinion, and, when the verdict is one of acquittal, stating the offence which he considers to have been committed."

It was further provided that,

" in dealing with the case so submitted the High Court may exercise any of the powers which it may exercise on an appeal, but it may acquit or convict the accused of any of the

offences of which the jury could have convicted him upon the charge framed and placed before it, and if it convicts him, may pass such sentence as might have been passed by the Court of Session."

xi. On 17th July 1884, the Government of Bengal asked the opinion of the High Court whether it was desirable to introduce trial by jury into certain other districts mentioned. After stating that the seven districts had been selected by the late Sudder Court on the ground that the intelligence of the residents was higher than that of the residents of other districts, and that the means of education existing in them, or in their immediate vicinity, would enable the better class to qualify themselves thoroughly to take part in the administration of justice, the letter from Government of Bengal proceeded in these terms :—

"3. The reports submitted by District Magistrates and Commissioners of Divisions on the working of the system during the first years of its introduction were not favourable. The Commissioner of Dacca stated that he had no confidence in the jury system so far as that division was concerned, and he was of opinion that justice would be defeated in the more important trials by its application to them, though it might work well in unimportant cases, where the parties were poor and insignificant. The Commissioner of the Presidency Division thought the country was not sufficiently advanced for the introduction of the system, as in his opinion, even the higher classes of the people, with the exception perhaps of those residing in the immediate vicinity of the metropolis, were unfit for the duty of jurors, not so much by reason of their education as on account of their peculiar religious tenets, and their more cherished feelings and prejudices; and where these objections did not exist, there was another not less important, *viz.*, their ignorance of the first principles of the law of evidence. The Commissioner proposed that Judges should be vested with the power of selection and rejection, not of persons, but of classes, so that where there was reason to believe that a Brahmin might be, on religious grounds, acquitted solely through the religious scruples of Hindus, or a failure of justice might be apprehended from the existence of party feeling, the Judge might form a mixed jury of Mahomedans, Hindoos, and Eurasians or Europeans, so that no one religion or class should largely predominate. He considered that if this were done, and if greater care were taken in testing the qualifications of the persons selected to serve as jurors, and a clear summing up of the facts of the case were laid before the jury, the chief evils complained of would be remedied. The Commissioner of Burdwan, while prepared to see failures of justice in places where an unusual question arose or difference existed, was of opinion that the system was one of good promise, but that it ought to be gradually and discreetly introduced. The Commissioner of Patna concurred with the Magistrate of Patna in thinking that the natives of India were not, as a body, sufficiently enlightened, either morally or intellectually, to hold the important position of jurors, and he observed that the sooner trial by jury was abolished, in Patna at least, the better it would be for the administration of justice.

4. The reports of the Sessions Judges of the 24-Pergunnahs and Nuddea, copies of which were forwarded with the High Court's letter No. 3325, dated the 29th November, 1864, were more favourable to the system.

The Judge of Nuddea expressed his decided opinion that it had worked well, although there were a few cases in which the verdict of the jury had been directly against the evidence adduced. From his actual experience of the trials in his court, he was satisfied that the presence of a jury in criminal cases had been of essential assistance to himself, and was regarded by the natives themselves as a safeguard against errors of judgment and a guarantee that all the details in a case would be fully understood before any conclusion was formed; and he observed—"Whatever confidence a native may have in the strict and unswerving impartiality of the European Judge, I am not so satisfied that he ever places the same reliance in his power to comprehend all the intricate details which are involved in a difficult case where only natives are concerned, and it is just in these cases, specially where questions of caste, and questions involving family disputes, and native social life and manners, are constantly arising, that a jury taken from the body of the community and intimately acquainted with the ordinary transactions of native life are in the best position for giving most material assistance to the Court." The Judge of Nuddea therefore felt sure that the abolition of trial by jury would be a retrograde measure; and he added, "Every year I hope to see an improvement of what, in its present stage, can only be regarded as an experiment; and while no institution could be better devised for leading the people to think and act more independently for themselves, to rely less upon the opinions and assistance of others, and to trust more to their own

energies and exertions, we shall find that the diffusion of the knowledge of the laws, in the practical administration of which they take so responsible a part, will produce a more intelligent attachment on the part of the natives to the Government under which they live."

The Judge of the 24-Pergunnahs considered the jury system to be unsuitable to the existing state of affairs, but he did not think it advisable to abolish it after so short a trial. He was in favour rather of retaining the system and of endeavouring to improve it by amending the jury list. He proposed having on every trial a mixed jury of Europeans and Eurasians with natives, and that the jury should be composed of 5 instead of 7 members.

The Hon'ble Judges of the High Court were of opinion that a certain measure of success had attended the introduction of the system, notwithstanding a few instances in which verdicts had been given palpably against the weight of the evidence, and from which, in consequence, a failure of justice had resulted. While, however, expressing generally their opinion that the system had not proved unsuccessful, the majority of the Hon'ble Judges were not prepared to advise its extension to other districts, or to crimes other than those specified in the chapters of the Penal Code to which it had been applied. They were of opinion that looking to the increased facilities of travelling both by land and water, the radius from within which jurors were drawn might be properly and advantageously extended to 15 or 20 miles instead of 10 miles, the distance from the court-house to which it was restricted, and that a reduction in the number of the jury from 7 to 5 would conduce not only to the convenience of the persons liable to serve as jurors, inasmuch as their services would be less frequently required, but also to the improvement of the system itself by the concentration of responsibility in a smaller number.

5. On a review of the reports summarised above, the Lieutenant-Governor (Sir Cecil Beadon) came to the conclusion that although there had been a few cases in which a failure of justice had resulted from the perversity, prejudice, or want of intelligence of the jury, yet the experiment had succeeded to an extent which was scarcely to be anticipated, and that, on the whole, the jurymen had discharged their duties intelligently and conscientiously. Sir Cecil Beadon was of opinion that in the face of the testimony to the beneficial working of the system in Nuddea borne by the Sessions Judge, who had evidently given the subject very serious thought, there was not sufficient ground for suspending trial by jury in that district, as had been proposed, and that, to abolish or suspend it in any district into which it had been introduced in respect to any particular class of offences to which it had been made applicable, wouldbe open to very serious objection. At the same time, there appeared to him to be sufficient grounds for not introducing the system into other districts until it had been tested for a longer period in the districts in which it was then in force. With a view to the improvement of the system, the radius of the area of selection was extended to 20 miles in the case of Krishnaghur, Patna, and Burdwan, and to 15 miles in the case of the sudder stations of the other jury districts, and the Commissioners were asked to have the jury lists carefully revised by Collectors and to see that the duty of a juror was made as little harassing as possible. The Lieutenant-Governor was of opinion that, in order to render the system applicable under all circumstances to the districts into which it had been, or into which it might hereafter be, introduced, provision should be made by law for empannelling a special jury whenever the Sessions Judge might think it necessary for the ends of justice to adopt this course; and also that the time had arrived when an attempt might be made to prevent access to the jury during the progress of the trial. He was not disposed to accept the recommendation of the High Court for reducing the number of the jury from 7 to 5.

6. In their report on the criminal administration of the Regulation Districts of Bengal for the year 1865, the High Court remarked that the jury system had worked well in the districts into which it has been introduced in 1862. They observed that its success must of course depend partly upon the proper selection of persons to form the jury list of a district, but mainly upon the ability and care with which the presiding Judge performed his duty of setting before the jury the evidence adduced, its legal value, and its bearing upon the crime of which the parties were charged, and they therefore strongly urged the importance of invariably selecting the most experienced and efficient officers at the disposal of the Government to serve as Judges in the jury districts.

7. In February 1867, Sir Cecil Beadon, before severing his connection with the Government of Bengal, recorded his deliberate and mature conviction, founded on long experience and observation, and specially on the results of the system in the Lower Provinces, so far as it had been acted upon, that the trial of all offences before the Courts of Session, in all parts of these Provinces, ought to be by jury; and that the system might be universally adopted not only without prejudice to the administration of criminal justice, but with decided benefit to the courts, and with increased confidence on the part of the public in their judgments. He observed

that it had been his invariable aim to select the most efficient, and generally the most experienced, officers at his disposal, to serve as Judges in the jury districts, and that it might be in some degree owing to the care with which the selection of judges had been made that the system had been so entirely successful as far as it had been introduced. He added that, even if there were one or two Judges on the mofussil bench who were not fully competent to direct a jury, it seemed to him that this circumstance ought not to operate against the general introduction of a measure believed otherwise to be expedient. The Government of India coincided generally in the views expressed by Sir Cecil Beadon, but they were not in favour of the extension of the system suggested by him, as they preferred that its extension should depend in the main upon the assured capacity of the Judges available.

8. In their Registrar's letter No. 512, dated the 6th May, 1867, the High Court communicated their views on the following points in connection with the working of the jury system:—

(1) Whether the system should be extended to any districts besides those in which it was in force.

(2) Whether it should be extended to any other offences besides those to which it had been made applicable in certain districts.

(3) Whether any provision should be made for the empannelling of special juries.

(4) Whether it was desirable to frame rules for preventing access to juries during the progress of trials.

The High Court observed that they had had another year's experience of a system which was still new to the country, and that results had not been sufficiently encouraging to warrant them in recommending its extension either to new districts or to other classes of offences than those to which it had in some districts already been applied. With reference to the third point, the Court were of opinion that the preparation of special jury lists was undesirable by reason of the difficulty which was already experienced in keeping up the lists of persons qualified to act as common jurors in mofussil stations; and that any measure which was calculated to diminish the number of common jurors, or to lower the standard of intelligence required of them should be avoided in a country where the system was still upon its trial. As regards the fourth point, the Court were very decidedly opposed to the adoption of any such measure as the framing of rules for the seclusion of juries during the progress of trials. With the exception of the Commissioner of the Presidency Division, all the Commissioners of divisions, who were asked for their opinions on the points specified above, were opposed to the system of trial by jury.

9. The attention of the Government having been drawn to certain cases in which there had been a failure of justice, owing to the action of the juries which tried them, the Hon'ble Judges of the High Court were asked, in July 1871, for an expression of their opinion as to whether the system should be continued or not; and if not, whether it should be abolished or modified, and if modified, in what particulars. In reply, the High Court forwarded the opinions of nine of the most experienced Sessions Judges, seven of whom were opposed to the system, together with a minute by Mr. Justice Jackson, which was concurred in by the Judges of the English Committee. The High Court were not prepared to recommend the removal of any district where it prevailed from the operation of the system; and with regard to any change in the class of offences triable by jury, they stated their willingness to express their opinion upon it should circumstances arise indicating the need of change.

10. Mr. Justice Jackson was of opinion that in cases where popular superstitions, prejudices or predilections operated for or against the accused, it was very unlikely, or at best it was far from certain, that the verdict would be in accordance with the evidence. He observed that it was notorious that in some districts a jury would convict a man charged with dacoity on the slightest evidence, while in many cases it was extremely difficult to obtain a verdict of guilty in cases of perjury and even of forgery. Juries would often acquit, in the face of the clearest proof, rather than run the risk of conducing to a capital sentence, and more especially if the crime had arisen out of conjugal infidelity, and in some places it was next to impossible to obtain from Hindu jurors the conviction of a Brahmin. For these reasons, Mr. Justice Jackson strongly urged the necessity of amending the law in the direction of enabling the presiding Judge whenever he disapproved the verdict of the jury, to refer the case for final orders to the High Court. He also thought that the number of jurors (*viz.*, seven) prescribed by Government was unnecessarily large, and should be reduced. With these modifications he considered that the system might be maintained, and that it was too late to withdraw entirely a boon which had been granted ten years previously, and which was capable of being continued if proper safe-guards were employed. These recommendations were substantially adopted in

the Criminal Procedure Code of 1872. Under the Code of 1861 (sections 328 and 352) convictions and acquittals could be obtained only when there were certain fixed majorities in the jury. Under section 263 of the Code of 1872, a Sessions Judge was empowered to refer for the decision of the High Court any case in which he considered the verdict of the jury to be subversive of the ends of justice, and under section 236 the minimum number of the jury was reduced from five to three. No important changes in the system have been made in the Code of 1882; the only new provision being that in section 304, which empowers a jury to amend its verdict.

11. Without going so far as to pronounce the system of trial by jury to have been anything like a complete success, the Lieutenant-Governor thinks that it has worked fairly well in the more advanced districts to which it has been applied. Occasionally, no doubt, bad verdicts have been given by juries and miscarriages of justice have resulted; but since 1872, when, at the suggestion of Mr. Justice Jackson, the law was amended and a reference to the High Court allowed in cases in which the presiding Judge considered the verdict given to be wrong, these have decreased in number, and one of the faults of the system at present seems to be that Sessions Judges do not make use of the power thus conferred upon them as often as they should. It will be seen from paragraph 7 of this letter that Sir Cecil Beadon advocated the extension of the system to all the districts of the Lower Provinces so far back as 1867, when it had been in force for only five years. This proposal was apparently abandoned in deference to the view which had been expressed by the High Court that a longer trial should be given to the system in the districts into which it had been originally introduced. Upwards of 14 years have elapsed since Sir Cecil Beadon's Resolution of February 1867 was recorded, and Mr. Rivers Thompson thinks the time has now come when the matter might, with advantage, be reconsidered. I am accordingly to request that the Hon'ble Judges may be moved to favour him with an expression of their opinion as to the advisability of extending the system to the districts named in the margin, supposing that, in the opinion of the local officers who will at the same time be consulted by Government, it will be possible to prepare for these districts a sufficient jury list."

(1) Midnapore.
(2) Rajshahye.
(3) Rungpore.
(4) Mymensingh.
(5) Chittagong.
(6) Cuttack.

We have set out this letter at length because it embodies the deliberate opinion of the Local Government in 1884 on the working of the jury-system in the seven districts up to that time, and because the view expressed in it appears to be borne out by the papers before us relating to that period.

The High Court considered that the extension of the jury-system thus proposed was not desirable. The Judges (Mitter, Norris and Ghose, JJ., dissenting) reported against it in view of the following considerations:—

(1) The difficulty of procuring proper persons as jurors, regard being had to deficiency of education, using that term not only in its popular sense but in its widest acceptation.

(2) Superstition and prejudice which were still disturbing influences not unfrequently leading to failures of justice.

(3) Perversity, instances of which occasionally came to the notice of the Judges.

(4) Inability to grasp numerous details in complicated cases.

(5) Distaste for the duty shown by those whose services as jurors were specially desirable.

(6) The difficulty of providing a sufficient number of District Judges who were sufficiently experienced and qualified to preside at the trial of jury cases.

It will be observed that the opinion of the High Court was expressed only on the proposed extension of the system, and that neither the Government of Bengal nor the High Court contemplated any limitation of the system then existing, in respect either of districts or of the offences to which it had been applied since 1862.

xii. In 1890 the Government of India requested the Local Government

and the Judges of the High Court to consider and report how the system of trial by jury had worked in the Lower Provinces; what opinion was entertained as to its merits as a means for the repression of crime; and what improvements, if any, were called for in its application.

As far as the High Court is concerned, it is sufficient to say that most of the Judges suggested amendments of the law calculated to secure a better administration of justice, and that none of the Judges suggested any other alteration in the system existing, except Mr. Justice Tottenham, who proposed the abolition of trial by jury in capital cases in the mofussil.

xiii. On 22nd June 1891 the Lieutenant-Governor of Bengal reported that a careful consideration of the opinions and figures obtained by him left no doubt in his mind of the failure of the jury system in these Provinces in its present shape. His Honour accordingly proposed to withdraw certain classes of offences which under the orders of 1862 and since that time had been triable by jury in certain districts, and also to extend that system to the trial of offences relating to marriage, and further recommended certain alterations in the law in respect of references by Sessions Judges in case of disagreement with the verdicts of juries, the ascertaining of the reasons for such verdicts, and the right of appeal on the facts where a jury was not unanimous and the Judge did not record his agreement with the majority.

xiv. The Government of India approved of the proposed withdrawal and addition of certain classes of offences; and accordingly on the 20th October 1892, the Government of Bengal excluded from trial by jury in the seven districts in which that system of trial had been introduced in 1862, offences under the following chapters of the Indian Penal Code, namely :—

Chapter VIII (*offences against the public tranquillity*).

Chapter XVII (*offences affecting the human body*), with the exception of sections 363 to 369 (*kidnapping and abduction*), section 372 (*selling a minor for purposes of prostitution, etc.*), section 373 (*buying a minor for purposes of prostitution, etc.*), and section 376 (*rape*).

Chapter XVIII (*offences relating to documents and to trade or property marks*).

The Lieutenant-Governor further directed that all offences under Chapter XX (*offences relating to marriage*) and abetments of, and attempts to commit, such offences should be tried by jury in any Court of Session established in the seven selected districts. These orders took effect from and after the 1st November 1892.

xv. Subsequently the Lieutenant-Governor of Bengal, in his letter to the Government of India of the 2nd January 1893, stated that he desired to reconsider the matter in view of the distress and dissatisfaction, caused by the partial removal of what is valued as an important privilege, having been so great and so much beyond his expectation, and he suggested a Commission to consider the matter. This suggestion was approved of by the Government of India and the Secretary of State, and the present Commission has accordingly been appointed.

4. We understand our instructions to direct us to report with as little delay as possible whether in our opinion the classes of offences triable by jury in the seven districts should continue as notified on 20th October 1892, or should be altered by reverting to the former classification or by adopting

any new classification, and also to report what changes, if any, in the present Code of Criminal Procedure are desirable to prevent miscarriages of justice.

5. We propose to consider, firstly, how far it has been established that trial by jury as introduced into Bengal in 1862 has proved unsuccessful with regard to the administration of justice, to what extent any failures of justice imputed to it are attributable to juries, and, lastly, whether this system of trial should be withdrawn in respect of certain classes of offences so triable or whether, with proper safeguards, it should be maintained as under the orders passed in 1862.

The working of the system generally.

6. We have already shown the procedure in Sessions trials in Bengal since 1793, and the working of the jury system from its introduction in 1862 up to 1884, when the Local Government did not consider it to be a failure but thought that it had "worked fairly well."

7. In 1890 inquiry was made into the system of trial by jury and reports were called for by Government on the following points:—

(1) how the system had worked;

(2) what opinion was entertained as to its merits for the repression of crime; and

(3) what improvements, if any, were called for in its application.

The Judges of the High Court considered that the system was capable of improvement. Their opinion was not especially asked as to any withdrawal of the system in respect either of locality or of the classes of offences triable by jury. It was evidently thought by the Judges that no opinion on this subject was required by the terms of the reference to them, and though some of the Judges stated that difficulty had been experienced in obtaining proper verdicts in certain classes of offences, especially in cases of homicide, and various amendments in the existing law were suggested, only one Judge suggested the abolition of trial by jury in capital cases.

The reports from the Executive and Judicial Officers varied. The majority of the Executive Officers was opposed to trial by jury and condemned the system. Some of the Judical Officers reported strongly in favour of it; others reported against it. It is to be observed that in 1884 also the reports of the Executive Officers were more adverse than those of the Judicial Officers, and that in 1890 many of the Judicial Officers who reported against the system based much of their opposition to it on grounds not special to Bengal but equally applicable to England. Many of them were of opinion that in any country a trained Judge is a better tribunal for discovering the truth than an untrained jury. Apart from general considerations many of them complained of the reluctance of juries to convict in cases of homicide or murder, and of the reluctance of the High Court to interfere with the verdicts of juries in cases referred under section 307 of the Code of Criminal Procedure, 1882.

8. The Local Government was of opinion that these reports showed that trial by jury was a failure in Bengal in its present shape, and that, its total abolition being undesirable on political grounds, early steps should be taken to make such changes in its working as might be best calculated to limit the injury which it entailed.

The Local Government accordingly recommended that references by Sessions Judges, when they differ in opinion from the verdict of a jury, should be compulsory; that it should be incumbent on the Sessions Judge to ascertain and record fully the reasons of the jury for their verdict, as "a simple and reasonable way to enabling him to be sure that he ought to disagree with the

jury," and that there should be a right of appeal on the facts against the verdict of a jury, when the jurors are not unanimous, unless the Judge records his agreement with the majority. The Local Government also expressed its opinion that "the system of trial by jury in Bengal is particularly unfitted for certain classes of cases, especially those relating to murder and rioting" and it accordingly proposed to the Government of India that the trial by jury of offences under Chapters VIII, XVI (with some exceptions) and XVIII of the Indian Penal Code should be withdrawn, but that the system should be extended to offences under Chapter XX (relating to marriage). In the opinion of the Local Government the evidence adduced clearly pointed to the necessity of making the withdrawals proposed.

9. The Government of India were of opinion that the defects of the present system of trial by jury in Bengal, as well as in other Provinces, appeared to be mainly attributable to two causes:

(1) To the extension of the jury system (*a*) to areas to which it is unsuitable, and (*b*) to classes of offences which, as the experience now gained has shown, ought not to be cognizable by juries.

(2) To the fact that the provisions of section 307 of the Code of Criminal Procedure, which were intended to give Sessions Judges and the High Court power to remedy and correct wrong verdicts, have failed to fulfil this intention.

After pointing out that the Lieutenant-Governor had, under the existing law, full power to modify the orders of 1862 so as to withdraw any classes of offences from trial by jury, the Government of India expressed their conviction that the action which the Lieutenant-Governor proposed to take was fully justified by the results reported.

The Government of India were opposed to the proposal to make reference by a Sessions Judge compulsory in every case in which he might disagree from the verdict of a jury; they disapproved of the proposal to empower Sessions Judges to question juries as to the reasons for their verdicts, except in so far as might be necessary to ascertain what the verdicts were, as provided by section 303 of the Code, but they noted for consideration on an amendment of the law the question whether before or after a general verdict has been taken, special verdicts should not be required on particular issues of fact, if not on the general credibility of particular evidence; and lastly, they disapproved of allowing an appeal against the decision of a jury, at least until all other available methods for the improvement of the system had been exhausted.

10. On 20th October 1892 orders, as already stated, were passed by the Lieutenant-Governor withdrawing from trial by jury in the seven districts of Bengal various classes of offences, and extending that form of trial to offences relating to marriage, as well as to abetments of, and attempts to commit, such offences.

11. In their Despatch to the Secretary of State dated 21st December 1892, the Government of India thus summed up the result of the inquiries held and the information so acquired—

"The results of the recent inquiry and the combined weight of high authority, which it disclosed, appeared to us to point distinctly to the adoption of one or other of two alternatives (1) either by legislation to impose the further restrictions on the jury system which are declared by the Local Government and the High Courts to be necessary to provide against failures of justice, or (2) to invite the responsible Local Governments to consider the question of making such necessary changes in the system as are practicable under the existing law."

12. We think that in the recent inquiry sufficient attention has not been

given, by many of the officers who have reported against it, to the inherent merits of jury trial as a system, which may be held to compensate for its defects, or to the special advantages which it possesses in a country like India, and which must be set off against the special disadvantages necessarily to be expected. As to the first, we would quote the words of Sir J. F. Stephen in his History of the Criminal Law of England (Vol. I, p. 572), which express our opinions in more appropriate language than we could offer. After considering the relative advantages to a proper administration of justice from trial by a jury, special and common, and from trial by a Judge alone, and generally expressing an opinion adverse to trial by common juries, Sir J. F. Stephen proceeds to discuss the benefits resulting from the system of trial by jury:—

"There is a third point of view from which trial by jury must be considered, namely, its collateral advantages, and those I think are not only incontestable in themselves, but are of such importance that I should be sorry to see any change in the system though I am alive to its defects. They are these:—

"In the first place, though I do not think that trial by jury really is more just than trial by a Judge without a jury would be, it is generally considered to be so, and not unnaturally Though the Judges are, and are known to be, independent of the executive Government, it is naturally felt that their sympathies are likely to be on the side of authority. The public at large feel more sympathy with jurymen than they do with Judges, and accept their verdicts with much less hesitation and distrust than they would feel towards judgments, however ably written or expressed.

"In the next place, trial by jury interests large numbers of people in the administration of justice and makes them responsible for it. It is difficult to overestimate the importance of this. It gives a degree of power and of popularity to the administration of justice which could hardly be derived from any other source.

"Lastly, though I am, as every Judge must be, a prejudiced witness on the subject, I think that the position in which trial by jury places the Judge is one in which such powers as he possesses can be most effectually used for the public service. * * * * * * *

"I think, however, that the institution does place the Judge in a position in which, with a view to the public interest, he ought to be placed,—that of a guide and adviser to those who are ultimately to decide, and a moderator in the struggle on the result of which they, are to give their decision. The interposition of a man, whose duty it is to do equal justice to all between the actual combatants and the actual Judges on the result of the combat, gives to the whole proceedings the air of gravity, dignity, and humanity, which ought to be, and usually is, characteristic of an English Court and which ought to make every such Court a school of truth, justice, and virtue. In short, if trial by jury is looked at from the political and moral point of view, everything is to be said in its favour, and nothing can be said against it. Whatever defects it may have might be effectually removed by having more highly qualified jurors. I think that to be on the jury list ought to be regarded as an honour and distinction. It is an office at least as important as, say, that of guardians of the poor, and I think that if arrangements were made for the comfort of jurors, and for the payment of their expenses when on duty, men of standing and consideration might be willing and even desirous to fill the position."

13. As regards India the system has special merits and special drawbacks. Some of its special advantages arise from the fact that our Criminal law is foreign, and that it is desirable to familiarize the people of India with it, by making them take part in its administration under the guidance of Judges who can explain to them its reasonableness and justice. Some, from the fact that the Sessions Judges are also foreigners and that as compared with them, even after they have acquired experience from a prolonged residence in the country, a local jury (supposing the jurors to be intelligent and honest) should be better able to draw inferences of fact and to discriminate between the truth and falsehood of conflicting oral evidence given in their own language. Further, the odium of what may appear harsh punishments is shifted in great part, from the Government, and the dread, however unfounded it may be, of the

all-pervading influence of the Government affecting the judgment is removed. These advantages are sufficient to compensate for a certain number of cases in which criminals may escape conviction or may be convicted of lesser crimes than the evidence might warrant.

On the other hand it was always evident from the beginning that the introduction of the system in India was an experiment involving certain risks. The people were unused to it; the diversity of races, religions and castes might cause a bias in the minds of the jurors in particular cases; it was known that there was amongst many of them a reluctance to be accessory to the taking of life. This last feeling varies much in different parts of the country and among different sects, and is said in some places, such as Surat, to form an insuperable obstacle to securing a conviction in a case of murder. These difficulties no doubt deterred the Government from introducing the system over the whole province of Bengal and led them to introduce it in the first instance in the seven most intelligent and advanced districts. These difficulties also led to the introduction of section 263 of the Code of 1872, now re-enacted in section 307 of the Code of 1882, so as to correct the miscarriages which must occasionally occur in any country where trial by jury exists and which experience was held to have shown occurred in an appreciable number of cases in Bengal.

14. The opinions before us show that experienced officers have frequently complained of the prevalence of wrong verdicts, which they have attributed to various innate defects in the jurors. The statistics on the other hand do not show that there has been any larger number of such cases than might have been reasonably expected, and they certainly do not indicate any break down of the system. We think that considerable weight should be given to the opinions of competent observers. Still the statistics are of great importance as indicating the number of trials, the number of cases in which the Judge has disagreed with the jury, the number of cases referred, and the result of references; and they form a sound basis for judging how far the matters complained of have operated so largely as to seriously interfere with the administration of justice. Opinions of this character have been expressed from time to time since 1862, but they have never been accepted as sufficient material for the condemnation of the system. There is reason to think tha the variance between the adverse opinions and the actual results shown by the statistics can be explained by the bias caused by the occurrence of some case, in which the unexpected results have shocked these officers, who are thus too easily led to believe in the prevalence of the influence which may have caused a failure of justice in an individual case. Having formed this strong opinion and probably reported it to their superior officers, and having satisfied themselves of the existence of certain tendencies or prejudices calculated to interfere with the correctness of verdicts, and seen some instances of their operation, they have too readily assumed that these tendencies and prejudices were overwhelming and generally operative to the subversion of justice, without considering how far education or a sense of responsibility might counteract them and might have led to the majority of the verdicts being such as could not have been given if the tendencies and prejudices in question had swayed the decision of the jury.

Assuming that such tendencies and prejudices on the part of jurors do exist, the statistics show that they do not operate to anything like the extent which might be expected from the perusal of many of the reports made to Government.

15. It must be borne in mind that some of the erroneous verdicts are probably due to want of practice on the part of the Judges in the very difficult art of charging a jury. A good and clear charge or an inefficient one frequently makes all the difference in a verdict. The careful appointment of only the best and most experienced Judges to jury districts must mitigate this danger, but the exigencies of the service must occasionably cause inexperienced officers to be temporarily appointed.

Some of the verdicts alleged to be erroneous may be fairly attributable to distrust of police evidence and of the manner in which cases are got up by the police. This distrust has not been without reason in the past, but steps have been recently taken to improve the police generally, and in particular to secure that the investigation and preparation of cases shall be entrusted to a higher and more trustworthy class of officers. With these improvements the distrust may be expected to gradually disappear.

Steps also have been taken to revise the jury lists so as to obtain a better class of jurors. No doubt this will have a most appreciable effect upon the character of the verdicts, and we notice that one Sessions Judge already reports an improvement from this cause.

16. For such erroneous verdicts as may be given, in spite of all improvements of the kind we have mentioned, and in spite of the increasing education of the people, the remedy of a reference under section 307 of the Code of Criminal Procedure ought, we think, to be sufficient. But there is a considerable body of opinion that this safeguard does not work as well as it ought to do owing to two causes,—the reluctance of Sessions Judges to refer cases, and the disinclination of the High Court to disturb a verdict when the case has been referred. This evil, so far as it exists, may, we think, be met by an alteration of the law. This matter we shall discuss later on. It cannot safely be inferred that, in every case in which a Sessions Judge has disagreed with a verdict but has declined to refer the case, the verdict was necessarily wrong. Even after allowing for the reluctance to refer abovementioned, many of the cases must belong to that class where the Judge is not sufficiently confident of the correctness of his own conclusions, as against those of the jury, to feel that for the ends of justice he is bound to press his opinion, or to be certain that the case is not one in which two opinions can be reasonably formed on the evidence. In such cases there is a fair probability that the jury may be right, for there are many referred cases in which the High Court has on a full consideration of the evidence adopted the same conclusion as the jury and rejected that of the Judge.

17. We have examined certain statistics showing the percentages of judgments of Sessions Judges sitting without a jury which have been reversed or modified on appeal. There is no possibility of drawing from these statistics any safe deduction as to the comparative correctness of such judgments and the verdicts of juries, because the former are open to an appeal on the facts in every case at the instance of the accused, whereas no appeal on facts ordinarily lies from the verdict of a jury. These statistics, however, show how possible it is for Judges conscientiously to come to different conclusions on the same evidence in a large percentage of cases, and emphasise the observation that it is unsafe to assume, as a rule, that the Judge is right and the jury wrong when they disagree.

Under section 374 of the Criminal Procedure Code all sentences of death are referred to the High Court for confirmation, and that Court, before confirming

any such sentence, considers the evidence, whether the case has been tried by a jury or not. The statistics for six years show that 220 cases were referred under this section, and that in 18 cases, or about 8 per cent., the persons convicted and sentenced by the Court of Session were acquitted by the High Court. These cases are from all the districts of Bengal, including jury districts; and the figures indicate that, whatever be the form of tribunal, a certain percentage of reversals must be expected upon revision by a higher Court, and that erroneous convictions occur in a considerable number of cases.

18. We have not been able to find any reliable evidence of any deterioration in the verdicts of jurors since 1884. We have prepared, from the Annual Administration Reports of the High Court, a statement showing the results of trial by jury since 1877. This statement shows the number of cases tried by juries, the number of such cases in which the verdicts have been approved by the Sessions Judge, the number of cases referred, and the result of the cases tried by the High Court on such references. The returns on which the Government of India and the Bengal Government have proceeded relate only to the five years ending 1891. We have accordingly also showed the results for each of the preceding periods of five years, which are as follows :—

	1877—1881.	1882—86.	1887—1891.
Number of trials held	1,988	1,692	1,505
Verdicts approved by Sessions Judges .	1,696	1,384*	1,208
Cases referred	118	108	97
Verdicts accepted by High Court in such cases	38†	48†	44†
Verdicts set aside or modified by High Court in such cases	75†	66†	48†

* In 14 cases of 1884 no approval or disapproval was expressed, the Judge having vacated office without recording his opinion.

† Cases actually disposed of during the period.

These returns, in our opinion, show no deterioration during the five last years, on the figures of which period the system of trial by jury has been condemned. If the slight variation can be accepted as any criterion, it would seem to show less cause for dissatisfaction. If, on the other hand, we take the returns of 1883, which the Government of Bengal must have had before them when their letter of 1884 was written, stating that, though the system of trial by jury might not be said to be "anything like a complete success," it had "worked fairly well," we find that out of 344 trials held, the Judge concurred with the verdicts in 292 cases, disapproved wholly in 33, and partly in 19 cases, and referred only 15 cases, out of which the verdicts were accepted in only 3 and set aside in 12. In 1891, on the other hand, the results were much more favourable to juries, for out of 20 references made and tried, the verdicts were set aside and affirmed in an equal number. So far, therefore, as statistics go, the results certainly do not indicate a deterioration.

19. After the fullest consideration of the very abundant materials before us we cannot come to the conclusion that the jury system in its present shape has proved a failure in Bengal. Our general conclusion is the same as that arrived at by the Local Government in 1884, that "the system has worked fairly well in the more advanced districts to which it has been applied." We think that the evils complained of can be sufficiently met by progress on the lines previously followed and by slight alterations of the law so as to express, in terms open to no doubt, what we understand to have been the intention of the Legislature in 1872 and 1882.

Murder Cases.

20. It is in trials for murder that complaints have been most general of failure of justice because juries are unwilling to convict.

This is a complaint which has been made ever since the introduction of the system, and is one which section 307 was designed to meet. But the statistics show that the reluctance to convict in capital cases, so far as it exists as a sentiment, has been to a great extent overcome. We do not find that it can be imputed to any of the seven districts in Bengal, as it has been to three districts in Bombay, that there exists such an antipathy to the taking of life in any form on the part of a large and influential class of the community, as renders it impossible to obtain verdicts of conviction, however clear the evidence may be. We observe that both the Government and the High Court of Bombay propose that charges of murder should still remain triable by jury in the two jury districts of that Presidency to which these special objections do not apply. The complaints in Bengal are more of a general character, that juries are prone to acquit in cases of homicide, as they are too ready to convict in cases of dacoity and kindred offences.

Taking the statistics of trials by jury in murder cases in the seven districts of Bengal, the results cannot, we think, be regarded as very unfavourable; nor are they especially unfavourable in cases in which Brahmins were the persons under trial.

We find that in six years, *i.e.*, from 1887 to 1892, the total number of murder cases tried in the jury districts was 404. Of the persons charged with murder in these cases, 23 were Brahmins. Of these, 13 were acquitted and 8 convicted on verdicts concurred in by the Sessions Judge. Two cases remain; in one, a case from Nuddea, the verdict of the jury, though not approved by the Sessions Judge, was not referred to the High Court, evidently on the ground that the Sessions Judge's dissent was not complete. In the other case a Brahmin named Khan Chand Boid, a constable employed to guard the Government Treasury at Hooghly, was convicted by the High Court against the verdict of the jury and was sentenced to transportation for life.

The Reports show that in one case (20 W. R., 19) a jury at Hooghly convicted one Ramsodoy Chuckerbutty, a Brahmin, of murder, and the Sessions Judge passed sentence of death, but a majority of the Judges of the High Court who tried the case acquitted on the facts. In an unreported case at Howrah a Brahmin, named Ram Charan Mookerjee, was in 1891 convicted of murder by a Hindu Jury and sentenced to death, but was acquitted by the High Court.

No case has been brought to our notice in which an erroneous verdict can be attributed to undue deference to the social position of the accused person. If there be any such case, it is not improbable that the verdict may be due in a great measure to greater care in the defence and to the accused being better able than an ordinary criminal to obtain the services of an experienced and competent legal practitioner.

We have had inquiries made as to the status and position of the persons whose cases have been referred to the High Court by Sessions Judges who disagreed with the verdict, and we find that in an overwhelming majority of cases these persons were of humble position and low caste and in many instances too poor to afford the expense of being represented at the hearing of the case before the High Court.

Riot Cases.

21. It has been said that riot cases ought to be withdrawn because they are complicated, because there is apt to be local feeling, and because the results of

the trials are unsatisfactory; and the Shambazar case is quoted as a convincing proof of this. These cases in Bengal present peculiar features. Generally there are two parties to the riot, and the prosecuting party are unwilling to state the actual truth as to the occurrence, lest it should appear that they too have rioted. There is no class of cases in which it is more difficult to ascertain the truth as regards either the circumstances of the riot or the participation of the accused in it. It is not unusual for the prosecuting party to introduce as actors in the riot persons belonging to the opposing party who were not present at the time. The large number of cases in which all or some of those who have been convicted by Sessions Judges without a jury have been acquitted by the High Court on the ground of the untrustworthy character of the evidence or of inconclusive identification, shows how unsafe it is to conclude that it is always the fault of the tribunal if, when a riot has undoubtedly taken place, it is impossible to obtain a conviction. The untrustworthy character of the evidence in these cases has usually more to do with this result than any incompetence in the tribunal.

Much might be done to simplify these cases for the jury by trying the accused in small batches, as allowed by section 239, and by the Judge, after summing up generally on the circumstances of the alleged riot, summing up clearly as to the evidence of identification against each of the accused, and its value.

The objection arising from local feeling can be met, where it exists, by the transfer of the cases to another district under section 526.

22. The Shambazar case is a very peculiar one. There was a notorious riot of a very grave character which could not be doubted or disputed. We have not the evidence before us so as to express an opinion on it even if it were desirable to do so; but it is, we think, clear that there must have been very grave defects in the evidence of identification. For, had the identification of the accused been as clear as the occurrence of the riot, it is not conceivable that the experienced Judge who tried the case would not have referred it to the High Court. He must have been well aware of the numerous cases in which the High Court has reversed unanimous verdicts of juries when they appeared to be clearly wrong.

We do not find any sufficient case made out for the withdrawal of this class of cases, *i.e.*, Chapter VIII of the Penal Code, from the cognisance of juries.

Forgery, etc.

23. No cases have been brought to our notice to show any substantial reason for withdrawing cases under Chapter XVIII of the Indian Penal Code (offences relating to documents or to trade or property marks) from trial by jury. The complaints made have been of a general character and have not been established.

Working and proposed amendment of section 307 of the Code of Criminal Procedure.

24. It has been urged that the remedies provided by law to prevent miscarriages of justice through erroneous verdicts have not been consistently applied, that there has been reluctance on the part of Sessions Judges to refer cases which should have been referred, and that in dealing with referred cases there has not been that uniformity of practice amongst the Judges of the High Court which is so necessary for an efficient administration of justice. We have had under consideration the judgments delivered in such cases during the last five years, and also in other cases published in the Law Reports. It has been argued that in some of these cases, so far as the judgments show, the opinions of the Sessions Judges have not been taken into consideration, and that the

Judges of the High Court have been hampered in the consideration of the cases on their merits by analogies of English law applicable to the revision of verdicts in civil cases by Judges who are not judges of the facts, and have rather required the party supporting the reference to show that the particular verdict was "perverse or unreasonable," which are the words used in the older English cases; or, if the case was dealt with without argument, have considered the case only from that point of view; although there are cases in which the Judges have considered the evidence on the merits in order to determine whether the view taken by the jury or that taken by the Sessions Judge was correct.

On the other hand it has been argued that all that can be deduced from the reported cases is that some Judges have given more weight to the opinion of a jury than others; but that as this manifestly depends on the different points of view from which different Judges regard the same matters, the Legislature could not possibly lay down any rule regarding the degree of weight to be attached to the verdict of the jury or the opinion of the Sessions Judge.

To remove all doubts and to define the duties of Sessions Judges and of the High Court in more clear language, we recommend that for the words "so completely that he considers it" in the first paragraph of section 307 of the Criminal Procedure Code, 1882, the words "and is clearly of opinion that it is" should be substituted, and that the last paragraph of the same section should be modified so as to run somewhat in the following terms:—

"In dealing with the case so submitted the High Court *shall consider the entire evidence, giving due weight to the verdict of the jury and to the opinion of the Sessions Judge and of the dissentient jurors, if any, and* may exercise etc., etc.," continuing in the terms of that section. The words in italics are those which in our opinion should be introduced.

25. We learn the intention of the Legislature as to the duty of Sessions Judges from the observations of the Honourable Mr. J. F. Stephen:—

"We do not, of course, mean that the Judge should act in this manner in every case in which he has doubts as to the propriety of a verdict, or even in those cases in which he feels that, if he had been a juror, he would not have returned the same verdict. Our intention is that he should exercise the power in question in those cases only in which it is necessary to do so, in order to prevent a manifest failure of justice; and having regard to the strong motive which the Judge always has for avoiding all future trouble by accepting the view taken by a jury, I think there is little reason to fear that the power will be abused."

To encourage disagreement from the verdict of a jury, or to require a reference in every case in which the Sessions Judge would have come to a different conclusion, would be attended with mischievous results. Amongst these we may point out that it would by degrees utterly destroy all sense of responsibility amongst jurors, a feeling which it is obviously desirable to strengthen, rather than to impair; and the unfortunate effects that would probably ensue from the removal of all such trials to the High Court to be decided on the bare record, and without the advantage of hearing the evidence given.

We understand the meaning of the law to be, that if the Sessions Judge, after considering the fact that the jury or a majority of them have arrived at a certain conclusion, disagrees with that conclusion, and is clearly of opinion that it would occasion a failure of justice if he were to accept the verdict, it is his duty then, and then only, whatever the result may be, to refer the case to the High Court. The two elements (1) disagreement with the verdict and (2) the opinion that he cannot record and give full effect to the verdict without

causing a failure of justice, are distinct and should be kept so. The alteration proposed is slight, but we trust that it will serve to make the law clearer and to emphasise the duty of a Sessions Judge not to record a verdict which he is satisfied will cause a failure of justice merely because he is uncertain whether the High Court will concur in his opinion, while making it equally clear that he ought not to refer unless he is satisfied that by giving effect to a verdict a failure of justice will ensue.

26. With regard to the second amendment recommended, we think that it was intended that the High Court should form an independent opinion on the evidence in the same way as it is bound to do, and invariably does, in an appeal in a case tried with Assessors, giving due weight to the opinion of the Sessions Judge as well as to the verdict of the jury. If we are correct in this view, it is desirable that the law should be expressed in clear terms admitting of no doubt.

With the law thus expressed we think that sufficient safeguards would be provided against any miscarriages of justice from erroneous verdicts.

27. After considering all the matters above set forth, including the probable effect of the further safeguards we have recommended, and the fact that for thirty years the offences specified in the orders of 1862 have been tried by juries, and that grave distress and dissatisfaction has been caused by the partial withdrawal of what has come to be regarded as a boon and a privilege, and considering also that, while it is necessary that justice should be administered, it is equally necessary that the subject should feel and be satisfied that it is being properly administered, we have come to the unanimous conclusion that the classification of offences triable by jury as it stood before the 20th October 1892 should be reverted to.

The additional safeguards and improvements recommended in our report will, we anticipate, diminish such evils as exist at present, but it is not in our opinion necessary or desirable to delay reverting to the former classification until the necessary legislation can be carried out. At the same time we think it desirable that the alteration in the law recommended by us should be made with the least possible delay.

28. We have also considered how far there should be any changes in the classification of offences triable by jury. We can suggest no improvement in the classification of offences as given in the orders of 1862. We prefer a classification by Chapters of the Penal Code to one by the degree of punishment which may be imposed, as in Bombay. The Bengal classification is more simple and not open to confusion resulting from charges for offences not triable by jury being added to charges for offences so triable.

Offences relating to marriage.

29. We observe that by the recent order offences under Chapter XX, Indian Penal Code (*offences relating to marriage*), have been made triable by jury, and we have considered whether this is reasonable and expedient. The change has no doubt been prompted by a desire to leave to juries the determination of cases in which matters relating to their social or religious habits or customs may be involved. It seems to us, however, that in consequence of the diversity of religious and social habits and caste-customs, this object will not be attained so well as in a trial with the assistance of assessors. The jurors are selected by lot and it may so happen that by this process none of the very religion or class which should be associated for the trial may be selected. For instance, where the parties in a trial for an offence relating to marriage may be all Mahomedans, a jury consisting entirely of Hindus may be selected by lot, and where the parties are Chamars or members of the lowest classes, a jury of Mahomedans or Hindus of the higher and educated classes,

ignorant of all the habits and customs of the parties, may be selected. On the other hand, in a trial with the assistance of assessors the very opposite results can be secured, because the Sessions Judge is able to *choose* persons to act as assessors, who are of the same caste or religion or have intimate knowledge of the customs of the parties. Advantages too can be derived in such cases from the more intimate relations which exist between a Judge and assessors than between a Judge and a jury. If, therefore, we have rightly understood the reasons which have induced the Local Government to include offences relating to marriage amongst those triable by jury, we would recommend that they be excluded.

Extension of the system to other offences.

30. We have also had under consideration whether trial by jury in the seven selected districts should be extended to the trial of other offences. We feel, however, that, with the information before us, we are not competent to express any safe opinion on this matter. It is one that can be determined only after detailed inquiry which, from the instructions that we have received to submit our report with as little delay as possible, we have not thought it our duty to undertake. It is a matter that can be separately dealt with by Government.

31. Several minor points in connection with the terms of the reference made to us have been considered and discussed, and upon these we desire also to express an opinion.

Section 303, Code of Criminal Procedure.

32. It has been suggested that the terms of section 303 of the Code of Criminal Procedure should be amended so as to enable a Sessions Judge to obtain more clearly the opinions of the jury on parts of the evidence so as to learn and place on record the grounds upon which the verdict was arrived at. We are not in favour of any alteration in the present law, which provides sufficient means for obtaining a verdict, and we think that there are strong objections to anything of the nature of a cross-examination of the jurors as to details of a case so as to obtain their opinion on portions of the evidence. Amongst these it will be sufficient to say that it must very frequently happen that the jurors may individually arrive at the same conclusion by different processes of reasoning, or they may find difficulty in expressing intelligently or logically a conclusion fairly arrived at on consideration of the entire case. No doubt in certain cases, for instance, in cases of culpable homicide not amounting to murder, or of house-breaking with intent to commit an offence, it may be necessary to give a special verdict to determine the exact offence, so as to regulate the sentence; but the terms of the present law sufficiently provide for this and we are opposed to any alteration for the purposes suggested.

It has also been proposed to permit questions to be put to the jurors after verdict delivered, so as to enable the Sessions Judge to determine whether he should refer the case to the High Court, as well as to enable the High Court itself in a referred case to learn whether a verdict was on reasonable and proper grounds; but the same objections equally apply. We prefer to adopt the course recommended by us, *viz.*, that each case referred by a Sessions Judge should be tried by the High Court on its merits on the evidence, as less likely to cause embarrassment and more certain to ensure a just and proper decision.

Special Verdicts.

33. We have considered anxiously whether it is practicable to enable the Judge to direct the jury to return a special verdict on issues framed by him. This proposal is supported by high authority, and we are fully sensible of the advantages it would be to the High Court in referred cases to have a special, instead of a general, verdict to deal with, but we have reluctantly come to the conclusion that such a procedure would be liable to create greater evils than it would remedy.

34. We agree with the conclusion arrived at by the Government of India that it is not desirable to have Special Juries, in so far as these may tend to weaken Common Juries, but at the same time we are of opinion that cases may occur in which the employment of a Special Jury may be highly desirable in the interests of justice as well as to satisfy public opinion, and we think that means may be provided which will meet the objection raised. It might be provided that while there is a separate list of Special Jurors, the gentlemen on that list should not be exempted from ordinary service as Common Jurors. They might be included also in the general list and be liable to serve when drawn for ordinary trials without being reserved only for trials by Special Juries. No additional service within the prescribed period of six months should be required. It might be left to the Local Government on consideration of the jury list and other matters, peculiar to a district to which trial by jury may have been extended to declare that in the Sessions Court of that district trials by Special Jury might be held, and it might be left to the discretion of the Sessions Judge of that district to determine in each case, on application made, whether a trial should be so held, provided that the application be made in sufficient time to summon a Special Jury. If this recommendation be accepted, it will become necessary to amend the law, so as to provide for the preparation of Special Jury lists, and for summoning such Jurors. **Special Juries.**

35. It has been proposed by the Government of Bengal to reduce the number of jurors from five to three. The law permits a jury to consist of from nine to three members, according as the Local Government may direct. Under the Code of 1861, the minimum was five, and seven was the number fixed by the Local Government for juries in Bengal. The Code of 1872 reduced the minimum to three, and in 1873, with the concurrence of the Judges of the High Court, the number was fixed at five. We are aware of no reason for a further reduction. It is not stated that under the present rule service on juries is too frequent or irksome. On the other hand, we think that three, except on some special ground, is too small a number for a jury, and that if improper influences are attempted, they are more likely to be successful on the smaller number. **Number of Jurors.**

36. We also find no sufficient grounds assigned for altering the limits of age of persons liable to serve as jurors, and we observe that this limit was fixed by the Code of 1861 and has remained unchanged until the present time. **Age of Jurors.**

37. Under the Codes of 1861 and 1872, a jury list was prepared of "persons residing within 10 miles from the place where Sessions trials are held, or within such other distance as the Local Government may think fit to direct," but the Code of 1882, Section 319, made all persons between the prescribed ages liable to serve as jurors at any trial within the district within which they reside. We prefer that it should be left to the discretion of the Local Government as under previous legislation to determine, on consideration of the circumstances of each district, the area from which a juror should be selected, as districts vary in extent and in the means of travelling available. **Area of Selection of Jurors.**

38. We observe that attention has been directed to this subject, and that in the revisions recently made the lists have been considerably reduced by the exclusion of many unfit persons. There can be no doubt that much benefit will result from this, and strict attention should be enjoined to this important duty in the future. **Revision of Jury Lists.**

We notice that in one district the recent revision of the list of jurors has

resulted in the exclusion of the names of all Honorary Magistrates, that is to say, of a class of men who, for the very reasons for which they have been given Magisterial powers, are best fitted to serve as jurors. They are not liable to exemption under any of the provisions of section 320 of the Procedure Code; and we think that all Honorary Magistrates as such should be included in all lists of jurors in the districts in which they reside.

We would also invite attention to the large number of exemptions granted under clause (*k*) of section 320 of the Code. These include certain officers of the Eastern Bengal State Railway,* all Barristers practising in the Mofussil†, District and Assistant Superintendents of Traffic and Guards on the East Indian Railway,‡ and local Auditors on the Staff of Examiners of Local Accounts in Bengal§. The Chief Customs Authority or Chief Customs Officer is also exempted under section 10 of Act VIII of 1878, and he has power under that section to exempt from service as a juror any other officer of Customs whom he deems it necessary to exempt on grounds of public duty. We would suggest that the necessity of exempting such a large body of men, who *primâ facie* are well fitted to serve as jurors, should be carefully reconsidered. Such exemptions deprive the jury lists of some of the persons best fitted to serve, and further tend to take from the position of juror much of the dignity which should attach to it.

* Notification, 31st August 1885, *Calcutta Gazette*, 9th September, Part I, page 886.

† Notification, 11th August 1888, *Calcutta Gazette*, 15th August, Part I, page 733.

‡ Resolution, 7th May 1875, *Calcutta Gazette*, 19th May, Part I, page 592.

§ Letter to Accountant General, Bengal, No. 2067 J. of 8th May 1889, and Notification of the same date.

Accommodation for Jurors.

39. It has also been represented to us that sufficient attention is not paid to the convenience and comfort of those summoned as jurors, and that in consequence native gentlemen of recognised social position are reluctant to attend. The matter was dealt with by a Circular of the High Court, dated 9th August 1865, but it does not appear that adequate steps have been taken to give effect to the instructions regarding the accommodation for jurors.

Remuneration of Jurors.

40. On this point we are not unanimous and find some difficulty in making any recommendation. The question is one which more intimately concerns the native community, and our members who represent that community differ in opinion. The matter is of no great importance, and may be left for settlement by Government after inquiry such as we have not been able to make.

Seclusion of Jurors.

41. The question of the seclusion of jurors during the trial and up to the delivery of their verdict is one which was considered by the Local Government and by the High Court in 1867. It is sufficient for us to say that the High Court has power under section 296, Criminal Procedure Code, to make rules in this direction, that it has never seen its way to framing any such rules, and that we find ourselves equally unable to suggest any rules which would not be repugnant to the prejudices and customs of the native community in Bengal.

Right of Appeal.

42. We are aware that opinion in England is inclined to an appeal, but we are not aware with what restriction it would be allowed; we are, therefore, unable to determine how far any recommendation that we could make would be in accordance with the rule in England and also applicable to Bengal. It has been recommended on high authority that an appeal should be allowed in cases in which the verdict is not unanimous and where the Sessions Judge also disagrees, but does not consider it necessary to refer the case to the High Court. We are of opinion, however, that section 307 of the Criminal Procedure Code,

with the alterations that we have suggested, will provide adequate protection against failures of justice.

43. It has been suggested to us that some provision should be made for a *verbatim* record of Sessions Judge's charge to the jury, but, in the opinion of the majority of us, none of the suggestions made on this point are practicable. **Heads of charge to Jury, S. 367, C. P. C.**

44. In dealing with all these matters, we have abstained from going beyond the strict terms of the reference made to us. We may mention that discussion of other matters has been invited, but we have, for the reasons stated, not taken them into consideration. We consider that the matters referred to us are defined by the two paragraphs of the Resolution of the Government of India dated the 23rd February 1893, set out in the commencement of this report, and that we are not authorized to travel beyond them.

We, the undersigned, accordingly report that, in our opinion, it is desirable that the classes of offences which, before the 20th October 1892, were triable by jury in the seven districts of Bengal abovementioned, should be triable by jury in those districts, and that the present classification should be amended accordingly.

We further report that, in our opinion, it is desirable, for the purpose of preventing miscarriage of justice, to amend section 307 of the Criminal Procedure Code by the substitution of the words "and is clearly of opinion that it is," for the words "so completely that he considers it," in the first paragraph of that section, and by the insertion in the third paragraph of the words "shall consider the entire evidence, giving due weight to the verdict of the jury and to the opinion of the Sessions Judge and of the dissentient jurors, if any and"; and that it is also desirable for the same purpose to make such further amendments in the Criminal Procedure Code as may be necessary to carry out our recommendations hereinbefore set forth as regards special jurors and the area from which jurors should be selected.

(Signed) H. T. PRINSEP.
,, G. H. P. EVANS.
,, JOTINDRO MOHUN TAGORE.*
,, ROMESH CHUNDER MITTER.*
,, C. A WILKINS.

March 24, 1893.

* Subject to separate notes attached to this report.

Note by Sir Romesh Chunder Mitter, Kt.

I. As regards the question whether Trial by Jury in the seven selected districts should be extended to the trial of other offences, I think it right to add that in my opinion there are many offences in the Indian Penal Code and other Acts which were not made triable by jury in 1862, but which may now with advantage be made so triable. Certain offences under the Penal Code were probably not originally made triable by jury because they were not exclusively triable by Courts of Session. But cases coming within this class are, by reason of their importance, frequently committed to Courts of Session for trial, and many of these should, in my opinion, be tried by jury in jury districts. There seems, for instance, no reason why offences under Chapter IX or Chapter XXII of the Code should not be triable by a Jury when committed to the Sessions, considering that offences against Public Justice are so triable. Similarly the offence of Defamation (Chapter XXI) seems to me to be an offence eminently fit for trial by a jury.

II. As regards offences under special Acts, I am of opinion that there are several which might conveniently be made triable by jury. For example, when in the course of proceedings under the Registration Act, a person is charged with using a forged document and making a false statement with reference to it, it is manifestly inconvenient that, as regards the charge of forgery under the Penal Code, he should be tried by a jury, while on the same facts as regards the charge under Section 82 of the Registration Act he should be tried by the Judge with the aid of Sessions. This anomaly could be avoided by making all offences in the Sessions Court in jury districts triable by jury except those which are specially mentioned by the Local Government.

III. It seems to me of the utmost importance that in cases tried by jury there should be an accurate record kept of the Judge's charge to the jury. At present though the law requires that the Sessions Judge should record the heads of his charge to the jury, it contains no provision as to when or how such record should be made. As a matter of practice I am informed Sessions Judges generally record from memory or their own notes the substance of the charge delivered orally, after the verdict has been taken. This course is open to many obvious objections and is likely to lead to unsatisfactory results. When an appeal has to be preferred to the High Court in a jury case, the appellant in appealing against an alleged misdirection of the Judge is sometimes forced to complain of the Judge's charge, not as it was probably laid before the jury, but as it has been recorded by the Judge after the verdict has been delivered. I am of opinion that the record should contain a strictly accurate report of the charge as delivered by the Judge to the jury.

IV. In my opinion there are two courses, the adoption of either of which would secure this end :—1st, it should be made obligatory upon the Judge to write out his summing up before he proceeds to charge the Jury. But this is a course which I am informed, though occasionally adopted by Judges in the Moffussil, is fraught with inconvenience and is likely to delay the trial. I am therefore disposed to recommend that a Bench Clerk should be attached to each Sessions Court whose duty it should be to take down in short-hand the Judge's charge as it is delivered and whose transcript of the charge, when signed by the presiding Judge, should form part of the record.

(Signed) ROMESH CHUNDER MITTER.

Note by Maharaja Sir Jotindro Mohun Tagore Bahadur, K.C.S.I.

I sign the Report subject to the note recorded below.

I agree with my Colleague, Sir Romesh Chunder Mitter, Kt., in the opinions he has expressed in paragraphs 1 and 2 of his note appended to the Report, so far as they relate to the extension of trial by jury to other offences. I agree that all offences in the Sessions Court in jury districts should be made triable by jury save those which may be specifically excepted by the Local Government. *Primá facie* I see no reason why a majority of the offences which now come before the Sessions Court, and which are comparatively of a less serious nature than those included in Chapters 8, 17, 18, etc., of the Indian Penal Code, should not also be made triable by jury, especially as some experienced Government officials have themselves recommended the extension of trial by jury to those offences. I also agree in the opinion expressed in paragraph 3 of the aforesaid note regarding the importance of keeping a full and accurate record of the Judge's charge to the jury, but I am not sure how far the means suggested by my learned Colleague in paragraph 4 of his note are likely to secure practically the object aimed at.

(Signed) JOTINDRO MOHUN TAGORE.

SCHEDULE.

PAPERS READ AND CONSIDERED BY THE COMMISSION.

General Papers.

Resolution of the Government of India in the Home Department, No. $\frac{5 \text{ (Judicial)}}{201\text{-}208}$, dated 23rd February 1893.

Extracts regarding trial by jury from the Annual Reports of the Calcutta High Court on the Administration of Criminal Justice in Bengal for each of the years 1862 to 1891.

Extracts regarding trial by jury from the Annual Reports of the Sessions Judges of the 24-Parganas, Hooghly, Burdwan, Murshidabad, Nadia, Patna, and Dacca for the years 1883 to 1891.

Extracts regarding trial by jury from the Annual Administration Reports of the Bengal Government for the years 1864-65 to 1890-91.

Extracts regarding trial by jury from the letters of the Government of Bengal to the Government of India, on the High Court's Annual Reports on the Administration of Criminal Justice in Bengal for the years 1883 to 1891.

Extracts from the Proceedings of the Legislative Council of the 9th December 1870, 30th January and 16th April 1872, and 25th January 1884. Also extracts from the preliminary report of the Special Committee of the Legislative Council and from the supplementary report of the Select Committee on the Bill which became Act X of 1872.

Bengal Correspondence.

Office Memorandum by the Government of India (Home Department), No. 1110, dated 25th August 1892.

Letter from the Sessions Judge, Murshidabad, to the Government of Bengal, No. 52, dated 27th May 1871.

" " the Government of Bengal to the Commissioner of Rajshahi, No. 2710, dated 12th June 1871.

" " the Commissioner of Rajshahi to the Government of Bengal, No. 160, dated 11th July 1871.

" " the Government of Bengal to the Registrar, High Court, No. 3499, dated 27th July 1871.

" " the Commissioner of Burdwan to the Government of Bengal, No. 102, dated 1st March 1872.

" " the Registrar, High Court, to the Government of Bengal, No. 205, dated 7th March 1872.

" " the Government of Bengal to the Registrar, High Court, No. 1653, dated 11th March 1872.

" " the Registrar, High Court, to the Government of Bengal, No. 326, dated 15th April 1872.

" " the Government of Bengal to the Registrar, High Court, No. 2611, dated 23rd April 1872.

" " the Government of Bengal to the Registrar, High Court, No. 1924J., dated 17th July 1884.

" " the Commissioner of Burdwan to the Government of Bengal, No. 376, dated 28th August 1884.

" " the Commissioner of Dacca to the Government of Bengal, No. 257M., dated 28th August 1884.

" " the Commissioner of Orissa to the Government of Bengal, No. 511, dated 30th August 1884.

" " the Commissioner of Chittagong to the Government of Bengal, No. 574 G. M., dated 12th September 1884.

" " the Commissioner of Rajshahi to the Government of Bengal, No. 626 Jot., dated 11th November 1884.

" " the Commissioner of the Presidency Division to the Government of Bengal, No. 13 Ct. J. G., dated 17th November 1884.

" " the Registrar, High Court, to the Government of Bengal, No. 1271, dated 22nd April 1885.

Letter from the Government of Bengal to Judges of Midnapore, Jessore, Rajshahi and Chittagong, No. 560-63 J. D., dated 26th May 1885.

" " the Judge of Midnapore to the Government of Bengal, No. 98, dated 2nd June 1885.

" " the Judge of Jessore to the Government of Bengal, No. 349-J., dated 10th June 1885.

" " the Judge of Chittagong to the Government of Bengal, No. 251G., dated 16th June 1885.

" " the Judge of Rajshahi to the Government of Bengal, No. 826G., dated 19th August 1885.

" " the Government of India (Home Department), to the Government of Bengal, No. 742, dated 31st May 1890.

" " the Government of India (Home Department), to the Registrar, High Court, Calcutta, No. 745, dated 31st May 1890.

" " the Government of Bengal to the Government of India (Home Department), No. 122 J. D., dated 22nd June 1891, with enclosures; *viz.* :—

Letter from the Additional Judge of the 24-Parganas, No. 252, dated 9th July 1890.

" " the Judge of Patna, No. $\frac{\text{Sct.}}{197}$, dated 21st July 1890.

" " the Judge of Burdwan, No. 1606, dated 7th August 1890.

" " the Judge of the 24-Parganas, No. 763, dated 9th August 1890.

" " the Judge of Nadia, No. 477, dated 19th August 1890, with enclosures from the Bar Library and from the Government Pleader, Krishnagar.

" " the Inspector General of Police, No. 11832, dated 2nd September 1890.

" " the Judge of Dacca, No. 1016, dated 2nd September 1890.

" " the Judge of Hooghly, No. 1534, dated 22nd September 1890, with enclosures, from the Public Prosecutor, from the Bar Association, and from the Muktears, Hooghly.

" " the Commissioner of Patna, No. 589 G., dated 24th September 1890.

" " the Judge of Murshidabad, No. 1291, dated 28th September 1890.

" " the Commissioner of Dacca, No. 1357 J., dated 7th October 1890.

" " the Commissioner of the Presidency Division, No. 106 J.G., dated 16th October 1890, with enclosure, from Magistrate of Nadia, No. 1470 J. G., dated 30th September 1890.

" " the Commissioner of Burdwan, No. $\frac{201\ \text{T. G.}}{292\ \text{T. G.}}$, dated $\frac{\text{31st October 1890,}}{\text{5th November 1890}}$ with enclosure, from Magistrate of Hooghly, No. 1725, dated 9th September 1890.

" " the Judge of Dacca, No. 45, dated 16th January 1891.

" " the Commissioner of the Presidency Division, No. 14 J. G., dated 18th February 1891.

Letter from the Registrar, High Court, Calcutta, to the Government of India (Home Department), No. 540, dated 9th February 1891.

" " the Government of Bengal to the Government of India (Home Department), No. 4675 J., dated 21st December 1891.

" " the Government of India (Home Department) to the Government of Bengal, No. 1107, dated 25th August 1892.

Notification of the Government of Bengal, dated 20th October 1892, with endorsement No. 907 J. D. of the same date.

Letter from the Government of Bengal to the Judges of—

The 24-Parganas
Hooghly
Burdwan
Murshidabad
Nadia
Patna
Dacca — No. 917 J. D., dated 29th October 1892, with endorsements Nos. 918-919 J. D.

Letter from the Government of Bengal to the Government of India (Home Department), No. 4056 J., dated 10th November 1892.

" " the Government of Bengal to the Government of India (Home Department), No. 4047 J., dated 11th November 1892.

" " the Government of Bengal to the Government of India (Home Department), No. 4527 J., dated 12th December 1892.

Despatch from the Government of India to Her Majesty's Secretary of State for India, No. 32 of 1892, dated 21st December 1892.

Letter from Maharaja Durga Churn Law, C.I.E., to the Government of Bengal, dated 23rd December 1892, with enclosed memorial of same date of the inhabitants of Calcutta and its suburbs in public meeting assembled.

„ „ the Government of Bengal to the Government of India (Home Department), No. 4723 J., dated 27th December 1892.

„ „ the Government of Bengal to the Government of India, No. 35 J., dated 2nd January 1893.

Despatch from the Government of India to Her Majesty's Secretary of State for India No. 1 of 1893, dated 4th January 1893.

Letter from Maharaja Durga Churn Law, C I.E, to the Government of Bengal, dated 7th January 1893, with enclosed memorial from the Committee appointed by the inhabitants of Calcutta, etc., in public meeting assembled.

„ „ Maharaja Durga Churn Law, C.I.E., to the Government of Bengal, dated 10th January 1893, with enclosed appendices to the Committee's memorial.

„ „ the Government of Bengal to the Government of India (Home Department), No. 208 J., dated 13th January 1893.

Despatch from the Government of India to Her Majesty's Secretary of State for India, No. 5 of 1893, dated 18th January 1893.

Circular letter from the Government of Bengal to the Judges of Jury districts, No. 4686 J., dated 21st December 1893.

„ „ from the Government of Bengal to the Judges of Jury districts, No 67 J., dated 4th January 1893.

Letter from the Judge of Murshidabad to the Government of Bengal, No. 1282, dated 30th December 1892.

„ „ the Judge of Hooghly to the Government of Bengal, No. 4232, dated 31st December 1892.

„ „ the Judge of Dacca to the Government of Bengal, No. 16, dated 5th January 1893.

„ „ the Judge of Nadia to the Government of Bengal, No. 31, dated 7th January 1893.

„ „ the Judge of Hooghly to the Government of Bengal, No. 55, dated 9th January 1893.

„ „ the Judge of Burdwan to the Government of Bengal, No. 85, dated 10th January 1893.

„ „ the Judge of Murshidabad to the Government of Bengal, No. 38, dated 13th January 1893.

„ „ the Judge of Dacca to the Government of Bengal, No. 91, dated 14th January 1893.

„ „ the Government of India to the Government of Bengal, No. 69, dated 16th January 1893.

„ „ the Additional Sessions Judge of the 24-Parganas and Hooghly to the Government of Bengal, No. 27, dated 20th January 1893.

„ „ the Additional Sessions Judge of the 24-Parganas and Hooghly to the Government of Bengal, No. 28, dated 20th January 1893.

„ „ the Judge of Patna to the Government of Bengal, No. 70, dated 27th January 1893.

Note by Mr. T. D. Beighton, District and Sessions Judge, dated 17th December 1892.

Letter from Mr. Beveridge, Additional Sessions Judge, 24-Parganas, dated 23rd December 1892.

Circular letter from the Government of Bengal to the Judges of Jury districts, No. 4758 J., dated 29th December 1892.

Letter from the Judge of Hooghly to the Government of Bengal, No. 4233, dated 31st December 1892.

„ the Judge of Nadia to the Government of Bengal, No. 15, dated 4th January 1893.

„ the Judge of Dacca to the Government of Bengal, No. 49, dated 10th January 1893.

„ the Judge of Murshidabad to the Government of Bengal, No. 33, dated 12th January 1893.

Letter from the Additional Sessions Judge of the 24-Parganas and Hooghly to the Government of Bengal, No. 10, dated 13th January 1893.
„ the Judge of Burdwan to the Government of Bengal, No. 222, dated 28th January 1893.
„ the Judge of Patna to the Government of Bengal, No. 171 S., dated 22nd February 1893.
Circular letter from the Government of Bengal to the Judges of Jury districts, No. 4759 J., dated 29th December 1892.
Letter from the Judge of Murshidabad to the Government of Bengal, No. 23, dated 10th January 1893.
„ „ Patna to the Government of Bengal, No. 24S., dated 11th January 1893.
„ „ Patna to the Government of Bengal, No. 40 S., dated 18th January 1893.
„ „ Nadia to the Government of Bengal, No. 103, dated 30th January 1893.
„ „ Hooghly to the Government of Bengal, No. 387, dated 31st January 1893.
„ „ Burdwan, to the Government of Bengal, No. 295, dated 8th February 1893.
„ „ of Dacca to the Government of Bengal, No. 398, dated 25th February 1893.
Circular letter from the Government of Bengal to the Judges of Jury districts, No. 306 J., dated 19th January 1893.
Letter from the Judge of Hooghly to the Government of Bengal, No. 311, dated 26th January 1893.
„ the Judge of Murshidabad to the Government of Bengal, No. 107, dated 26th January 1893.
„ „ Nadia to the Government of Bengal, No. 97, dated 28th January 1893.
„ „ Hooghly to the Government of Bengal, No. 354, dated 30th January 1893.
„ „ Burdwan to the Government of Bengal, No. 261, dated 1st February 1893.
„ „ Patna to the Government of Bengal, No. 98S., dated 1st February 1893.
„ Additional Sessions Judge of the 24-Parganas, to the Government of Bengal, No. 83, dated 27th February 1893.
„ Additional Sessions Judge of the 24-Parganas and Hooghly, to the Government of Bengal, No. 94, dated 7th March 1893.
„ Government of India (Home Department), to the Government of Madras, No. 740, dated 31st May 1890.
„ Government of Madras to the Government of India (Home Department), No. 2096, dated 29th December 1890, with enclosures, *viz.*:— **Madras Correspondence**

Letter from the Judge of Vizagapatam, No. 575, dated 12th August 1890.
„ „ South Arcot, No. 74, dated 12th August 1890.
„ „ Tanjore, No. 400, dated 13th August 1890.
„ „ Coimbatore, No. 973, dated 16th August 1890.
„ „ South Arcot, No. 88, dated 16th September 1890.
„ „ Registrar Madras High Court, No. 2543, date 5th November 1890.
„ „ Registrar, Madras High Court, No. 2565, dated 7th November 1890.

Letter from the Government of India (Home Department) to the Government of Madras, No. 1105, dated 25th August 1892.
„ the Government of Madras to the Government of India (Home Department), No. 268, dated 6th February 1893, with enclosures, *viz.*:—

Resolution of Madras Government, No. 1827 (Judicial), dated 28th September 1892.
Letter from Registrar, Madras High Court, No. 3281, dated 9th December 1892.

Letter from the Government of India (Home Department) to the Government of Bombay, No. 741, dated 31st May 1890. **Bombay Correspondence.**

Letter from the Government of Bombay to the Government of India (Home Department), No. 7105, dated 19th December 1890, with enclosures, *viz.*:—

Letter from Judge of Thana, No. 1499, dated 19th July 1890.
" " " Ahmednagar, No. 1791, dated 28th July 1890.
" " " Surat, No. 1220, dated 14th August 1890.
" " " Poona, No. 391, " 16th " "
" " " Karachi, No. 1017, dated 19th August 1890.
" " " Belgaun, No. 1317, " 23rd " "
" " " Ahmedabad, No. 1838, dated 22nd September 1890.
" " Judicial Commissioner in Sind, No. 1847, dated 26th September 1890.
" " Registrar, Bombay High Court, No. 2003, dated 26th September 1890, with enclosures, *viz.*:—

Letter from the Judge of Surat, No. 484, dated 14th March 1890.
" " Poona, No. 106, dated 15th March 1890.
" " Thana, No. 654, dated 18th March 1890.
" " Belgaum, No. 699, dated 17th April 1890.
" " Ahmedadad, No. 314, dated 19th April 1890.

Letter from the Government of Bombay to the Government of India (Home Department), No. 614, dated 27th January 1893, with enclosures, *viz.*:—

Letter from the Commissioner of the Central Division, No. P.-2285—51, dated 18th December 1892.
" " Magistrate of Nasik, No. 7590, dated 12th November 1892.
" " " of Khandesh, No. 8883 " " "
" " " of Sholapur, No. 644 G., dated 23rd November 1892, enclosing letter from the Judge of Sholapur-Bijapur, No. 2611, dated 5th November 1892.
" " " of Satara, No. 12—3286, dated 28th November 1892, enclosing letter from the Judge of Satara, No. 2418, dated 24th November 1892.
" " " of Ahmadnagar, No. D.-14, dated 19th December 1892.

Memorandum from Commissioner of the Central Division, No. P.-12, dated 6th January 1892.

Letter from the Commissioner of the Northern Division, No. 1516—44, dated 22nd December 1892.
" " Magistrate of Thana, No. 6179, dated 8th November 1892.
" " " of Broach, No. 36, dated 8th December 1892.
" " " of Panch Mahals, No. 14, dated 14th December 1892.
" " " of Kaira, No. 366, dated 15th December 1892.
" " " of Ahmedabad, No. C. M.—16, dated 15th December 1892, enclosing letter from the Judge of Ahmedabad to the High Court, No. 1739, dated 10th December 1892.
" " " of Surat, No. 82 M., dated 19th January 1893.
" " Commissioner in Sind, No. 2271, dated 23rd December 1891.
" " Judge of Shikarpur to the Magistrate of Upper Sind Frontier, No. 4, dated 10th November 1892.
" " Magistrate of Upper Sind Frontier, No. 67, dated 17th November 1892.
" " Deputy Commissioner, Thar and Parkar, No. 819, dated 26th November 1892.

Memorandum from the Magistrate of Shikarpur No. 26, dated 3rd December 1892, enclosing letter from the Judge of Shikarpur, No. 7, dated 30th November 1892.

Letter from the Magistrate of Hyderabad, No. 9—4866, dated 9th December 1892 enclosing extracts from the Judge of Hyderabad's letter No. 3, dated 28th November 1892.
" " " of Karachi, No. 2681, dated 22nd December 1892.
" " the Judicial Commissioner in Sind, No. 8, dated 17th December 1892, enclosing letter from the Judge of Karachi, No. 1971, dated 29th November 1892.
" " the Commissioner, Southern Division, No. 36 P., dated 6th January 1893.

Letter from the Magistrate of Dharwar, No. 7215-94, dated 16th November 1892, enclosing letter from the Judge of Dharwar, No. 1876—1, dated 14th November 1892.
" " " of Bijapur, No. 4963, dated 22nd November 1892.
" " " of Kanara, No. 4579, dated 25th November 1892, enclosing letter from the Judge of Kanara, No. 11, dated 23rd November 1892.
" " " of Ratnagiri, No. S. R.-18, dated November 1892.
" " " of Kolaba, No. 38, dated 30th November 1892.
" " " of Belgaum, No. 24, dated 21st December 1892, enclosing letter from the Judge of Belgaum, No. 2191, dated 19th December 1892.
" " Registrar, Bombay High Court, No. 117, dated 19th January 1893, enclosing minutes by Sir Charles Sargent, *C. J.*, and Fulton, Candy, Parsons, Starling, and Bayley, *J. J.*

North-Western Provinces Correspondence.

Letter from the Government of India (Home Department) to the Government of the North-Western Provinces and Oudh, No. 743, dated 31st May 1890.
Letter from the Government of the North-Western Provinces and Oudh to the Government of India (Home Department), No. 307, dated 2nd February 1891, with enclosures, *viz.*—

Letter to Registrar, High Court, Allahabad, $\frac{1647}{\text{VI-598 B.}}$, dated 26th June 1890.

Circular letter to—
- Judicial Commissioner, Oudh
- Judge of Allahabad
- " Benares
- " Lucknow
- Magistrate of Benares
- " Lucknow
- Legal Remembrancer
- Public Prosecutor, Allahabad

No. $\frac{1648}{\text{VI-598B.}}$, dated 26th June 1890.

- Colonel G. E. Erskine
- Mr. W. E. Neale
- " F. W. Porter
- " Adams

No. $\frac{1649}{\text{VI-598B}}$, dated 26th June 1890.

Letter from the Judge of Benares, No. 761, dated 18th September 1890, enclosing his letter to High Court, No. 755, dated 15th September 1890.
" the Commissioner of Agra, No. $\frac{7510}{\text{XV-28}}$, dated 15th July 1890.
" " Benares, No. $\frac{7040}{\text{XIII-307}}$, dated 15th July 1890.
" Deputy Commissioner of Lucknow, No. 3368, dated 29th July 1890.
" Public Prosecutor, Allahabad, without number, dated 29th July 1890.
" Legal Remembrancer, No. $\frac{4226}{\text{F.-1107}}$, dated 31st July 1890.
" Registrar, Allahabad High Court, No. 4169, dated 20th August 1890.
" Judge of Benares, No. 761, dated 18th September 1890, enclosing his letter to High Court, No. 755, dated 15th September 1890.
" Magistrate of Allahabad, without number, dated 22nd September 1890.
" Judge of Allahabad, No. 614, dated 22nd September 1890.
" Secretary, Kashi Sujan Somaj, No. H. 99, dated 22nd September 1890.
" Judicial Commissioner of Oudh, No. 1493, dated 29th September 1890.
" Commissioner of Kumaon, No. $\frac{1858}{\text{XIII-310}}$, dated 7th July 1890.
" Magistrate of Benares, No. $\frac{4}{\text{XVII-20}}$, dated 10th July 1890.
" Commissioner of Lucknow, No. 4219, dated 14th July 1890.

Letter from the Government of the North-Western Provinces and Oudh to the Government of India (Home Department), No. 3007, dated 5th November 1891.
Letter from the Government of India (Home Department), to the Government of the North-Western Provinces and Oudh, No. 1108, dated 25th August 1892.

Assam Correspondence.

Letter from the Government of India (Home Department), to the Chief Commissioner of Assam, No. 744, dated 31st May 1890.

Letter from the Assam Administration to the Government of India (Home Department), No. 145 J., dated 14th January 1891, with enclosure :—letter from the Judge, Assam Valley, No. 1271, dated 17th November 1890, enclosing his office letters to the High Court, No. 947, dated 24th June 1884.

,,	4 T.	,,	10th January 1885.
,,	63 B.	,,	2nd February 1888.
,,	508	,,	26th June 1888.
,,	167	,,	3rd September 1888.
,,	884 B.	,,	23rd November 1888.
,,	221V.	,,	9th March 1889.
,,	7 T.	,,	17th April 1889.

Letter from the Government of India (Home Department) to the Chief Commissioner of Assam, No. 1109, dated 25th August 1892.

Letter from the Assam Administration to the Government of India (Home Department), No. 4661 J., dated 11th October 1892.

Also various memorials and representations addressed to the Commission by local bodies and by certain individuals.

No. 1523J., dated Calcutta, the 25th March 1893.

From—H. J. S. Cotton, Esq., c.s.i., Chief Secy. to the Government of Bengal,
To—The Secretary to the Government of India, Home Department.

The Lieutenant-Governor has been furnished unofficially with a copy of the Report of the Jury Commission, and feels bound, in accordance with the recommendation of the Commission, to withdraw the notification of this Government, dated 20th October 1892, making certain alterations in the classes of cases which are triable by a Jury in the districts to which the Jury system has been extended, at once. His Honour would have taken action in this direction on his own authority, were it not that he had already referred the question to the Government of India and had acted under the authority of the Government of India in issuing the notification. He considers therefore that the notification should be withdrawn with the authority of His Excellency the Governor-General in Council, and awaits the receipt of orders to this effect.

No. 357, dated Calcutta, the 28th March 1893.

From—C. J. Lyall, Esq., c.i.e., Secretary to the Govt. of India, Home Dept.,
To—The Chief Secretary to the Government of Bengal.

In reply to your letter No. 1523J., dated the 25th instant, I am directed to say that the Governor-General in Council authorizes the issue of a notification by His Honour the Lieutenant-Governor, under section 269 of the Criminal Procedure Code, withdrawing the notification of the 20th October 1892, by which certain changes were made in the classification of offences triable by Jury before the Courts of Session in the districts of the 24-Parganas, Hooghly, Burdwan, Murshidabad, Nadia, Patna, and Dacca, and restoring the classification of offences so triable in those districts which was in force prior to the issue of that notification.

NOMINATION OF REPRESENTATIVES TO SEATS IN THE COUNCIL OF THE LIEUTENANT-GOVERNOR FOR MAKING LAWS AND REGULATIONS ON THE RECOMMENDATION OF PUBLIC BODIES AND ASSOCIATIONS.

RESOLUTION.

JUDICIAL.

Dated Calcutta, the 25th March 1893.

UNDER Rule II of the Regulations which have been framed by the Governor-General in Council with the sanction of the Secretary of State under section 1(4) of the Indian Councils Act, 1892, for Bengal, it has been laid down that the nomination to seven seats in the Council of the Lieutenant-Governor for making Laws and Regulations shall be made by the Lieutenant-Governor on the recommendation of the following bodies and associations respectively, viz.—

A.—The Corporation of Calcutta;

B.—Such Municipal Corporations or group or groups of Municipal Corporations other than the Corporation of Calcutta as the Lieutenant-Governor may from time to time prescribe by Notification in the *Calcutta Gazette*;

C.—Such District Boards, or group or groups of District Boards, as the Lieutenant-Governor may from time to time prescribe as aforesaid;

D.—Such Association or Associations of merchants, manufacturers or tradesmen as the Lieutenant-Governor may from time to time prescribe as aforesaid;

E.—The Senate of the University of Calcutta:

Provided that the bodies described above under A, B, C, D, and E, respectively, shall each (except as hereinafter provided in Rule VII) have at least one Councillor nominated upon its recommendation, and A, D, and E not more than one each.

With reference to the above proviso, it has been decided that District Municipalities and District Boards shall each be ordinarily represented by two members.

2. Under Rule V (*c*) of the same Regulations, it has been laid down that the recommendation of a person for nomination by the Lieutenant-Governor shall be made "in the case of a group of Municipal Corporations, District Boards, or Associations by the majority of votes of representatives to be appointed according to such scale as the Lieutenant-Governor may from time to time prescribe by the Corporations, Boards, or Associations."

3. The Corporation of Calcutta and the Senate of the University of Calcutta will now be asked by a separate communication to recommend a person for nomination by the Lieutenant-Governor. The votes of the Commissioners of the Corporation of Calcutta will be given at a meeting of the Commissioners. Those of the Fellows of the Senate will be given by voting papers to be delivered personally to the Registrar, or forwarded by post under certain conditions. The Bengal Chamber of Commerce are already represented on the Council by the Vice-President of their body, the Hon'ble Mr. Playfair, and no steps can be taken under clause D of the Rule II above quoted until he resigns his appointment or the term of his office expires.

4. The following observations exclusively refer to the arrangements which will now be made regarding the nomination to the four seats which will be made by the Lieutenant-Governor on the recommendation of District Boards and of Mufassal Municipalities.

5. The Lieutenant-Governor has decided that both District Boards and Municipalities shall be grouped together separately division by division, and that the District Boards and Municipalities within each divisional area shall take it in turns to exercise the privilege which is now bestowed on them of recommending

a person for nomination to the Council. It is proposed that this privilege should be exercised by the groups of Municipalities and District Boards in each Division according to rotation. The following is a sketch of the form which the rotation may probably assume: but the Lieutenant-Governor cannot bind himself or his successor as to the exact order in which the privilege will in future be exercised:—

Date of election.	Municipalities.	District Boards.
1893 ...	... Presid ncy Division	... Patna Division.
	Rajshahi Division	... Chittagong Division.
1895 ...	... Burdwan Division	... Dacca Division.
	Orissa Division Chota Nagpur Division	... Bhagalpur Division.
1897 ...	... Patna Division	... Presidency Division.
	Chittagong Division	... Rajshahi Division.
1899 ...	... Dacca Division	... Burdwan Division.
	Bhagalpur Division	... Orissa Division.
1901 ...	... Presidency Division	... Patna Division.
	Rajshahi Division	... Chittagong Division.

and so on.

The necessary notification will now be published in the *Calcutta Gazette* specifying the groups of District Boards and Municipalities in the Divisions from which a recommendation will be made to the Lieutenant-Governor for the nomination to four seats in Council in 1893.

6. The Lieutenant-Governor is pleased to prescribe the following procedure under which each District Board and Municipality concerned shall, for the purpose of making its recommendation, proceed to elect from amongst its own members an electoral representative, who shall be entrusted with full powers to vote for a member to represent the group in Council.

7. In respect of Municipal Corporations, it has been determined that only those municipalities which enjoy a clear income from municipal resources proper of Rs. 5,000 and over shall exercise the right of electing an electoral representative. The voting power of each of these representatives will be calculated by the income of the municipalities concerned according to the following scale:—

	Votes.
Municipalities with an income of Rs. 5,000 and less than Rs. 10,000 will be entitled to	1
Municipalities with an income of Rs. 10,000 and less than Rs. 20,000 to	2
Municipalities with an income of Rs. 20,000 and less than Rs. 50,000 to	3
Municipalities with an income of Rs. 50,000 and less than Rs. 1,00,000 to	4
Municipalities with an income of Rs. 1,00,000 and less than Rs. 1,50,000 to	5
Municipalities with an income of Rs. 1,50,000 and less than Rs. 2,00,000 to	6
Municipalities with an income of Rs. 2,00,000 and less than Rs. 2,50,000 to	7
Municipalities with an income of Rs. 2,50,000 and over to ...	8

Each Municipality will elect one electoral representative only, and this representative shall be entitled to exercise all the votes of the Municipality which he represents.

8. All districts are considered by the Government to be of approximately equal importance, and each District Board will appoint one representative having one vote.

9. According to the scales above laid down, the following Municipal Corporations and District Boards will now proceed to elect their electoral representatives as follows:—

Municipalities in the Presidency Division.

District.	Name of Municipality.	Ordinary Municipal Income.*	Number of votes to be exercised by each representative.
		Rs.	
24-Parganas	Cossipore-Chitpur	1,16,260	5
	Maniktola	41,753	3
	Baranagar	39,040	3
	South Suburbs	47,650	3
	Rajpur	6,908	1
	Joynagar	5,033	1
	South Dum-Dum	7,728	1
	South Barrackpore	11,809	2
	North Barrackpore	11,260	2
	Barasat	8,065	1
	Naihati	15,664	2
	Basirhat	6,285	1
Nadia	Krishnagar	24,699	3
	Santipur	25,594	3
	Ranaghat	5,583	1
	Kushtia	6,341	1
Jessore	Jessore	14,405	2
Khulna	Khulna	10,976	2
Murshidabad	Berhampore	36,[illegible]38	3
	Lalbagh	24,320	3
	Jangipur	7,355	1
	Kandi	5,777	1
	22		45

Municipalities in the Rajshahi Division.

District.	Name of Municipality.	Ordinary Municipal Income.*	Number of votes to be exercised by each representative.
		Rs.	
Darjeeling	Darjeeling	94,949	4
	Kurseong	8,105	1
Rajshahi	Rampur Boalia	19,014	2
	Nator	10,909	2
Dinajpur	Dinajpur	22,434	3
Pabna	Pabna	15,252	2
	Sirajganj	15,627	2
Bogra	Bogra	13,026	2
Rangpur	Rangpur	22,770	3
Jalpaiguri	Jalpaiguri	12,318	2
	10		23

* The Ordinary Municipal Income is found from Statement II attached to the Resolution on the working of Municipalities in 1891-92, by deducting from head column 11 the figures shown in head columns 8, 9, and 10, *i.e.*, the Special grants, Miscellaneous, and Debt heads.

District Boards in the Patna Division.

Patna.
Gaya.
Shahabad.
Darbhanga.
Champaran.
Muzaffarpur.
Saran.

District Boards in the Chittagong Division.

Tippera.
Noakhali.
Chittagong.

10. Under Rule IV of the Regulations quoted, the Lieutenant-Governor now desires that intimation may be at once communicated by the Commissioners of the Divisions concerned to the Chairmen of all the Municipalities and District Boards enumerated in the above lists, requesting them to arrange without delay for the convention of a special meeting of each District Board and Municipality concerned at which one of their members may be elected to represent them for the purpose of recommending the nomination of a member in the Lieutenant-Governor's Council. The name of the electoral representative elected in each must be reported at once by the Chairman of the local body concerned for the information of the Commissioner of the Division.

11. The period of two months which is contemplated under Rule VII of the Regulations as the period within which a recommendation shall be made to the Lieutenant-Governor is hereby declared to run from the date on which

the Commissioner of the Division issues his invitation to the Chairman of any Municipality or District Board within the group concerned to elect one of their members to represent them for the purpose of recommending the nomination of a member in the Lieutenant-Governor's Council.

12. As soon as the electoral representatives are elected by the local bodies concerned, they will be called upon by the Commissioner of the Division to meet together on an early and convenient date with special reference to the limit of time imposed under rule VII of the Regulations, and at such convenient place as he may specify, for the purpose of electing by a majority of votes a person whom they will recommend to the Lieutenant-Governor to be nominated as a member of the Council. The names of all candidates put forward at such meeting shall be duly proposed by one of the electoral representatives present. The election shall be by ballot, and the person elected must obtain a majority of the votes of the representatives present. If on occasion of the first ballot an absolute majority is not obtained, the candidate who obtains the least number of votes shall be withdrawn from the election, and another ballot shall then be held for the remaining candidates, and so on until an absolute majority is obtained.

The electoral representatives present at this meeting shall elect among themselves a Chairman, who shall preside and be responsible for the fair and proper exercise of the ballot vote.

As soon as the election is made, the Chairman of the meeting shall without delay report to the Commissioner of the Division the name of the person so elected with the number of votes obtained and any other information which it may appear desirable to communicate, and on behalf of the meeting shall recommend to the Lieutenant-Governor to nominate for Council the person so elected. The Commissioner shall submit the report from the Chairman of the meeting, with any observations he may wish to add, to the Chief Secretary to Government, by whom the recommendations will be submitted to the Lieutenant-Governor.

13. Attention is drawn to the following Rule VI of the Regulations which have been framed by the Governor-General in Council and Secretary of State:—

VI.—It shall be a condition in the case of any person to be recommended by a Municipal Corporation or group of Municipal Corporations that he shall be a person ordinarily resident within the Municipality or the district in which it is situated, or in some one of the municipalities constituting the group or of the districts in which they are situated. A similar condition shall also apply to persons to be recommended by District Boards.

Under this rule it is not necessary that persons recommended shall be members of any Municipality or District Board concerned, but they must be ordinarily resident within the division from which the recommendation is made. Subject to this condition, the rules declare no limit of qualification, and it is left to the electoral representatives to recommend a person under Rule V(*c*) according to the majority of their votes.

14. The Lieutenant-Governor is anxious to ensure the success of the operation of the new rules, and with this object has been careful to provide that all the subsidiary arrangements now sanctioned shall, as far as possible, be given effect to by the local bodies concerned with the minimum of official interference He is confident, however, that District Magistrates will afford any assistance that may be required and do their utmost to facilitate the smooth working of the elections. The experiment now being tried is one of considerable importance, and the arrangements made are necessarily of an experimental character, and will be reconsidered if experience shows that they require modification.

ORDERED that a copy of this Resolution be furnished to all Commissioners for information and guidance and for communication to all the District Boards and Municipalities in their Divisions.

Ordered also that a copy be published in the *Calcutta Gazette.*

Ordered also that a copy be submitted with a covering letter to the Government of India for information.

By order of the Lieutenant-Governor of Bengal,

H J. S. COTTON,

Chief Secretary to the Government of Bengal.

APPOINTMENT OF A COMMITTEE TO REPORT ON THE MEDICAL NEEDS OF CALCUTTA.

RESOLUTION.

No. 1134Med.

Calcutta, the 28th March 1893.

READ—

Report on the Calcutta Medical Institutions for 1891.

RESOLUTION.—The question of providing suitable and sufficient accommodation for the gratuitous treatment of the sick-poor in Calcutta, whether as out-door or in-door patients, is one which has for many years engaged the attention of the Government of Bengal, while it has more lately attracted the notice of the Government of India who in July last intimated their opinion that the existing provision for the medical relief of the poorer inhabitants of Calcutta was still inadequate.

2. The Northern and Central portion of the city are fortunate in possessing a large number of excellent medical institutions, and their usefulness has frequently been acknowledged; but even in this part of the town there is a large tract in the north-east, where no public hospital or dispensary exists. On the other hand, with the exception of the Presidency General Hospital, which does not admit native cases, and the Military Hospitals, European and Native, which are necessarily exclusive, there is no institution south of Government House which provides accommodation for in-door patients. Dispensaries exist, it is true, for the out-door relief of the sick which are supported either by Government, the Municipality, or private benevolence, but useful and beneficent as their operations are, they cannot supply the place of a hospital for the treatment of the sick in the large area which lies south and east of the Calcutta *Maidan*.

3. In these circumstances, the Lieutenant-Governor has decided that a small Committee should be formed to consider and report upon the whole subject, and he is pleased to nominate as members the Hon'ble J. Lambert, C.I.E., and Surgeon Lieutenant-Colonel A. Crombie with Surgeon Colonel J. G. Pilcher, Inspector-General of Civil Hospitals, as their President, with power to add to their number. It will be the duty of these gentlemen to submit with as little delay as possible a report with a map showing what accommodation now exists, and what additional accommodation they consider to be necessary both for out-door and in-door patients. They should lay down what is in their opinion the maximum distance within which each resident of the town should be able to find medical relief, and they should indicate what parts of the city do not satisfy this principle, and where, therefore, new dispensaries or hospitals are required. They should also, after looking to the population which an institution so situated will serve, frame an estimate of the number of beds to be provided in each for the accommodation of males and females, but the question of cost of construction, or the source from which the funds for maintaining the institution should be drawn, need not be considered by them at the present stage. When this report has been received, the Lieutenant-Governor will be in a position to decide whether, and to what extent, an urgent need exists for more dispensaries or hospitals in the metropolis of Bengal.

By order of the Lieutenant-Governor of Bengal,

J. A. BOURDILLON,

Offg. Secy. to the Government of Bengal.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 25th March, 1893.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.			
BURDWAN DIVN.			
1	Burdwan March 25, '93 Kalna ... Katwa ... Raniganj ..	1·18 2·02 0·94 0·12	Weather—cool for the time of year. Land being ploughed. Sugarcane being pressed. Supply of fodder and water sufficient. Prices stationary. Prices of common rice:— Srs. Sadar ... ... 10½ to 13 } Kalna ... ... 10 to 13 } per rupee. Katwa ... ... 13 } Raniganj ... ... 13 }
2	Bankura „ 25, '93 Vishnupur ...	1·09 2·59	Weather—hot and generally fair. Wheat is being harvested. Pressing of sugarcane continues. Ploughing going on briskly. Fodder and water sufficient. Prices of common rice:— Srs. Sadar ... . 11¾ } per rupee. Vishnupur ... ... 11½ }
3	Birbhum „ 25, '93 Rampur Hát ...	0·70 0·43	Ploughing going on. Few crops on the ground. Sugarcane pressing nearly finished, with good outturn. Fodder and water sufficient.
4	Midnapore „ 25, '93	1·61	Weather—gradully becoming warmer; occasionally there is rain. Ploughing is going on everywhere. Prices of common rice:— Srs. Sadar ... ... 12½ } Contai ... ... 13½ } per rupee. Garhbeta ... ... 11 to 12 }
5	Hooghly „ 25, '93 Serampore ...	1·07 1·37	Weather—rainy; then fine and cool, now a little warmer. The continued rain is supposed to have injured the late *rabi* (gram and wheat) and potatoes so far as to reduce them to little more than an 8-anna crop. Mango blossoms also spoilt. Ploughing very well advanced. Fodder and water plentiful. Prices of common rice:— Srs. Sadar ... ... 11 } per rupee. Serampore ... ... 10 to 11½ }
6	Howrah „ 25, '93 Ulubaria ...	0·75 1·85	Weather—showery and cooler. The late rain has done some harm to paddy stacked in the field. Cattle-disease reported from some villages in Amta thana. Fodder and water-supply sufficient. Price of rice 10 to 11½ seers per rupee.
PRESIDENCY DIVN.			
7	24-Parganas „ 25, '93	1·31	Weather—first part of the week rainy and the latter seasonable, but cold at night. Ploughing going on. Sufficient fodder and water. No cattle-disease. Prices of common rice:— Srs. c. Sadar ... ... 10 to 13 0 } Diamond Harbour ... ... 13 0 } Basirhat ... ... 11 7 } per rupee. Barasat ... ... 10 5 } Dum-Dum ... ... 12 0 } Barrackpore ... ... 11 0 }
8	Nadia „ 25, '93 Kushtia ... Meherpur ... Chuadanga ... Ranaghat ...	0·39 1·49 0·87 2·56 1·50	Weather—fair with occasional storms; nights cool. *Rabi* harvest in progress. Lands being prepared for *bhadoi*. Prices stationary. Fodder and water plentiful.
9	Khulna „ 25, '93 Bagerhat ... Satkhira ...	2·87 3·91 1·57	Weather—cloudy all the week with some severe storms and heavy rain. The sky is now cloudless. The late rain caused about one anna damage to *rabi* crops, the harvesting of which is finished in Satkhira. Common rice sells at 10 seers 10 chitaks in Satkhira, and 12 to 13 seers at Sadar and Bagerhat. Water and fodder sufficient.
10	Jessore „ 25, '93 Jhenida ... Magura .. Narail ... Bangaon ...	1·76 1·54 1·27 5·18 0·88	Weather—cloudy and rainy during the latter part of the week. The recent rainfall has interfered with ploughing on lowlands and sowing of *boro* crop, and has damaged gram, *til*, mustard and other *rabi* crops. Cattle-disease still reported from parts of Bangaon. Plenty of fodder and water. Price of rice stationary.
11	Murshidabad „ 25, '93	0·83	Weather—days getting hot, but nights and mornings cool. *Rabi* harvest going on. Pressing of sugarcane nearly finished. Sowing of *til* continues. Lands are being ploughed for sowing *aus* and *aman* paddy. In lowlands *aus* has already been sown. Common rice sells at 12 seers per rupee. There is sufficient fodder for cattle. No cattle-disease reported.

BENGAL—*concld.*

Division	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and State and prospects of the crops.
Chittagong Divn.	12	Chittagong	Mar. 25, '93	1·92	Weather—cool. Prospects of crops good. Prices stationary. Condition of cattle good. Supply of fodder sufficient.
	13	Noakhali	„ 25, '93	2·58	Weather—rainy and stormy on 22nd. *Rabi* crops doing well. Sowing of *aus* paddy somewhat retarded by heavy rain. Condition of cattle fair. Fodder and water sufficient. Price of rice almost stationary.
	14	Tippera	„ 25, '93	2·82	Weather—cloudy with frequent storms. Winter crops being reaped. *Boro* paddy being sown on the chars, and on the main land ploughing for *aus* and *aman* in active progress.
	15	Chittagong Hill Tracts.	„ 24, '93	1·22	Weather—cloudy and rainy. The rain rendered the prospect of vegetables and other crops favourable. *Jum* cutting and *jum* burning going on. Condition of cattle reported to be good. Price of common rice at Rangamati 10 seers per rupee.
Dacca Divn.	16	Dacca	„ 25, '93	5·65	Weather—cloudy and rainy. Gathering of *rabi* crops nearly completed. Sowing of *aman* and *aus* paddy continues. Recent rain has done some damage to the standing crops and also retarded the ploughing of land for *aman* and *aus* crops. Fodder available. No cattle-disease. Common rice selling at from 11 to 13½ seers per rupee.
	17	Faridpur	„ 25, '93	2·78	Weather—unusually wet for the time of year, but more settled weather seems to have set in now with westerly winds. The heavy rain has damaged the *masuri* and other pulses, but the early paddy is all doing well. Cultivation for and sowing of *aman* and planting of sugarcane in progress. Common rice varies in price from 12 to 13 seers per rupee. Cattle doing well and get fodder.
	18	Backergunge	„ 25, '93	0·99	Weather—most unseasonable; storm and rain up to Thursday (23rd); fine weather in latter part of the week. Oilseeds damaged by rain. Prospects fair. Price of common rice 10 to 13 seers per rupee. Fodder and water sufficient.
	19	Mymensingh	„ 25, '93	1·41	Weather—getting hot in day, but cool at night. Prospects of standing crops unfavourable owing to the untimely heavy rain. Common rice selling at from 11¼ to 14¼ seers per rupee. Condition of cattle good. Fodder and water sufficient.
Rajshahi Divn.	20	Dinajpur	„ 25, '93	0·02	Weather—dry with strong westerly wind during day. Nights still cool. Cultivation of lands for *bhadoi* and jute in progress. Sowing commenced in places. Prices of rice unchanged. Cattle reported to be in good condition. Fodder and drinking water plentiful.
		Thakurgaon	...	0·87	
	21	Rajshahi	„ 25, '93	1·03	Weather—days hot and nights cool. Harvesting of *rabi* crops going on. Manufacture of ganja nearly completed. Ploughing for *aus, aman,* jute and sugarcane going on Some cases of small-pox among cattle reported from Lalpur and Manda thanas. Supply of water and fodder sufficient. Price of rice ranges from 12 to 15 seers per rupee.
		Nator	...	1·80	
		Naugaon	...	1·26	
	22	Rangpur	„ 25, '93	Nil	Weather—fine with westerly winds. *Aus* sowings at most complete. Jute lands still under preparation. Price of rice stationary. Some damage to mango and tobacco crop by a hailstorm reported from Kurigram.
		Kurigram	...	Nil	
		Nilphamari	...	0·16	
		Gaibanda	...	0·28	
		Ulipur	...	0·12	
	23	Bogra	„ 25, '93	2·05	Weather—seasonable. Ploughing for jute and paddy going on. Common rice sells at 13¾ seers per rupee. Fodder and water sufficient.
		Sherpur	...	1·32	
		Naukhila	...	1·28	
	24	Pabna	„ 25, '93	1·64	Weather—unsettled, cloudy and stormy. Frequent rainfall during the week has been unfavourable to ploughing and sowing. Rice sells at 12 seers per rupee at Pabna and at Rs. 3-5 to Rs. 4-8 per maund at Sirajganj. Condition of cattle good. Fodder and water-supply sufficient.
	25	Darjeeling	„ 25, '93	Nil	Weather—fine and clear during first part of the week; hazy since 24th. *In the hills:*—Wheat, barley, *kagni,* potatoes and *chota marua* progressing favourably. *Bhutta* has been planted. *In the Terai:*—Ploughing of land continues. Tobacco has begun to be cut. Barley and wheat will be soon fit for gathering. Prices of coarse rice:— Srs. Hills ... ... 11 } per rupee. Terai ... ... 12 } per rupee.
		Siliguri	...	Nil	
	26	Jalpaiguri	„ 25, '93	0·30	Weather—days hot, nights cool. Ploughing of land continues. Hailstones have caused considerable damage to tobacco in Alipur tahsil. Coarse rice sells at 14 seers per rupee. Water-supply and fodder sufficient. No cattle-disease.

	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
BHAGALPUR DIVN.	27	Monghyr March 25, '93 Begusarai ... Jamui ...	0·24 0·74 0·09	Weather—cloudy in the beginning and bright in the latter part of the week. Though damaged by rain, a fair out urn of *rabi* and opium is expected. Cases of small-pox among cattle towards Chakai (in Jamui) are reported. Indigo coming up well. Plenty of fodder and water. Prices of common rice :— Srs. Sadar ... ... 12 to 16 } per rupee. Begusarai ... ... 15½ } per rupee. Jamui ... ... 14 } per rupee.
	28	Bhagalpur „ 25, '93 Banka ... Madhipura ... Supaul ...	0·10 0·06 0·20 Nil	Weather—fairly cool for the time of year. Prospects of crops as stated in last report. *Rabi* will yield at least 12 annas outturn. Common rice 15 seers 2 chitaks per rupee.
	29	Purnea „ 25, '93 Kishanganj ... Araria ...	0·07 0·77 0·05	Weather—cloudy at the beginning of the week. It has since cleared up. There is a strong west wind. Becoming hotter during the day, but cool in the mornings and nights. The recent rain as well as a hailstorm in the north of Kishanganj has caused some damage to the standing crops in those parts. Harvesting of *mung*, *khesari*, tobacco, &c., is going on. Gathering of gram and wheat and the sowing of paddy on low lands have commenced in Araria. *Rabi* prospects at Sadar good. Fodder and water plentiful. No cattle-disease. Prices stationary.
	30	Malda „ 25, '93 Chanchal ... Shibganj ...	1·11 0·02 1·03	Weather—first part of the week cloudy with heavy rain in the afternoon of the 21st. Fair and cool latterly. Harvesting of *rabi* crops has commenced ; the outturn is expected to be 14 annas. The sowing of *bhadoi* rice and jute is going on in some places. Common rice sells at from 13 to 16 seers per rupee. Fodder and drinking water sufficient.
	31	Sonthal Parganas „ 25, '93 Deoghur ... Godda ... Jamtara ... Pakur ... Rajmahal ...	1·20 2·06 0·10 1·23 0·52 Nil	Weather—early in the week thunderstorms and on one day hail. The west winds have begun. Nights still cool. Harvesting of *rahar*, linseed, gram, peas, *khesari*, barley and wheat has begun. *Mahua* beginning to fall. Mangoes in Rajmahal promise fair. Price of rice about 14 seers per rupee. Fodder and water sufficient.
PATNA DIVISION.	32	Patna „ 25, '93 Barh ... Bihar ... Dinapore ...	0·33 0·27 0·07 0·47	Weather—getting warm ; nights and mornings still cool. There was a hail-storm at Barh on the 20th instant which has done some injury to the standing and harvested crops. *Rabi* cutting and opium gathering almost finished. About 15 annas of opium has been collected, and the outturn is reported to be satisfactory. Prices of common rice :— Srs. Sadar ... ... 16 } per rupee. Barh ... ... 11½ } per rupee. Bihar ... ... 16¾ } per rupee. Dinapore ... ... 15 } per rupee.
	33	Gaya „ 25, '93 Jahanabad ... Aurangabad ... Nawada ...	Nil Nil 0·05 0·16	Weather—bright on the whole, and cool, but west winds now beginning. Prospects improved by the clearing up of the weather. *Rabi* harvest well advanced and about seven-eighths of the opium crop collected. Opium is expected to be a 14-anna crop, but with an undue proportion of *pasewa* in consequence of the wet weather. Sugarcane planting progressing. Common rice sells at 13 to 14 seers per rupee. Water and fodder-supply sufficient.
	34	Shahabad „ 25, '93 Buxar ... Sasaram ...	0·09 0·20 0·59	Fine clear weather with strong westerly winds. The *rabi* harvest is now in full swing. Pulses and oilseeds are being gathered, and wheat, barley and oats cut. The weather is favourable, and where no damage by hail has occurred the returns will be fully up to the average. Prices are still high. Fodder and water abundant.
	35	Darbhanga „ 25, '93 Samastipur ...	0·10 0·12	Weather—getting warm. *Rabi* harvest in progress. Indigo sowing almost finished. Paddy and *mung* being sown. The rainfall of the week did considerable injury to mango blossoms. Collection of opium in progress. Condition of cattle good. Prices remain stationary.
	36	Muzaffarpur „ 18, '93 Hajipur ... Sitamarhi ...	Nil Nil Nil	Weather—seasonable. Harvesting of the *rabi* crops progressing. Collection of opium fast drawing to a close. Weather favourable. No disease among cattle. Fodder and water plentiful.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
	BIHAR—*concld.*		
	Patna Division—concld.		
37	Saran Mar. 25, '93 Siwan .. Gopalganj ..	0·89 0·07 0·28	Weather—early in the week cloudy with local showers and an extraordinary hailstorm on 20th instant at Revelganj, Chapra and neighbouring places which greatly damaged cereals, castor and mango blossoms. Last few days fine with west wind and very cool nights. *Rabi* harvest rapidly proceeding. In Gopalganj and Siwan outturn expected to be good as a rule. In Sadar subdivision the hailstorm has caused much damage along its track. Indigo has suffered from rain or hail, necessitating resowing. Opium operations practically closed with fair results. Fodder and water ample. Prices of common rice:— Srs. c. Chapra ... ... 13 8 } Siwan ... ... 13 2 } per rupee. Gopalganj ... ... 13 6 }
38	Champaran ,, 25, '93	0·11	Weather—clear and getting warm. *Rabi* harvest commenced in places. Paddy and *china* being sown. Opium collections making good progress; about 12 annas collected. No marked change in prices of food-grains. No cattle-disease. Fodder and water sufficient.
	ORISSA.		
	Orissa Divn.		
39	Cuttack ,, 25, '93	0·19	Weather—warm. Outturn of tobacco estimated at 14 to 16 annas. Supply of fodder and water sufficient. Price of common rice stationary.
40	Puri ,, 23, '93 Khurda ... Banpur ...	Nil Nil 0·90	Weather—cloudy with drizzling rain. Lands are being ploughed for the ensuing *sarad* crop. *Dalua* paddy ripening. Prices of rice stationary.
41	Balasore ,, 25, '93	1·32	Weather—stormy. Very few crops on the ground. Cases of cattle-disease reported in the centre and north of the district. Prices high but stationary.
	CHOTA NAGPUR.		
	South-West Frontier Agency.		
	Chota Nagpur Divn.		
42	Hazaribagh Mar. 25, '93 Giridi ...	Nil 0·43	Weather—bright; cool for the time of the year. *Rabi* crops being harvested; 8 to 12 annas outturn expected. Opium nearly all got in; yield expected to come up to estimate. Prospects of *mahua* and mango somewhat improved. Common rice 12 to 14 seers per rupee. Fodder and water sufficient.
43	Lohardaga ,, 25, '93	1·31	Weather—seasonable. Ploughing continues. The heavy fall of rain and hail caused some damage to standing crops (*rahar*, wheat and barley). Common rice is selling at 13 seers per rupee. Fodder and water plentiful.
44	Palamau ,, 24, '93	0·08	Weather—seasonable. The weather has apparently cleared up. Hail in some parts, which has damaged the *rabi* crops and the *mahua* and mango blossoms. *Rabi* harvest has commenced. Foot-and-mouth disease amongst cattle. Prices rising.
45	Singhbhum ,, 25, '93	1·12	Weather—stormy and wet at beginning of week, but bright and quite cool now (25th). What *rabi* there is is doing well. Mango and *mahua* have suffered considerably. Cattle-disease reported from some villages in Bharagora outpost jurisdiction. Water and fodder plentiful.
46	Manbhum ,, 25, '93 Gobindpur ...	1·32 0·54	Weather—getting warmer. Mango and *mahua* damaged, as reported last week; extent of damage not known yet. Rice selling at from 10 to 13 seers per rupee. Fodder and water-supply sufficient.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 28th March, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	Station Observations. Air Pressure. Mean barometric height, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. Prevailing direction.	Mean wind velocity.	Temperature. Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri ...	29·835	29 784	—	SWly	319	84·7	21st Mar.	60·1	24th Mar.	83·7	75·0	79·4
		Gopalpore ...	29·834	29 795	—·064	SWly	466	85 2	20 & 21 ,,	67 9	25th ,,	84·5	72·2	78·4
		False Point ...	29·842	29·805	—·065	SSW	329	84·9	20 & 23 ,,	64·5	24 & 25 ,,	83·7	71·1	77·4
	Cuttack	Cuttack ...	29·769	29·793	—·062	Calm & SW	92	95·6	19th ,,	66 8	24th ,,	91·4	72·2	81·8
	Balasore	Balasore ...	29 792	29 795	—·066	SSW	155	94 4	20th ,,	64·7	24th ,,	88·0	69 2	78·6
South-West Bengal.	Midnapore	Midnapore ...	29·699	29·797	—·063	Sly	274	96·3	19th ,,	63·2	24 & 25 ,,	90 3	67·9	79·2
	24-Parganas	Calcutta ...	29 828	29·795	—·062	Variable	106	90 6	20th ,,	60·2	25th ,,	85 6	67·5	76·6
		Saugor Island	29·835	29 805	—·055	SSE	336	85·7	21st ,,	68·4	23rd ,,	83 8	71 6	77·7
	Howrah													
	Hooghly													
	Nadia	Krishnagar ...	29·792	29 798	—·045	Variable	122	90·2	19th ,,	57 8	25th ,,	87·1	66·7	76·9
	Khulna													
	Jessore	Jessore ...	29 810	29 791	—·071	Sly	79	90·0	19th ,,	59·0	25th ,,	86·3	67·6	77 9
	Burdwan ...	Burdwan ...	29·748	29 796	—·057	Variable	33	90·6	19th ,,	61·5	25th ,,	87 0	68·0	77·5
		Raniganj ...	29 511	29 814	—·056	SWly	47	91·7	20th ,,	65·0	23rd ,,	88·8	66 1	77·5
	Bankura	Bankura ...	29 521	29 777	—·063	Variable	63	94·1	19th ,,	61·8	25th ,,	89·4	66 9	78·2
	Birbhum													
	Murshidabad	Berhampore...	29 772	29 790	— 062	Wly	83	89·6	19th ,,	58·8	25th ,,	86·2	65·1	75·7
North Bengal.	Pabna	Sirajganj ..	29·795	29·792	—·061	SEly	65	85·7	21th ,,	57·4	25th ,,	83 3	64·4	73·5
	Bogra	Bogra ...	29·781	29 797	—·031	E	114	87·2	23rd ,,	56·2	25th ,,	84·5	63·3	73·9
	Rajshahi	Rampur Boalia.	29 771	29·792	—·044	SW	96	95·6	23rd ,,	57·7	25th ,,	86·4	63·2	74·8
	Malda	Malda ...	29·741	29·774	—	SW	90	90·4	21st ,,	52 9	24th ,,	86·8	61·6	74·2
	Dinajpur	Dinajpur ...	29·710	29 785	—·084	NWly	119	89·6	23rd ,,	54·4	25th ,,	85 7	62·7	74·3
	Rangpur	Rangpur ..	29·701	29·781	—·045	Variable	75	87·4	23rd ,,	50·3	25th ,,	83 9	60·0	72·0
	Jalpaiguri	Jalpaiguri ..	29 558	29 806	—·032	E	63	85·0	23rd ,,	48 6	24th ,,	81·5	57 8	69·8
	Kuch Bihar													
	Darjeeling	Darjeeling ...	22·862	—	—·132	SW	307	56·1	21 & 22 ,,	35·0	24th ,,	53 8	39 7	46 8
	Sikkim	Gnatong .	19·081	—	—	Variable	142	40·5	19th ,,	6·6	24th ,,	34·3	13·2	23·8
East Bengal.	Chittagong	Chittagong ...	29·808	29·844	—·060	NEly	110	86 2	19th ,,	60 1	19th ,,	81 2	65·5	73·4
	Chittagong Hill Tracts	Demagiri ...						Observations not received.						
	Backergunge	Barisal ..	29·834	29 813	—·053	Calm	120	87·8	20th Mar.	63 1	24th ,,	83·1	67 9	75·5
	Noakhali	Noakhâli ...	29·846	29·836	—·047	Ely	168	82·0	20th ,,	60·1	25th ,,	80·7	66·7	73·7
	Faridpur	Faridpur ...	29·822	29·817	—·058	S	110	86·5	19 & 21 ,,	60·0	25th ,,	84·1	66 6	75·3
	Dacca	Dacca ...	29 827	29·797	—·060	SWly	154*	87·1	19th ,,	62 3	25th ,,	84·0	67·6	75·8
	Tippera	Comilla ...	29·837	29·820	—·051	S	146	86·4	19th ,,	65 8	20 & 21 ,,	82 7	65 4	74 1
	Mymensingh	Mymensingh	29 793	29·809	—·069	ESE	133	82·2	25th ,,	59·7	25th ,,	80 6	64·8	72 7
North Bihar.	Purnea	Purnea ..	29·699	29·781	—·065	Variable	91	90 2	23rd ,,	53·3	24 & 25 ,,	87·5	59·4	73·5
	Bhagalpur	Bhagalpur ..	29·655	29·771	—·064	Calm	35	91 2	21st ,,	55·0	25th ,,	88 1	61·3	74·7
	Darbhanga	Darbhanga ...	29 659	29 783	—·063	Variable	128	88·4	21st ,,	55 2	25th ,,	86·0	59 6	72·8
	Muzaffarpur	Muzaffarpur *	29·645	29·783	—	WSW	133	88 2	20th ,,	51·3	23rd ,,	85 9	57 1	71 5
	Champaran	Motihari ...	29·579	29·769	—·059	WSW	164	87·2	21st ,,	47·9	23rd ,,	85·8	55·6	70·7
	Saran	Chapra ...	29·643	29 783	—·035	WSW	133	91·1	21st ,,	55·7	23rd ,,	87·0	60·0	73·6
South Bihar.	Shahabad	Dehri ...	29·470	29·785	—·070	SW	72	94·3	19th ,,	57 4	23rd ,,	88·0	62 0	75·0
		Buxar ..	29·595	29 796	—·053	Wly	114	91·5	21st ,,	55·4	23rd ,,	87·1	60·5	73·8
		Arrah ...	29·637	29 783	—·030	SWly	100	93 0	21st ,,	54·4	23rd ,,	88·7	59·8	74·3
	Gaya	Gaya ...	29·4 5	29·793	—·063	Sly	132	93·2	19th ,,	57·0	23rd ,,	88·8	61 3	75·1
	Patna	Bankipore ...	29·615	29 785	—·062	W	106	91 7	21st ,,	56 9	25th ,,	87·1	61·7	74·4
	Monghyr													
	Sonthal Parganas ...	Naya Dumka	29·353	29·792	—·051	NWly	31	90 6	19th ,,	56·6	25th ,,	86·3	62·9	74·6
Chota Nagpur.	Hazaribagh	Hazaribagh *	27·806	29 782	·082	Wly	208	90·0	19th ,,	55·2	24th ,,	85·0	59·9	72·4
	Lohardaga	Ranchi ...	27 6 2	29 791	—·072	SWly	163	89 7	19th ,,	55·4	24th ,,	82·9	59 4	71·2
	Palamau													
	Singhbhum ...	Chaibassa ...	29·675	29·797	—·053	Variable	44	93·7	21st ,,	57·4	25th ,,	85 4	63 4	6·9
	Manbhum													

* Mean of 6 days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period
The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01
rain fall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station
district, *i.e.*, from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one or

for the week ending Saturday, the 25th of March 1893.

Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	DISTRICT OBSERVATIONS. Of week. Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Rainfall. Since 1st of month. Mean for district.	Normal mean.	Variation.	Since 16th October 1892. Mean for district.	Normal mean.	Variation.	District.
—	77·7	85	3·0	0·38		0·23		0·33		0·63			7·99		
—2·0	76·4	87	0·1	1·47											
—3·5	76·8	87	6·1	1·05											Puri.
—3·8	77·4	75	2·7	0·66		0·21		0·37		0·91			6·05		Cuttack.
—2·9	74·7	83	2·6	1·73		0·41		0·61		1·12			5·34		Balasore.
—4·0	75 3	71	2·0	1·60	2·18	0·37	3·25	0·63	2·74	1·10	+1·64	15·39	5·55	+9·84	Midnapore.
—4·9	74·4	86	3·9	1·31	1·29	0·56	2·71	0·60	2·07	1·15	+0·92	15·19	5·76	+9·43	24-Parganas.
—4·8	76·3	90	5·6	3·28											
					1·74	0·40	3·50	0·63	2·31	0·98	+1·33	11·09	4·78	+6·31	Howrah.
					1·12	0·44	2·33	0·47	2·19	1·01	+1·18	15·72	4 12	+11·30	Hooghly.
—4·8	73 9	76	3·7	0·39	1·36	0·72	2·10	0·79	2·22	1·44	+0·78	12·19	4·69	+7·50	Nadia.
—5·0	73 7	87	6·3	1·76	2 78	0·86	3·00	0·92	4·27	1·64	+2·63	16 72	6·09	+10·69	Khulna.
					2·14	0·81	3·80	1·02	2·98	1·77	+1 21	16·94	5 61	+11·33	Jessore.
—5·2	73·0	77	4·0	1·18	1·07	0·46	1·50	0·62	2·07	0·91	+1·16	11·89	4 07	+7·82	Burdwan.
—5·6	71·1	83	0·6	0·12											
—5·4	76·5	67	3·6	1·09	1·68	0·34	1·75	0·55	1·89	0·88	+1·01	12·06	3·72	+8·34	Bankura.
—5·4	69·7	87	4·1	0·83	0·44	0·25	2·00	0·37	1·37	0·54	+0·83	10 28	2·92	+7·36	Birbhum.
					1·21	0 40	1·67	0·54	2·02	0·76	+1·26	8 51	2·97	+5·54	Murshidabad.
—4·5	70·2	85	4·4	3·49	2·52	0·50	2·50	0·87	3·22	1·16	+2·06	9·39	4·41	+4·98	Pabna.
—5·8	68·7	89	4·0	2·07	1·36	0·15	1·75	0·82	2·45	0·84	+1·61	6·55	3 28	+3·27	Bogra.
—4 7	71·4	77	2·7	1·00	1·36	0·39	2·33	0·58	2·19	0·77	+1·42	7·14	3·26	+3·88	Rajshahi.
—	72·3	69	0·6	1·11	0·57	0·19	0·50	0·34	0·73	0·47	+0·28	4·49	2·78	+1·62	Malda.
—3 6	68 1	69	1·7	Nil	0·29	0·30	1·00	0·11	0·87	0·58	+0·29	3·46	2·41	+1·05	Dinajpur.
—4·2	68 2	78	1·4	Nil	0·34	0·49	1·00	0·57	1·05	1·25	—0·20	3·68	3·51	+0·17	Rangpur.
—5·3	64·8	81	4·0	0·26	0 36	0·54	1·00	0·79	2·04	1·53	+0·51	4·89	4·06	—0·16	Jalpaiguri.
					0·61	0·85	1·00	1·00	2·34	1·74	+0 58	4·65	3 79	+0·86	Kuch Bihar.
—5·0	46·5	50	3·1	Nil	0·40	0·53	0·75	1·28	1·63	1·98	—0·35	7 60	5·86	+1·74	Darjeeling.
—	28 3	60	2·7	1·50											Sikkim.
—4·4	71·0	87	5·9	1·85	1·36	0·67	2·50	0·90	1·40	1·30	+0·10	14·84	8·31	+6·53	Chittagong.
					1·55	0·99	4·00	1·20	1·60	2 15	—0·46	11·79	8·83	+2·96	Chittagong Hill Tracts.
—4·6	72 6	94	5·7	1·24	2·05	0·75	4·25	1·03	2·49	1·52	+0·97	14·22	7·27	+6·95	Backergunge.
—5 1	23·8	87	5·4	2·58	1·69	1·33	3·00	1·32	4·94	2·57	+2·37	22 91	10·08	+12·83	Noakhali.
—4·2	71·0	92	5·7	2·89	2·71	0·74	4·33	1·12	3·25	2·15	+1·19	15·36	5·81	+9·55	Faridpur.
—5·3	72·5	88	5·7	5·24	1·02	1·22	4·25	1·37	4·32	2·61	+1·71	17·23	6·82	+10·41	Dacca.
—6·2	73·1	86	6·1	2·51	4·90	1·13	4·75	1·34	4·36	3·47	+0·89	15·84	7 90	+7·94	Tippera.
—3·9	69·0	86	1·9	1·48	2 00	0·79	3·20	1·17	3·07	1·72	+1·35	9·32	5·20	+4·12	Mymensingh.
—3·8	67·7	91	1·9	0·07	0·29	0·18	0·33	0·26	1·28	0·18	+0·80	3·51	2·76	+0·75	Purnea.
—4·5	73·0	59	1·0	0·10	0·12	0·09	0·50	0·16	0·49	0·26	+0·23	3·99	2·34	+1·65	Bhagalpur.
—4·3	68·6	63	2·3	0·10	0·07	0·04	0·33	0·13	0 10	0·26	—0·16	2·80	2·29	+0·69	Darbhanga.
—	67·2	81	1·5	0·38	0·31	0·12	1·00	0·19	0·38	0·34	+0·04	3 07	2·18	+0·59	Muzaffarpur.
—5·3	65·8	64	2·6	0·11	0·13	0·05	0·59	0·20	0·20	0·29	—0·09	2·52	1·93	+0·59	Champaran.
—6·0	69·1	64	2·6	0·89	0·41	0·06	0·67	0·19	0·48	0·15	+0·33	3·09	2 39	+0·79	Saran.
—5·1	69·8	59	0·6	1·07											
—6·2	69·0	52	2·0	0·20	0·44	0·04	1·20	0·17	0·76	0·52	+0·44	3·71	2·57	+0·84	Shahabad.
—5·5	70·3	57	0·3	0·09											
—7·0	70·0	64	1·6	0·32	0·24	0·08	1·00	0·17	0·54	0·30	+0·24	4·50	2·51	+1·99	Gaya.
—5·1	70·6	56	2·3	0·33	0·29	0·07	1·25	0·12	0·39	0·25	+0·11	3 35	2·48	+0·87	Patna.
					0·36	0·10	1·50	0·16	0·44	0·23	+0·18	5·64	2 70	+2·94	Monghyr.
—6·9	70·8	67	0·4	1·20	0·85	0·12	1·17	0 21	1·45	0·42	+1·03	6·79	2 51	+4·28	Sonthal Parganas.
—6·1	69·9	49	0·7	0·19		0·06		0·16		0·95			3 46		Hazaribagh.
—6·6	68·2	63	0·9	1·31	0·73	0·06	1·59	0·16	1·91	0·91	+1·[illegible]	13 78	4·23	+9·55	Lohardaga.
—6·3	71·2	77	3·1	1·12	0·08	0·10	0·00	0·21	0·93	0·55	+0·[illegible]	4·45	3 30	+1 13	Palamau.
					1·12	0·29	2·00	0·45	2·74	0·98	+1·76	15 28	4·51	+10·77	Singhbhum.
					0·93	0·12	1·50	0·39	2·14	0·62	+1·53	11·01	3·42	+7 5[illegible]	Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 25th of March 1893.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 19th.	Monday, 20th.	Tuesday, 21st.	Wednesday, 22nd.	Thursday, 23rd.	Friday, 24th.	Saturday, 25th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th October 1892.	Average rainfall from 16th October to date.
ORISSA	Puri	Puri	...	...	...	...	...	0·38	...	1	0·38	0·13	1·05	0·29	16·37	8·44
		Khurda	...	...	...	...	0·15	...	...			0·21		0·76		6·31
		Banpur	...	...	...	...	0·05	0·07	...			0·26		0·62		7·58
		False Point	...	...	...	...	0·91	0·14	..	2	1·05	0·30	1·51	0·83	14·64	9·58
		Gop	...	...	0·30	0·25						?		?		?
		Satpara										?		?		?
		Pipli										?		?		?
	Cuttack	Jagatsingpore	...	...	...	...	1·88	...	...	1	1·88	0·15	4·32	0·58	16·47	5·53
		Banki										0·38		1·27		6·14
		Cuttack	...	0·07	...	...	..	...	...	Nil	0·07	0·14	4·12	1·04	16·41	6·26
		Kendrapara	...	...	...	...	0·11	...	...	1	0·11	0·17	2·67	0·74	11·85	6·12
		Jajpur	...	...	...	0·12	1·72	...	...	2	1·84	0·23	3·41	0·93	10·33	6·10
		Dharmsala	...	...	0·15	...	1·00	...	...	2	1·15	?	3·33	?	12·45	?
		Salipore										?		?		?
		Pal Lahara										?		?		?
	Balasore	*Akhyapada*	...	..	...	0·26	1·35	...	...	2	1·61	?	3·55	?	9·83	?
		Chandbali	...	...	...	0·06	1·37	...	...	1	1·43	0·21	3·11	0·86	?	6·31
		Bhadrak	...	..	...	0·11	0·94	...	...			0·53		1·23		5·88
		Soro	...	0·30	...	0·25		...	...	2	0·55	0·45	1·53	1·49	11·31	5·38
		Balasore	...	0·20	0·97	0·07	0·08	...	...	2	1·32	0·30	2·06	1·17	16·96	6·61
		Jellasore										0·24		0·84		3·90
		Baripodah	...	0·45	0·22	0·33	...	...	...	3	1·00	0·64	1·36	1·14	13·97	3·08
SOUTH-WEST BENGAL.	Midnapore	Contai	...	0·12	0·13	0·13	1·85	...	...	4	2·23	0·48	2·64	0·91	16·88	7·43
		Tamluk	...	0·24	1·15	0·80	0·74	...	...	4	2·93	0·36	3·35	1·02	12·96	5·79
		Midnapore	...	0·12	1·19	...	0·30	...	...	3	1·61	0·29	2·04	0·97	14·72	5·12
		Ghatal	...	0·19	0·72	...	0·04	...	...	2	1·95	0·37	2·96	1·51	17·03	3·77
		Kukrahaty	...	0·36	0·62	0·15	0·42	...	...	4	1·55	?	2·65	?	12·40	?
		Garhbeta	...	0·25	0·33	...	0·06	...	...	2	0·64	?	1·62	?	9·95	?
		Panskura	...	...	0·48	0·10	0·46	...	...	3	1·04	?	1·21	?	?	?
	24-Parganas	Saugor Island	...	...	0·26	0·17	2·52	0·03	...	3	3·28	0·68	3·76	1·09	21·59	7·03
		Diamond Harbour	...	0·34	0·48	0·29	0·54	...	...	4	1·56	0·44	3·36	0·97	16·78	6·17
		Canning Town	...	0·80	1·15	0·64	1·95	1·29	...	5	5·74	?	7·02	?	21·57	?
		Alipore (Observatory.)	...	0·23	0·72	0·01	0·35	...	...	3	1·31	0·30	1·85	1·11	11·70	5·96
		Barrackpore	...	0·73	0·11	0·05	0·10	...	...	3	0·99	0·56	1·44	1·15	16·42	5·03
		Dum-Dum	...	0·46	..	...	0·33	...	...	2	0·79	0·46	1·42	0·97	11·67	5·00
		Barasat	...	0·23	0·10	...	.	...	...	2	0·33	0·57	1·24	1·07	13·46	5·21
		Basirhat	...	0·21	.	...	0·53	...	...	2	0·74	0·82	1·40	1·68	14·61	5·37
	Howrah	Howrah	...	0·18	0·32	...	0·25	...	...	3	0·75	0·89	1·07	0·92	9·06	5·11
		Mohesreka	...	0·46	1·23	0·21	0·82	...	...	4	2·72	0·41	3·54	1·04	13·37	4·42
		Ulubaria	...	0·65	0·60	0·06	0·55	...	...	3	1·86	?	2·32	?	10·15	?
	Hooghly	Serampore	...	1·12	0·11	0·04	0·10	...	...	3	1·37	0·57	1·83	1·13	17·69	4·50
		Hooghly	...	0·85	0·19	...	0·03	...	...	2	1·07	0·41	3·21	0·96	17·42	4·55
		Jahanabad	...	0·49	0·44	...	...	...	...	2	0·93	0·34	1·56	0·92	12·09	4·23
	Nadia	Ranaghat	...	...	0·92	0·58	...	...	...	2	1·50	0·56	2·24	1·32	14·00	4·69
		Krishnagar	...	0·05	0·20	0·14	..	...	...	2	0·39	0·69	1·83	1·22	14·62	3·92
		Chuadanga	...	0·25	1·54	0·72	0·05	...	...	3	2·56	0·81	3·06	1·54	?	5·03
		Meherpore	...	0·31	0·03	0·50	0·03	...	...	2	0·87	0·94	1·56	1·66	10·58	4·85
		Kushtia	...	0·46	0·78	0·25	...	...	...	3	1·49	0·59	2·42	1·47	10·55	4·93
	Khulna	Satkhira	...	1·17	0·10	...	0·30	...	...	3	1·57	1·11	3·57	1·83	14·68	6·06
		Bagerhat	...	2·92	0·47	...	0·52	...	...	3	3·91	0·69	4·97	1·52	17·92	5·95
		Khulna	...	2·42	0·34	...	0·11	...	...	3	2·87	0·79	4·30	1·59	17·60	6·24
		Nakipur	...	0·53	0·10	0·08	2·00	...	...	3	2·71	?	3·43	?	12·20	?
		Rampal	...	2·10	...	...	0·27	0·40	...	3	2·77	?	3·07	?	13·79	?
	Jessore	Narail	...	1·25	2·78	0·60	0·55	...	...	4	5·18	0·56	5·91	1·61	18·46	5·98
		Jessore	...	0·26	0·26	1·00	0·24	...	...	4	1·76	0·93	2·28	2·08	20·64	6·29
		Jhenidah	...	0·34	0·35	0·12	0·73	...	...	4	1·54	0·82	2·02	1·58	16·31	5·57
		Magura	...	0·33	0·23	0·51	0·20	...	...	4	1·27	1·07	2·23	2·24	14·17	5·30
		Bangaon	...	0·45	0·13	0·25	0·05	...	...	3	0·88	0·68	2·38	1·36	15·01	5·07
	Burdwan	Kalna	...	...	1·42	0·60	...	...	...	2	2·02	0·47	2·66	1·10	15·30	4·41
		Burdwan	...	0·01	1·14	0·03	...	...	...	1	1·18	0·60	3·10	1·12	14·48	4·26
		Katwa	...	0·71	0·09	0·14	...	...	...	2	0·94	0·62	2·02	0·97	10·62	4·31
		Raniganj	...	...	0·12	...	...	...	...	1	0·12	0·16	0·47	0·42	7·10	3·23
		Mankur	...	...	0·95	...	...	...	...	1	0·95	?	1·75	?	8·76	?
	Bankura	Bankura	...	0·17	0·92	...	...	..	...	2	1·09	0·13	1·48	0·85	11·51	4·06
		Vishnupur	...	0·94	1·65	...	...	...	...	2	2·59	0·42	3·29	1·05	14·52	3·89
		Maliara	...	..	0·15	...	...	.	...	1	0·15	0·23	1·42	0·61	8·08	2·75
		Khatra	...	0·12	0·36	...	...	.	...	2	0·48	0·58	0·88	1·00	13·65	4·20
		Indas	...	0·23	1·23	...	..	...	...	2	1·46	?	3·60	?	14·11	?
		Kotalpur	...	0·62	...	...	...	...	...	1	0·62	?	2·24	?	11·90	?
		Onda	...	0·43	0·36	..	...	..	...	2	0·79	?	1·97	?	12·32	?
		Gangajalghati	...	0·11	0·32	...	...	..	...	2	0·43	?	2·37	?	9·12	?
		Raipur	...	...	1·05	...	...	...	...	1	1·05	?	2·69	?	17·46	?
		Sonamukhi	...	...	0·21	...	...	...	...	1	0·21	?	1·20	?	14·41	?
	Birbhum	Suri	0·30	0·11	0·29	...	...	..	...	3	0·70	0·20	2·53	0·53	11·40	3·29
		Hetampore	...	0·05	0·14	...	...	...	...	1	0·19	0·27	0·61	0·41	10·86	2·46
		Rampur Hat	0·29	...	0·12	0·02	...	...	...	2	0·43	0·28	0·98	0·65	8·62	2·99
		Bolpur	...	0·30		0·23	0·21	...	...	3	0·74	?	2·04	?	10·23	?
		Murarai	0·76	0·35	0·80	...	...	.	...	3	1·91	?	2·75	?	7·48	?
	Murshidabad	Kandi	...	0·18	0·60	...	...	...	...	2	0·78	0·50	1·30	0·81	10·67	3·23
		Berhampore	..	0·81	0·02	...	..	..	...	1	0·83	0·38	1·35	0·83	7·72	3·50
		Lalbagh	...	0·55	...	...	...	...	...	1	0·55	0·47	1·25	0·85	8·19	2·70
		Azimganj	.	0·45	...	...	...	...	...	1	0·45	0·40	2·28	0·73	7·70	3·04
		Jangipur	0·43	0·61	0·46	0·05	..	...	...	3	1·55	0·24	1·92	0·53	7·05	2·47
		Lalgola	...	1·35	1·75	...	...	...	...	2	3·10	0·38	4·05	0·75	9·92	2·82
		Akhriganj	...	0·57	..	...	...	...	...	1	0·57	?	2·33	?	7·56	?
		Pathakbari	...	0·20	0·10	...	..	..	...	2	0·30	?	1·10	?	7·50	?
NORTH BENGAL	Pabna	Pabna	...	0·74	0·51	0·29	0·08	...	...	3	1·64	0·54	2·41	1·43	10·06	4·42
		Sirajganj	..	1·02	2·32	0·06	...	...	...	2	3·40	0·47	4·03	0·91	8·70	4·38
	Bogra	Sherepore	...	0·85	0·47	...	...	...	...	2	1·32	0·51	1·83	1·16	7·04	4·02
		Nowkhilla	...	1·28	...	...	...	...	...	1	1·28	0·59	1·47	0·86	6·31	3·51
		Bogra	0·02	1·20	0·85	...	...	...	...	2	2·07	0·31	2·49	0·57	6·70	3·34
		Panchbibi	0·55	0·22	...	...	...	...	...	2	0·77	0·40	4·02	0·76	6·16	2·21
	Rajshahi	Boalia	...	0·64	...	0·39	..	...	...	2	1·03	0·32	1·65	0·61	7·20	3·00
		Nator	..	1·37	0·30	0·13	...	...	...	3	1·80	0·43	3·40	0·78	9·25	3·69
		Naugaon	1·00	...	0·26	...	...	...	...	2	1·26	0·41	1·43	0·92	5·03	3·06
		Lalpore	0·50	0·83	0·07	...	...	...	...	2	1·40	?	3·48	?	8·54	?
		Manda	...	1·80	...	...	...			1	1·80	?	2·83	?	6·09	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 25th of March 1893—contd.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 19th.	Monday, 20th.	Tuesday, 21st.	Wednesday, 22nd.	Thursday, 23rd.	Friday, 24th.	Saturday, 25th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BENGAL—concld.	Malda ...	Malda ...	0·01	...	1·08	0·02	...	...	...	1	1·11	0·21	1·41	0·57	5·98	3·15
		Chanchal ...	0·02	...	...	..	...	...	...	Nil	0·02	0·17	0·07	0·35	2·78	2·33
		Gajol ...	.	...	...	...	...	...	...	Nil	Nil	?	0·11	?	2·37	?
		Sibganj ..	0·70	...	0·33	...	...	...	...	2	1·03	?	1·35	?	6·81	?
	Dinajpur ...	Mohadebpore	0·24	...	0·31	...	...	...	...	2	0·55	0·49	0·59	0·66	4·06	2·18
		Churaman ...	...	0·02	...	...	...	...	.	Nil	0·02	0·24	0·26	0·33	2·71	1·91
		Raiganj ...	0·18	...	...	...	...	...	...	1	0·18	0·25	0·73	0·55	3·44	2·07
		Dinajpur ...	0·02	...	...	...	...	...	...	Nil	0·02	0·20	0·31	0·73	2·26	3·81
		Balurghat ...	...	0·34	0·29	0·03	...	...	...	2	0·66	0·31	2·21	0·46	4·68	1·96
		Thakurgaon ...	0·87	...	...	...	...	...	...	1	0·87	?	1·81	?	3·28	?
	Rangpur ...	Bhawanigunge (*Gyabanda*)	0·10	...	0·02	...	...	...	...	1	0·12	0·47	0·61	1·12	2·23	3·61
		Rangpur ...	...	...	...	...	...	...	...	Nil	Nil	0·28	0·46	1·01	5·61	3·81
		Kurigaon ...	0·38	...	...	0·70	...	...	...	2	1·08	0·83	2·17	1·83	3·42	3·70
		Bagdogra (*Nilphamari*)	0·16	...	...	...	...	...	...	1	0·16	0·36	0·96	0·99	3·32	2·88
		Ultpore ...	0·12	...	...	...	...	...	...	1	0·12	?	0·88	?	1·94	?
	Jalpaiguri ...	Jalpaiguri	0·36	...	...	...	...	...	...	1	0·36	0·54	2·04	1·53	4·80	4·96
		Alipore Dooar	...	0·92	...	...	...	...	...	1	0·92	?	2·01	?	4·88	?
		Fallacotta ...	...	...	...	...	...	...	...	Nil	Nil	?	0·78	?	3·23	?
		Debiganj ...	0·16	...	...	...	...	...	...	1	0·16	?	1·01	?	3·06	?
	Kuch Bihar	*Bhagatpore (Nagrakatta)*	0·06	0·19	...	...	...	...	...	1	0·25	?	1·38	?	10·21	?
		Dinhatta ...	1·44	0·07	...	...	...	...	...	1	1·51	0·67	3·70	1·56	5·55	3·68
		Kuch Bihar ...	0·23	...	0·12	...	...	...	...	2	0·35	0·86	2·85	1·80	5·41	3·84
		Mickliganj ...	0·05	...	...	...	...	...	...	Nil	0·05	0·76	1·08	1·34	3·56	3·31
		Mathabhanga	0·56	0·08	...	...	...	...	...	1	0·64	1·09	1·05	2·17	3·99	3·99
	Darjeeling ...	Buxa ...	0·28	0·62	0·70	...	...	...	..	3	1·60	1·27	2·18	3·03	17·64	5·63
		Siliguri ...	...	...	...	...	..	...	...	Nil	Nil	0·69	0·80	1·38	4·63	3·24
		Darjeeling ...	...	...	...	...	...	...	...	Nil	Nil	0·81	1·28	1·75	4·07	6·98
		Kalimpong ...	..	...	...	...	...	...	.	Nil	Nil	0·65	0·97	1·71	4·62	4·54
		Kurseong ...	...	...	...	...	...	...	..	Nil	Nil	?	1·18	?	6·12	?
EAST BENGAL	Chittagong ..	Cox's Bazar ...	...	...	.	...	0·29	0·50	...	2	0·79	0·51	0·83	0·98	14·13	9·00
		Chittagong ...	...	0·10	0·07	0·08	0·93	0·60	...	3	1·92	0·83	1·96	1·61	15·54	7·53
		Kutubdia ...										?		?		?
		Satkanya ...			...	...	1·28	1·05		5	2·04	?	2·18	?		?
		Kodala ...	...	0·18	0·05							?		?	?	?
		Fenoa ...	...	0·15	0·22	0·28	0·65	0·36				?		?	?	?
		Mirsarai ...	...	0·15	0·16	0·37	0·88	0·48				?		?	?	?
		Chandpur ...	...	0·16				0·54				?		?		?
	Chittagong Hill Tracts.	Rangamati ..	...	0·15	0·13	...	0·88	0·59	...	4	1·55	0·99	1·69	2·15	11·79	8·83
		Bundarban ...	...	0·25	0·05							?		?		?
	Backergunge	Patuakhali ...	...	1·82	0·12	0·02	0·53	0·20	...	4	2·69	0·85	3·89	1·38	16·05	7·40
		Pirojpur ...	...	2·20	0·41	0·06	0·65	0·27	...	4	3·59	0·44	3·91	1·16	16·60	6·64
		Barisal ...	0·10	0·32	0·22	..	0·35	...	.	4	0·90	0·82	0·99	0·91	11·35	7·80
		Gournaddi .	1·98	0·53	0·26	0·33	0·13	...	...	5	3·23	?	3·49	?	12·02	?
		Bhola ...	0·12	0·15	0·11	...	0·44	0·12	..	5	0·94	0·90	1·19	1·66	12·82	7·13
		Daulatkhan ...	...	1·12	0·13	...	0·46	...	...	3	1·71	?	1·91	?	16·45	?
		Bauphal ...	...	1·79	0·19	0·04	...	0·28	...	3	2·30	?	2·37	?	14·06	?
	Noakhali ...	Noakhali ..	...	1·38	0·05	0·02	1·10	0·03		2	2·58	1·10	2·66	2·51	21·22	9·01
		Fenny ...	...	2·15	0·30	0·70	3·65	...		4	6·80	1·56	7·22	2·63	24·57	11·09
		Harishpore ...	...	1·23	0·17	0·09	0·95					?		?		?
		Ramganj ...	...	1·02	...	0·31	1·26					?		?		?
	Faridpur ..	Madaripur ...	...	0·54	...	0·23	0·27	0·88	...	4	1·92	0·76	2·35	2·07	11·96	5·95
		Faridpur ...	0·30	0·42	1·26	0·14	0·68	...	...	5	2·80	0·75	3·52	2·48	20·04	6·19
		Goalundo ...	...	0·74	1·77	0·63	0·27	...	...	4	3·41	0·72	3·87	1·93	14·12	5·31
	Dacca ..	Munshiganj ...	...	1·26	1·40	0·42	0·28	...	...	4	3·36	1·07	3·54	3·07	14·30	8·32
		Dacca ...	0·12	1·14	0·82	0·77	2·80	...	...	5	5·65	0·96	5·34	2·65	21·38	6·06
		Narayanganj...	..	1·75	1·48	0·46	0·71	...	...	4	4·40	1·77	4·98	2·96	18·55	7·86
		Manikganj ...	0·01	0·61	0·83	0·84	0·39	...	...	4	2·66	1·09	2·79	1·76	14·50	4·92
		Joydebpore ...	...	0·82	0·62	0·24	0·19	...	...	4	1·87	?	2·52	?	9·72	?
	Hill Tippera Tippera ...	Agartola ...	1·12	1·27	1·93	1·18	1·14	...	...	5	6·84	1·14	7·07	3·94	16·75	8·67
		Comilla ...	0·25	1·20	0·65	0·25	0·47	...	...	5	2·82	1·16	3·13	3·05	14·68	7·07
		Chandpore ...	...	0·80	0·29	1·20	0·50	...	...	4	2·70	1·07	2·31	2·32	13·96	6·15
		Brahmanbaria	0·65	0·53	2·03	0·10	0·88	...	...	5	4·19	1·13	4·30	3·97	17·59	5·81
		Ramchandrapore	0·90	0·70	...	...	2·20	...	...	3	3·80	?	3·80	?	1[illegible]·51	?
		Nasirnagar ...	...	0·74	1·12	...	...	...	...	2	1·80	?	3·08	?	16·70	?
		Daudkandi ...	0·60	0·50	0·95	0·20	...	...	...	4	2·65	?	2·90	?	10·74	?
		Kasba ...	0·30	0·50	1·40	0·60	17·0	0·10	.	6	4·60	?	4·60	?	15·64	?
		Laksham ...	...	2·00	0·70	0·20	0·25	...	...	4	4·95	?	5·05	?	17·06	?
	Mymensingh..	Kishorganj ...	0·27	0·55	0·61	0·51	0·40	...	...	5	2·34	1·09	3·83	2·62	12·37	6·04
		Atia (*Tangail*)	...	0·91	0·33	0·24	...	...	...	3	1·48	0·40	3·65	0·88	9·82	4·37
		Mymensingh ...	0·67	0·37	0·47	0·57	...	...	...	3	1·18	0·73	2·28	1·8[illegible]	6·76	5·44
		Jamalpur	...	0·09	0·33	...	...	...	...	1	0·42	0·19	0·67	1·01	5·44	4·49
		Netrakona ...	...	1·30	0·10	1·01	...	0·85	...	4	0·26	1·32	4·88	2·17	12·19	5·55
		Subornakhally	1·06	...	0·41	...	...	...	...	2	1·47	?	1·91	?	6·13	?
		Durgapore ...	...	1·00								?		?		?
		Sherepore Town	0·05	0·09	0·08							?		?		?
		Dewanganj ...										?		?		?
NORTH BIHAR	Purnea ...	Kishanganj ...	0·75	...	...	...	...	...	...	1	0·75	0·26	1·81	0·58	4·14	2·86
		Araria ...	0·05	...	...	...	...	...	...	Nil	0·05	0·18	1·94	0·52	4·19	2·54
		Purnea ...	0·07	...	...	...	...	...	...	Nil	0·07	0·09	0·08	0·54	2·83	2·93
		Gonowara (Korah) ..	0·16	...	...	...	...	...	...	1	0·16	?	0·33	?	1·56	?
		Barsoe ...	...	...	...	...	...	...	...	Nil	Nil	?	0·35	?	2·21	?
		Forbesganj ..										?	1·07	?	3·14	?
		Kaliaganj ..	0·40	...	...	...	...	...	...	1	0·40	?	1·76	?	3·05	?
	Bhágalpur ...	Madhipura ...	...	0·20	...	...	...	...	...	1	0·20	0·10	0·45	0·29	3·65	2·33
		Bongaon (Syfabad).	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·27	?
		Supaul ...	...	...	...	...	...	...	...	Nil	Nil	0·11	0·56	0·32	2·82	2·13
		Protabganj ...	...	...	...	...	...	...	...	Nil	Nil	?	0·52	?	2·63	?
		Bhagalpur ..	0·02	...	0·08	...	...	...	...	Nil	0·10	0·10	0·12	0·21	4·14	2·36
		Banka ...	0·10	...	0·06	...	...	...	...	1	0·16	0·05	0·81	0·20	5·79	2·49
		Colgong ...	0·01	...	0·10	...	...	...	...	1	0·11	?	0·12	?	5·04	?
	Darbhanga ...	Tajpur ...	0·12	...	...	...	...	...	...	1	0·12	0·04	0·12	0·21	2·10	2·05
		Darbhanga ...	0·07	0·03	...	...	...	...	...	Nil	0·10	0·03	0·19	0·22	2·92	2·23
		Madhubani ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·34	3·42	2·42
		Bahera ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·39	?
		Roshera ...	0·20	...	...	...	...	...	...	1	0·20	?	0·59	?	1·92	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 25th of March 1893—concld.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 19th.	Monday, 20th.	Tuesday, 21st.	Wednesday, 22nd.	Thursday, 23rd.	Friday, 24th.	Saturday, 25th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BIHAR—*concluded.*	Muzaffarpur...	Sitamarhi ...	0·12	...	..	...	...	...	...	1	0·12	0·11	0·26	0·42	3·66	2·12
		Muzaffarpur	0·07	0·10	...	...		...	...	1	0·17	0·09	0·20	0·28	2·29	3·01
		Hajipur ...	0·08	..	0·55	...	...	...	...	1	0·63	0·15	0·66	0·29	3·25	2·22
		Paru	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·70	?
		Mahuwa (Chak-warra.)	0·02	...	...	...	...	..	...	Nil	0·02	?	0·02	?	2·42	?
		Sahar ..	0·12	...	...	...	...	...	...	1	0·12	?	0·22	?	0·63	?
		Pupri ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·79	?
	Champaran	Motihari .	0·04	0·07	...	...	...	...	...	Nil	0·11	0·03	0·20	0·29	2·78	1·86
		Bettiah ..	0·15	...	...	...	...	...	...	1	0·15	0·07	0·20	0·29	2·23	1·95
		Bagaha ...	0·17	...	...	...	..	...	...	1	0·17	?	0·30	?	2·93	?
		Burharwa .	0·21	...	...	...	...	...	...	1	0·21	?	0·41	?	2·19	?
	Saran ..	Gopalganj ...	0·28	...	...	...	..	...	...	1	0·28	0·08	0·28	0·11	2·62	1·92
		Siwan	0·03	...	0·04	...	...	...	...	Nil	0·07	0·09	0·18	0·18	2·85	2·63
		Chapra ...	0·03	...	0·80	...	..	..	...	1	0·83	0·02	0·98	0·16	3·83	2·39
SOUTH BIHAR	Shahabad ...	Buxar ...	0·20	...	...	...	...	...	...	1	0·20	0·06	0·88	0·21	3·78	2·62
		Dehri ...	0·31	...	0·76	...	...	...	...	2	1·07	0·02	1·19	0·12	4·33	3·07
		Bhabhua ...	0·25	...	0·02	...	...	...	...	1	0·27	0·03	0·57	0·17	3·49	3·32
		Sasaram ...	0·34	...	0·25	...	.	...	...	2	0·59	0·03	0·80	0·22	3·09	2·72
		Arrah ...	0·09	...	...	...	..	..	...	Nil	0·09	0·06	0·38	0·25	3·67	2·47
		Mohanea .	0·03	...	..	...	..	..	...	Nil	0·03	?	0·18	?	1·51	?
		Khira ...	0·15	.	...	...	..	...	...	1	0·15	?	1·55	?	4·02	?
		Agiaon ..	.	...	...	...	...	...	...	Nil	Nil	?	0·21	?	1·51	?
		Ramgar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·33	?
		Kowath ...	...	...	...	...	...	...	..	Nil	Nil	?	1·27	?	4·28	?
		Sikraul ..	..	...	...	...	.	...	..	Nil	Nil	?	0·36	?	2·73	?
		Bassowan ...	0·20	..	...	...		...	...	1	0·20	?	0·45	?	4·11	?
		Monaharpur	0·19	...	...	...	...	...	...	1	0·19	?	0·87	?	3·77	?
	Gaya ...	Aurangabad ...	0·31	...	0·05	...	...	...	...	1	0·36	0·06	0·68	0·32	4·57	2·29
		Gaya ...	0·32	...	...	...	.	...	...	1	0·32	0·09	0·59	0·28	4·16	2·63
		Nawadah ...	0·16	...	...	...	..	...	...	1	0·16	0·12	0·46	0·34	5·43	2·61
		Jahanabad ...	0·13	..	...	...	...	...	...	1	0·13	0·06	0·41	0·25	3·71	2·41
		Arwal	0·10	...	...	...	..	...	...	1	0·10	?	0·40	?	2·94	?
		Daudnagar ...	0·16	...	...	...	..	...	...	1	0·16	?	0·45	?	2·31	?
		Sherghati		...	0·61	...	..	...	...	1	0·61	?	1·09	?	7·05	?
		Rajauli ...	0·30	...	...	...	..	...	...	1	0·30	?	1·10	?	8·34	?
		Pakri Barawan	.	..	..	...	...	...	...	Nil	Nil	?	0·29	.	4·03	?
	Patna ...	Patna .	0·10	..	0·23	...		...	...	2	0·33	0·07	0·34	0·29	2·94	2·15
		Dinapore ...	0·08	..	0·39	...		...	...	1	0·47	0·01	0·49	0·15	2·69	2·17
		Bihar .	0·07	...	.	...	...	...	...	1	0·07	0·08	0·12	0·27	4·00	2·79
		Barh .	0·02	..	0·25	...	...	...	...	1	0·27	0·10	0·29	0·29	3·62	2·51
		Bikram ..	...	...	..	...	..	...	...	Nil	Nil	?	Nil	?	3·35	?
		Hilsa	.	...	...	...	...	...	...	Nil	Nil	?	Nil	?	3·92	?
	Monghyr ..	Begusarai ...	...	...	0·74	...	...	...	...	1	0·74	0·08	0·83	0·19	6·56	2·82
		Monghyr ...	...	..	0·24	...	...	...	...	1	0·24	0·10	0·29	0·23	5·39	2·64
		Jamui ..	0·09	...	...	...	.	...	...	1	0·09	0·12	0·17	0·33	4·96	2·61
		Gogri ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	10·86	?
		Sheikhpura ...	...	...	...	...	.	...	...	Nil	Nil	?	Nil	?	4·62	?
		Chakai Banda	0·10	...	0·05	...	...	...	...	1	0·15	?	0·45	?	6·24	?
	Sonthal Pergunnahs.	Rajmahal ...	...	...	.	...	...	...	...	Nil	Nil	0·08	0·25	0·21	4·01	1·87
		Godda .	0·06	...	0·04	...	..	...	...	Nil	0·10	0·07	0·55	0·33	4·75	2·08
		Pakour ...	0·41	...	0·11	...	...	...	...	2	0·52	0·21	1·96	0·40	9·41	1·95
		Nya Dumka	0·64	0·51	0·61	0·04	...	..	...	2	1·20	0·12	1·99	0·59	7·22	3·19
		Deoghur	1·70	.	0·36	...	...	..	...	2	2·06	0·10	2·38	0·40	6·34	3·20
		Jamtara ...	0·08	...	1·15	...	...	...	...	1	1·23	0·13	1·52	0·40	8·89	2·75
		Barhadda ..	.	...	...	...	..	...	...	Nil	Nil	?	Nil	?	3·67	?
		Nachhal ...	1·60	...	...	...	..	...	...	1	1·60	?	2·60	?	5·55	?
CHOTA NAGPUR.	Hazaribagh .	Pachamba ... (*Giridih*).	..	...	0·43	...	..	..	...	1	0·43	0·03	1·77	0·50	9·23	2·90
		Hazaribagh	0·19	.	.	...	...	...	...	1	0·19	0·08	1·77	0·54	9·57	3·25
		Seintagurah										0·13		0·87		3·15
		Mahudi Hills										0·04		0·60		3·13
		Dhunra Hill										Nil		2·20		4·70
		Barhi ..	0·19	...	0·20	...	...	...	...	2	0·39	?	1·50	?	6·86	?
		Chatra ...	0·14	...	0·05	...	...	...	...	1	0·19	?	1·23	?	8·03	?
		Karancha	0·10	...	..	...	...	...	...	1	0·10	?	1·94	?	6·22	?
		Ramgar .	..	...	0·20	...	...	...	...	1	0·20	?	1·34	?	10·49	?
	Lohardaga	Lohardaga ...	0·10	.	..	...	...	...	...	1	0·10	0·01	1·08	1·04	12·11	4·13
		Ranchi ...		1·11	0·29	...	...	...	...	2	1·40	0·11	2·77	0·79	15·13	4·23
		Silli ...	0·10	2·20	...	...	...	...	...	2	2·30	?		?		?
	Palamau ..	Palamau (Daltonganj).	...	..	0·08	...	...	..	...	Nil	0·08	0·10	0·95	0·55	4·43	3·30
		Latehar	...	...	0·15	...	...	..	...	1	0·15	?	1·16	?	10·32	?
		Husainabad	0·16	..	...	...	...	..	...	1	0·16	?	0·73	?	4·99	?
		Garhwa	0·10	...	...	...	.	...	...	1	0·10	?	1·17	?	6·16	?
	Singhbhum ..	Chaibassa	...	..	0·70	0·03	0·39	...	...	2	1·12	0·29	2·74	0·98	15·28	4·51
		Chakradharpur.	...	..	0·75	0·22	...	...	...	2	0·97	?		?		?
		Ghatsila	..	...	0·49	...	...	...	...	1	0·49	?	2·80	?	14·95	?
		Bahragora										?		?		?
	Manbhum .	Purulia ..	.	0·77	0·55	...	...	...	...	2	1·32	0·20	3·51	0·81	14·64	3·70
		Gobindpur	.	..	0·54	...	.	..	...	1	0·54	0·05	0·76	0·42	7·34	3·05
		Raghunathpur	...	...	0·24	..	...	...	...	1	0·24	?	1·15	?	5·87	?
		Barabhum	.	0·09	0·15	...	0·04	...	...	1	0·28	?	1·33	?	12·13	?
		Jhalda .	.	0·38	1·33	...	...	...	...	2	1·71	?	2·61	?	8·55	?
		Chas	.	0·10	0·11	...	..	...	...	2	0·21	?	1·84	?	8·45	?
		Pandra ..	..	...	0·20	...	.	...	...	1	0·20	?	0·65	?	0·67	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·10 inch of rain has fallen.

CALCUTTA, *the 28th March* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 25TH OF MARCH 1893.

DURING the previous week a continuous and rather rapid fall of pressure had occurred, and the distribution had completely changed from what it had previously been, and at the close of the week pressure was low over the western and north-western parts of the province, and comparatively high in South-East Bengal, and on the whole the distribution resembled that which usually obtains in the hot weather months. On the 19th pressure had risen slowly at the western stations, and fallen over the remainder of the province, but generally over Northern India the pressure changes were irregular, and a feeble area of low pressure existed in North-West India near the hills. This pointed to the existence of rather disturbed conditions over the whole of Northern India, and on this day a number of local hot weather storms or nor'-westers occurred in all districts of Bengal except Orissa, the rainfall from which was rather heavy, and was reported on the morning of the 20th. From the 19th to the 20th pressure began to fall at all except a few of the south-eastern stations, the fall being brisk in Bihar, while at the same time a barometric depression had appeared in Chota Nagpur, South Bihar and the neighbouring districts of the North-West Provinces. Again, therefore, conditions continued disturbed, and numerous local storms occurred in Bengal, and on the morning of 21st the majority of stations, except in Orissa and parts of Bihar, reported rain. On the 21st the low pressure area had apparently advanced slowly in an easterly direction, and a very shallow depression covered the western half of the province. Hence again conditions remained very disturbed in Bengal; local storms continued numerous, and a large number of stations reported rainfall on the 22nd. From the 21st to the 22nd the shallow depression had again advanced in an easterly direction, partially filling up in its advance, and two feeble residual low pressure areas existed, one in Orissa and one in North Bengal and Assam. The disturbed conditions therefore still existed in Bengal, and numerous local storms occurred, and on the morning of the 23rd rainfall was again reported in Orissa, South-West Bengal and East Bengal, though the remainder of the province had become almost rainless. On the morning of the 23rd, however, a rather rapid increase of pressure had taken place over the whole province, and the residual low pressure areas, which had existed on the 22nd, had disappeared, though the actual pressure recorded over the province was still in moderate defect of the normal. With the disappearance of the actual depressions, however, weather immediately began to improve, the sky rapidly cleared, a dry north-westerly and westerly wind current set in over the whole province, and rainfall entirely ceased. A further moderate increase of pressure took place on the 24th, which made pressure in excess of the normal of the day at almost all stations, while again on the 25th a further moderate increase of pressure took place, and it became in excess of the normal by amounts ranging up to nearly a tenth of an inch in the west of Bihar, and pressure became very uniform over the whole province, while over the greater part of Bengal a dry westerly wind current was blowing. The first half of the week was therefore stormy and wet with rather heavily clouded skies, and the second half fine and dry and with almost cloudless skies, but throughout the week temperature has again been much below the normal for the period.

Pressure—Has been very decidedly low for a considerable part of the week, and hence the mean pressure has been in distinct defect of the normal. This defect has usually equalled from 0·05″ to 0·07,″ and it has been fairly uniform over the whole province.

Temperature.—Owing to the rather heavy rainfall in the first half of the week and to the cool dry north-westerly and westerly wind which was blowing for the last three days of the week, temperature has again been largely in defect of the normal. Indeed on the morning of the 25th the mean temperature reported was from about 8° to 11° below the normal of the day. Hence for the whole week the mean temperature has been in defect of the normal, the defect equalling about 5°, while in South Bihar and Chota Nagpur it has equalled 6°.

The distribution of temperature for the week and its variation from the normal value are best seen in the table below, where the average maximum, minimum and mean temperatures for the week at nine typical stations in different districts of the province are compared with the normal values for the period. The defect during the week, it will again be seen, has been considerably larger in the day than in the night temperatures :—

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 25*th March* 1893.

	Normal mean maximum temperature for the week ending 25th March.	Actual mean maximum temperature for the week ending 25th March 1893.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 25th March.	Actual mean minimum temperature for the week ending 25th March 1893.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 25th March.	Actual mean daily temperature for the week ending 25th March 1893.	Variation of actual mean from the normal.
Cuttack	97·2	91·4	—5·8	73·9	72 2	—1·7	85·6	81·8	—3·8
Calcutta	91·5	85·6	—5·9	71·3	67·5	—3·8	81·4	76·6	—4·8
Dacca	91·6	84·0	—7·6	70·4	67·6	—2·8	81·0	75·8	—5·2
Burdwan	95·4	87·0	—8·4	69·9	68·0	—1·9	82·7	77·5	—5·2
Patna	93·4	87·1	—6·3	65·4	61·7	—3 7	79·4	74·4	—5·0
Gaya	96·0	88·8	—7·2	68·1	61·3	—6·8	82·0	75·1	—6·9
Purnea	92·5	87·5	—5·0	62·1	59 4	—2·7	77·3	73·5	—3·8
Hazaribagh	90·9	85·7	—5·2	66·2	60·3	—5·9	78·6	73·0	—5·6
Darjeeling	58·2	53·8	—4·4	45·2	39·7	—5·5	51·8	46·8	—5·0

Rainfall.—The rainfall during the week has again been heavy. It has averaged nearly three inches in East Bengal, one inch and-a-half in South-West Bengal, about one inch in Orissa and North Bengal, about half an inch in Chota Nagpur and South Bihar, and only a quarter of an inch in North Bihar. In all divisions of the province, however, the falls have been rather largely in excess of the normal.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 25th of March 1893 :—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th Oct. 1892.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	94·6	64·5	86 3	71·9	79·1	—3·0	0·90	0·30	+0·60	1·47	0·45	+1·02	2·57	0·92	13·62	6·30
South-West Bengal ...	96·3	57·8	87·2	67·5	77·5	—5·0	1·47	0·52	+0·95	2·50	0·66	+1·84	2·33	1·12	13·31	4·60
North Bengal	95·6	48·6	84·7	61·9	73·3	—4·7	0·85	0·47	+0·38	1·36	0·66	+0·70	1·72	1·00	5·19	3·34
East Bengal	87·8	59·7	82·3	66·4	74·4	—4·8	2·91	0·92	+1·99	3·92	1·19	+2·73	3·40	2·19	14·83	7·03
North Bihar	91·2	47·9	86·7	58·8	72·7	—4·8	0·22	0·09	+0·13	0·56	0·19	+0·37	0·50	0·29	3·28	2·33
South Bihar	94·3	54·4	87·7	61·4	74·6	—6·0	0·48	0·08	+0·40	1·14	0·17	+0·97	0·79	0·33	4·87	2·58
Chota Nagpur	93·7	55 2	85·4	61·6	73·5	—6·3	0·55	0·09	+0·46	1·27	0·22	+1·05	1·82	0·84	10·79	3·64

METEOROLOGICAL OFFICE, BENGAL,
The 28*th March* 1893.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 19th to 25th March 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Fahr.	Temperature. Mean.	Maximum.	Range.	Minimum.	Hygrometry. Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Wind. Prevailing direction.	Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
March	19th	142 5	9·6	29·716	78·7	90·5	18·0	72·5	74·1	0·785	72·0	81	SSW and variable	154	0·23	Partially cloudy, o, g, t, <, /, ▲.
,,	20th	144·4	7·2	·729	76·7	85·8	19·5	66·3	73·1	·771	71·4	84	SSW and SSE ...	149	0·47	Partially cloudy, o, g, p, t, <, d.
,,	21st	144·7	9·3	·736	77·9	85·7	16·2	69·5	74·3	·807	72·8	84	SSW and SW ...	176	0·26	Partially cloudy, o, p, d.
,,	22nd	133·3	4·3	·753	75·7	81·7	11·2	70·5	72·4	·752	70·7	85	SSW and SW ...	96	0·23	Chiefly cloudy, o, g, p, t, d.
,,	23rd	137·2	8·3	·809	73·5	81·6	14·7	66·9	67·7	·603	64·3	75	NNE and variable	49	0·12	Partially cloudy, o, p.
,,	24th	141 2	10·5	·846	74·3	84·2	18 0	66·2	64·9	·491	58·4	57	WNW and calm...	55	Nil	Clear, ▲.
,,	25th	142 5	10·5	·858	73·1	85 6	25·2	60·4	64·9	·507	59·3	62	WSW and calm...	52	,,	Clear, ▲.

	Inches.
The mean pressure of the seven days	29·778
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	29·795
	Hours.
The total number of hours of bright sunshine	59·7
The maximum possible number of hours of sunshine	84·7
	°
The mean temperature of the seven days	75·7
The average temperature of the corresponding period for 24 years, S.-G.'s Office	82·3
The extreme variation of temperature	30·1
The maximum temperature	90·5
	Miles.
The highest velocity of the wind in one hour	18
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	75
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	65
	Inches.
The total fall of rain from 19th to 25th March 1893	1·31
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·30
The total fall from 1st January to 25th March 1893	6·85
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	2·69

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; t, thunder; <, lightning; /, strong wind; ▲, dew; p, passing temporary showers; d, drizzling rain.

N.B.—In the weekly report from 5th to 11th March 1893 read " 66·0 " for " 6·60 " as the mean wet bulb of the 10th March 1893.

C. Little,
For Meteorological Reporter to the Govt. of India.

Meteorological Office, Govt. of India;
Calcutta, the 27th March 1893.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 19th to 25th March 1893.

Month	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature. Daily mean.	Maximum.	Range.	Minimum.	Hygrometry. Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	Rainfall at 10 A.M. for past 24 hours.
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
March ...	19th ...	29·797	82·4	92 0	19·2	72 8	82·6	76·5	·825	73·4	75	...
" ...	20th ...	·774	77 2	88 0	21·6	66 4	79 6	75·5	·830	73·6	82	0·35
" ...	21st ..	·802	78 4	87·0	17·2	69 8	82·4	77·0	·856	74 5	78	0·74
" ...	22nd ...	·805	76 9	82·9	12·1	70 8	82·4	76 5	·834	73 7	75	.
" ...	23rd ...	·887	74 9	82·9	16 0	66·9	74·6	70·6	·696	68 4	81	0·49
" ...	24th ...	·897	75 9	85 9	20·0	65·9	80 1	71·1	·642	66·1	62	...
" ...	25th ...	·941	74·4	87·3	25·9	61·4	80·6	77·0	·831	75·4	85	...

		Inches.
The mean 10 A.M. pressure of the seven days	... ...	29·843
		°
The mean temperature of the seven days	... .	77·2
The extreme variation of temperature	... ...	30 6
The maximum temperature	... ...	92·0
		%
The mean 10 A.M. relative humidity of the seven days	... ...	77
The total fall of rain from 19th to 25th March 1893	... ...	1·58 inch.

The daily mean temperatures are the crude means of maximum and minimum temperatures.

C. LITTLE,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 27th March 1893.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 25th March 1893, *as compared with the corresponding week of the previous year.*

Nature of Cargo.	Week ending Saturday, the 25th March 1893. Number of boats.	Weight of cargo.	Tollage.	Week ending Saturday, the 26th March 1892. Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	636	1,15,950	1,881	382	1,60,875	2,919
Jute	16	8,700	163	3	800	17
Firewood	21	10,600	161	118	73,766	1,125
Other articles	761	1,94,150	2,775	719	2,26,555	3,534
Total ...	1,434	3,29,400	4,980	1,222	4,61,995	7,589

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 18th March 1893, on 1,610⅓ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*294,700	*3,25,220 13 0	30,70,926 20	7,50,563 12 0	18,979 5 0	10,94,763 14 0	78,130½	117,075¾	195,206
Or per mile of railway	......	201 15 0	......	466 0 8	11 12 7	679 12 3	......	......	......
For previous 10 weeks of half-year	3,067,677	34,85,445 2 0	2,80,92,270 10	63,33,175 10 0	1,76,507 5 0	99,95,128 1 0	783,040½	1,078,492	1,861,532¼
Total for 11 weeks ...	3,362,377	38,10,665 15 0	3,11,63,196 30	70,83,739 6 0	1,95,486 10 0	1,10,89,891 15 0	861,170¾	1,195,567¾	2,056,738¼
Comparison.									
Total for corresponding week of previous year	247,675	2,89,952 4 5	27,62,691 0	6,13,964 8 6	18,028 5 3	9,21,945 2 2	83,312	109,340	192,652
Per mile of railway corresponding week of previous year ...	......	183 3 1	......	387 14 4	11 6 3	552 7 8	......	......	......
Total for corresponding 11⅞ weeks of previous year	3,208,892	35,68,495 11 8	3,13,88,078 0	71,84,471 2 2	1,99,809 13 9	1,09,52,776 11 7	864,723	1,175,557	2,040,280

* The increase is chiefly due to journeys undertaken by pilgrims on account of "Baroonee" bathing festival.

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 18th March 1893, on 22¼ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	22,183	5,939 8 0	8,835 30	377 8 0	12 0 0	6,329 0 0	871	97	968
Or per mile of railway	......	266 15 1	......	16 15 5	0 8 8	284 7 2	......	......	......
For previous 10 weeks of half-year	*219,792	*57,055 12 0	†1,02,697 30	†3,991 0 0	‡113 0 0	61,159 12 0	8,819	1,109	9,928
Total for 11 weeks ...	241,975	62,995 4 0	1,11,553 20	4,368 8 0	125 0 0	67,488 12 0	9,690	1,206	10,896
Comparison.									
Total for corresponding week of previous year	21,293	5,309 15 7	36,140 0	903 7 0	9 2 3	6,222 8 10	852	116	968
Per mile of railway corresponding week of previous year .	......	238 10 5	......	40 9 8	0 6 7	279 10 8	......	......	......
Total for corresponding 11⅞ weeks of previous year ...	251,413½	63,859 14 6	2,36,742 30	7,613 9 9	130 8 0	71,604 0 3	9,044	1,327	11,271

* Deducted number of passengers 3,082 and Rs. 865 }
† Added Mds. 12 and ,, 4 } on account of difference between the approximate and audited figures for the week ended 11th February 1893.
‡ Ditto ,, 7 }

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 18th March 1893, on 161⅔ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*24,265	*15,618 15 0	62,485 0	8,419 8 0	35 0 0	24,073 7 0	5,165	3,748	8,913
Or per mile of railway	......	96 12 4	......	52 2 8	0 3 6	149 2 6	......	......	......
For previous 10 weeks of half-year	†176,867	†1,16,607 6 0	‡5,25,695 20	‡78,766 4 0	§367 0 0	1,95,740 10 0	51,981	32,732	84,713
Total for 11 weeks ...	201,132	1,32,226 5 0	5,88,180 20	87,185 12 0	402 0 0	2,19,814 1 0	57,146	36,480	93,626
Comparison.									
Total for corresponding week of previous year	16,446½	13,321 5 6	45,738 0	8,715 2 0	92 14 6	22,129 6 0	6,599	2,173	8,772
Per mile of railway corresponding week of previous year ...	......	82 8 7	......	53 15 11	0 9 3	137 1 9	......	......	......
Total for corresponding 11⅞ weeks of previous year	166,019	1,19,192 11 10	5,02,299 10	90,357 4 0	747 8 9	2,10,297 8 7	65,621	24,122	89,743

* The increase is partly due to journeys undertaken by pilgrims on account of "Baroonee" bathing festival, and partly to general development of traffic.
† Added number of passengers 590 and Rs. 758 }
‡ Ditto maunds 505 and deducted ,, 2,981 } on account of difference between the approximate and audited figures for the week ended 11th February 1893.
§ Ditto ,, 8 }

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for the week ended 18th March 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	173,850	a 96,030 0 0	8,30,306 0	1,00,280 0 0	12,350 0 0	2,08,660 0 0	27,822	27,985	55,807
Or per mile of railway	224	124 0 0	1,069 0	129 0 0	†2 0 0	255 0 0	......	......	......
For previous 10 weeks of half-year*	1,899,254	9,01,041 0 0	71,30,696 0	9,79,314 0 0	1,54,211 0 0	20,34,566 0 0	282,612	281,855	564,467
Total for 11 weeks ...	2,073,104	9,97,071 0 0	79,61,002 0	10,79,594 0 0	1,66,561 0 0	22,43,226 0 0	310,434	309,840	620,274
Comparison.									
Total for corresponding week of previous year	158,020	75,879 0 0	5,58,356 0	62,733 0 0	11,517 0 0	1,50,129 0 0	27,499	29,374	56,873
Per mile of railway corresponding period of previous year ...	203	97 0 0	710 0	81 0 0	†2 0 0	180 0 0	......	......	......
Total to corresponding date of previous year	1,938,978	9,50,557 0 0	66,25,325 0	9,03,242 0 0	1,53,240 0 0	20,07,039 0 0	308,564	329,621	638,185

* Audited up to week ending 28th January 1893.
† Excluding steamer earnings.
a. The increase due to Baruni bathing festival which took place on the 26th March last year.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 18th March 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	31,439	10,540 0 0	92,370 0	5,710 0 0	140 0 0	16,390 0 0	3,920	1,770	5,690
Or per mile of railway	252	84 0 0	739 0	46 0 0	1 0 0	131 0 0	......	......	......
For previous 10 weeks of half-year*	319,435	1,14,051 0 0	6,35,619 0	39,410 0 0	1,615 0 0	1,55,076 0 0	36,670	20,104	56,774
Total for 11 weeks ...	350,874	1,24,591 0 0	7,27,989 0	45,120 0 0	1,755 0 0	1,71,466 0 0	40,590	21,874	62,464
Comparison.									
Total for corresponding week of previous year	27,672	9,925 0 0	56,655 0	3,304 0 0	56 0 0	13,285 0 0	8,920	1,752	5,672
Per mile of railway corresponding week of previous year ...	221	79 0 0	453 0	27 0 0	......	106 0 0	......	......	......
Total to corresponding date of previous year	336,809	1,23,227 0 0	6,95,249 0	22,816 0 0	1,059 0 0	1,67,102 0 0	41,288	22,759	64,047

* Audited up to week ending 28th January 1893.

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 18th March 1893, on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	18,356	5,330 0 0	16,170 0	2,360 0 0	120 0 0	7,810 0 0	2,487	737	3,224
Or per mile of railway	213	62 0 0	188 0	28 0 0	1 0 0	91 0 0	......	......	......
For previous 10 weeks of half-year*	192,631	60,214 0 0	1,70,745 0	16,839 0 0	1,789 0 0	78,842 0 0	24,921	7,319	32,240
Total for 11 weeks ...	210,987	65,514 0 0	1,86,915 0	19,199 0 0	1,909 0 0	86,652 0 0	27,408	8,056	35,464
Comparison.									
Total for corresponding week of previous year	15,872	5,139 0 0	19,914 0	1,015 0 0	78 0 0	6,232 0 0	2,409	725	3,224
Per mile of railway corresponding week of previous year ..	185	59 0 0	232 0	12 0 0	1 0 0	72 0 0	......	......	......
Total to corresponding date of previous year	193,387	64,371 0 0	1,53,447 0	12,542 0 0	1,564 0 0	78,477 0 0	28,186	8,140	36,326

* Audited up to week ending 28th January 1893.

BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

Approximate return of traffic for the week ending 18th March 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	95,480	39,090	4,54,070	69,620	11,110	1,10,820	13,616	19,089	32,6[illegible]
Or per mile of railway	126·30	51·71	600·62	92·09	14·69	158·49	......	.....	....
For previous 10 weeks of half-year*	914,294	3,91,731	42,35,040	6,15,208	1,17,681	11,24,620	122,538	173,538	297,07[illegible]
Total for 11 weeks ...	1,009,774	4,30,821	46,89,110	6,84,828	1,28,791	12,44,440	136,154	192,577	328,731
COMPARISON.									
Total for corresponding period of previous year on 755 miles open	75,160	31,322	3,25,046	45,257	6,449	83,028	11,784	17,724	29,5[illegible]
Per mile of corresponding week of previous year	99·55	41·49	430·52	59·94	8·54	109·97	......	......	......
Total to corresponding date of previous year	897,495	3,84,700	37,45,437	5,27,535	1,10,542	10,22,778	130,967	192,782	323,74[illegible]

* Includes audited figures up to 21st January 1893.

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CONTENTS.

Abstract of the Proceedings of the Council of the Lieutenant-Governor of Bengal assembled for the purpose of making Laws and Regulations under the provisions of the Act of Parliament, 24 and 25 Vic., Cap. 67.

The Council met at the Council Chamber on Saturday, the 1st April, 1893.

Present:

The HON'BLE SIR CHARLES ALFRED ELLIOTT, K.C.S.I., Lieutenant-Governor of Bengal, *presiding*.
The HON'BLE SIR CHARLES PAUL, K.C.I.E., *Advocate-General.*
The HON'BLE T. T. ALLEN.
The HON'BLE H. J. S. COTTON, C.S.I.
The HON'BLE H. H. RISLEY, C.I.E.
The HON'BLE J. LAMBERT, C.I.E.
The HON'BLE DR. MAHENDRA LAL SIRCAR, C.I.E.
The HON'BLE A. H. WALLIS.
The HON'BLE GONESH CHUNDER CHUNDER.
The HON'BLE P. PLAYFAIR.
The HON'BLE MAULVI SYED FAZL IMAM, KHAN BAHADUR.

NATURAL DRAINAGE OF VILLAGES.

In the absence of the Hon'ble Dr. Mahendra Lal Sircar, who came late and who had given notice of the question, the Hon'ble BABU GONESH CHUNDER CHUNDER enquired whether Government is aware that the water-mains of the Calcutta Corporation, which have been laid along the Barrackpore Trunk Road,

have materially obstructed the drainage of the villages to the east of the Road, by passing through several bridges over the water-courses, which cross the road from the east to the west in the manner shown in the accompanying rough sketch of two of the bridges named therein and thus causing permanent saturation with water of the soil on both sides of the road, have aggravated the malarial condition of the villages? And that in view of the importance of the subject, whether Government is prepared to order the necessary enquiries with the object of finding and carrying out of any remedial measure or measures other than that adopted by the Corporation, namely, that of deepening the channels of the water-courses at the places crossed by the mains, and which has proved ineffectual owing to the rapid silting up of these excavations?

The Hon'ble MR. RISLEY replied as follows:—"In reply to the Hon'ble Dr. Mahendra Lal Sircar's question, I have to say that two reports have been received by Government which touched on the state of things complained of. The Sanitary Commissioner, Dr. Gregg, submitted a report, dated the 21st January, 1890, on the drainage, water-supply and conservancy arrangements of the group of small municipalities surrounding Calcutta on the north and east, in which he attributed the main evils from which this tract of country suffered to obstructions set up by the agricultural population impeding the natural flow of the streams and drainage channels. He also remarked, in discussing a scheme for opening up the Bagjala khal, that 'the syphons passing under the main pipes of the Calcutta Water-works do not, I understand, work properly owing to their becoming silted up occasionally, and at such times obstructing the free flow of drainage through them. These syphons should never be allowed to become silted up, even temporarily.' The memorandum in questioned was reviewed by Government in the Municipal Resolution of the 7th February, 1890, and was transferred to the Sanitary Board for further consideration and action. The other paper which Government has received was a Note by Babu Dakhina Ranjan Mukerji on the insanitary condition of the Baranagore Municipality, in which he referred to the material, though partial, blocking of the culverts in the Barrackpore Road by the construction of the Calcutta Water-works. In both these reports, the reference to this particular obstruction occupied a very subordinate place, and the larger proposals respecting compulsory drainage and excavation of old silted-up channels have been pending until some legal powers should be acquired by Government to intervene in such cases. When sanction was given by Government to lay the Calcutta main, it was required that the area of the drainage openings in the road should not be diminished, and it is believed that this condition has been fulfilled. The Government is not aware that the crossings provided have deteriorated or silted up, but enquiries will be made on this point, and if the statement communicated by the hon'ble member is found to be correct, the local authorities will be enjoined to restore matters to a proper state."

LICENSED WAREHOUSE AND FIRE-BRIGADE BILL.

The Hon'ble MR. COTTON moved that the clauses of the Bill for the regulation of Warehouses and the maintenance of a Fire-brigade be further considered for settlement in the form recommended by the Select Committee.

The Motion was put and agreed to.

The Hon'ble MR. COTTON said:—"The amendment which stands in my name is of a verbal character, but, in effect, it makes clear the intention of section 9 of the Bill. Under section 9, with the consent of the Chairman of the Commissioners, any Special Committee whom the Commissioners in meeting shall on that behalf appoint may exercise the powers and the discretion vested by the Act in the Chairman of the Commissioners. The particular point of my amendment is to enable the Special Committee to exercise not only the powers but all or any of the powers of the Chairman. It is desirable that this matter should be made quite clear, as there are certain powers in the way of granting licenses for warehouses which can undoubtedly much more conveniently be exercised by the Chairman in his executive capacity, and which need not be transferred to the Committee; such, for instance, as the large numbers of licenses which would be granted for warehouses for hay, straw, wood and the like. The granting or withholding of such licenses raise no question of any importance or consideration: they are purely executive matters, and it is obviously undesirable that the power of granting or withholding such licenses should be delegated to a Committee. They are powers which the Chairman

now deals with in practice, and it is convenient that this practice should continue. The proposed amendment makes it quite clear that the powers and discretion, which may be delegated to a Committee appointed under this section, may be limited to the exercise of the particular powers relating to important warehouses, such as jute warehouses and the like, or they may, if the Commissioners so decide, be general in their character. To avoid any misunderstanding, it is desirable that the clause should distinctly lay down that all or any of the powers of the Chairman may be delegated. I, therefore, move that in section 9, before the words 'the powers' the words 'all or any of' be inserted."

The Hon'ble Sir Charles Paul said:—"I should have thought this amendment to be unnecessary. According to the interpretation of statutes, words in the plural number include the singular. I have no objection to the passing of the amendment, if the Hon'ble Member in charge of the Bill thinks it necessary."

The Hon'ble Mr. Allen said:—"It appears to me that the definite article used in section 9 of the Bill before the words 'powers and discretion vested in the Chairman of the Commissioners' refers to the powers conferred by the sections preceding and are limited to those powers. A subsequent section (12) imposes on the Chairman of the Commissioners other duties, and I do not understand whether the hon'ble member intends that the Committee shall exercise those powers under section 12 or shall be capable of exercising them, as well as the mere power and discretion vested for granting or withholding licenses. If the definite article is cut out of section 9 and the words 'all or any of' are introduced, clearly they will refer to all the powers given to the Chairman of the Commissioners throughout the whole Act, and possibly the adoption of this amendment may go further than the hon'ble member intends. I understand he has no intention to extend the delegation of authority to the Committee beyond the powers and discretion which refer to the granting of licenses. There might be some inconvenience in allowing the Committee to take action under section 12."

The Hon'ble the President said:—"I think the remark made by the learned Advocate-General that the words proposed to be inserted in section 9, though possibly unnecessary, can do no harm would justify us in including those words, because if they can do no harm, they may just as well be put in. There was a case quite recently—a very important case—in which the absence of those or similar words had the effect of completely vitiating the intention of the Legislature in an Act which was passed, and tied down the hands of the executive in a way which was not intended. It certainly appears to me that the words 'the powers under this Act' might include all the powers conferred under any part of the Act, and would not confine the delegation to the powers referred to in the section previous to section 9. And though the Legal Remembrancer objects that it might cause inconvenience if all the powers of the Chairman were to be exercised by the Committee, I may point out that we are merely putting the power of delegation in the hands of the Chairman, and we may rely on his exercising it in a way which will be judicious and convenient. I therefore think we can hardly do wrong in acceding to the amendment which has been proposed."

The Motion was put and agreed to.

The Hon'ble Mr. Cotton moved that the Bill for the licensing of Warehouses and the maintenance of a Fire-brigade, as settled in Council, be passed. He said:—"This Bill, after having been the subject of very considerable discussion, both in this Council and outside of it, and after having been subjected to lively opposition from extreme points of view, has at length passed between Scylla and Charybdis and arrived in port. It is only necessary for me, I think, to make one remark on this occasion, and that is, to express the obligations of the Council to the Hon'ble Mr. Woodroffe, who has vacated his seat since the Advocate-General has returned from leave, for the most valuable services which he has rendered both in the Select Committee and in this Council, in preparing the clauses of this Bill. The lion's share of the work undoubtedly fell to him, and I am sure I am no more than expressing the general opinion of the Council when I say, that we are much indebted to him for the trouble he took over this matter."

The Motion was put and also agreed to.

The Hon'ble Mr. Playfair said :—"The Bengal Provincial Services estimate has been in the hands of hon'ble members for several days, but being a mere statement of balances it is not self-explanatory, and I would venture to suggest that, in future years, it might suit the convenience of members were the Budget and the official statement by the Hon'ble Member in charge of the Budget, presented at one meeting of the Council to be brought forward for discussion at a subsequent meeting of the Council.

"Taking the estimates of receipts and expenditure for the coming year, it is in the first place to be observed that the Government of India has reduced the income estimated by the Local Government by the sum of Rs. 1,85,000, and has likewise reduced the estimated expenditure by Rs. 62,000, which alterations raise the estimated deficiency for the year from the sum of Rs. 51,000, estimated by the Local Government, to the sum of Rs. 1,74,000, estimated by the Government of India. And it naturally occurs to me to enquire whether the expenditure of the year could not be limited to the sum of Rs. 4,24,04,000 scheduled by the Supreme Government, and whether the income of Rs. 4,24,15,000, as estimated by the Local Government, could not be retained, in which case there would practically be equilibrium between income and expenditure. Under the Heading of Railways, the Government of India has docked the income estimated by the Government of Bengal by 1½ lakhs of rupees, which in itself goes far to account for the estimated deficiency for the year 1893-94, and it will be interesting to know if there is any likelihood of this further receipt being obtained from this source.

"Turning to details of the estimate for the coming year 1893-94, the Hon'ble Member in charge of the Budget has explained the reduction effected under the heading 'Salt.' I should like to enquire whether the expenditure of Rs. 5,52,000 under 'Customs'—heading No. 9 of the statement—includes the cost of collecting the salt revenue, which income, I understand, is passed to the credit of the Imperial Government; and if so, whether Bengal gets credit for any portion of this cost from neighbouring provinces to which a portion of the salt passes, or from the Government of India on their behalf. Receipts under heading XII show that Rs. 1,82,000 is received on account of interest which, if taken to result from money advanced at 5 per cent., represents a capital of Rs. 36,40,000, which is not a large sum for this vast province. It would be interesting to know whether any portion of this represents loans to public bodies in Calcutta, or whether the money is lent wholly to bodies in the mufassal. The next heading to which I would direct attention is number XVI, under which Courts of Law are estimated to produce an income of Rs. 8,76,000. It has been reported that the accounts of the Calcutta Small Cause Court for the past year show a surplus approaching Rs. 1,60,000, and I beg leave to enquire if this revenue is included in the sum of Rs. 8,76,000. Turning to the other side of the estimates, it will be seen that the expenditure under Courts of Law is placed at Rs. 85,28,000, and it would be interesting to learn what portion of the revenue from stamps, estimated at Rs. 1,17,75,000, may be considered as a credit against this debit.

"I come now to the important heading entitled 'Eastern Bengal State Railway system,' showing an estimated receipt of Rs. 32,12,000 for the year 1892-93, and a receipt of Rs. 33,50,000, estimated by the Local Government, and, as I have already pointed out, amended by the Government of India to Rs. 32,00,000 for the coming year 1893-94. This is apparently a net receipt, for the expenditure column under the heading 'Railways' includes the nominal charge of only Rs 1,000. In the first place, I would venture to enquire whether this profit is arrived at after paying any interest on capital, and whether it is the whole profit of the year. Secondly, whether the reduction of one-and-a-half lakh by the Government of India on the estimated income of Rs. 33,50,000 made by the Local Government represents a reduction in tariff rates, or does it imply an increase in expenditure? It is to be hoped that the Government of India may in the near future take such action as will solve the difficulties arising from the depreciated value of silver, and that attention will be devoted forthwith to the wants of the internal trade of the country which is meanwhile suffering, and that the Local Government will, in future, desire to obtain an income from railway traffic carried in quantity at low rates rather than from a restricted traffic transported at high rates. It will be within the recollection of hon'ble members of this Council that the Government of India took over the Eastern Bengal Railway from a Company, and that Colonel Conway Gordon, who was appointed Manager, stated before a Select Committee of the House of Commons that one of the reasons for Government doing so was to protect the public from the excessive tariffs charged by the Company; it will also be remembered that the rates were lowered to the great

advantage of trade, and especially of the jute trade, during Colonel Conway Gordon's incumbency; that these were restored to the tariff of the old Company, and that although the tariff has again been modified the undertaking earns an income approaching 7 per cent. on a capital far in excess of that of the original capital of the Company. It has recently been stated in this Council that this is an expensive port, and I earnestly hope that the time will soon arrive when this Government will take into serious consideration the charge upon crops from the field to the 'tween decks of vessels lying in the port, and endeavour to lessen the present cost. And in this connection I venture now to ask whether the Local Government is in favour of the extension of the Bengal Central Railway through Singhia to Madaripore to tap the large jute-growing district, and place Calcutta in direct communication with the Chandpore terminus of the Bengal-Assam Railway, and whether the Local Government will represent to the Government of India the necessity for the construction of this section, if it has not already done so.

"I observe that the expenditure under the heading 'Irrigation' is estimated to be Rs. 30,26,000 over receipts; that the charge for interest alone, amounting to Rs. 24,48,000, is greater than the whole income of the department placed at Rs. 23,82,000. It would be interesting to have an explanation of the real value of this expenditure.

"The last entry under the heading of 'Contributions', placed in the expenditure column by the Government of India at Rs. 10,00,000, being Rs. 1½ lakhs below the sum budgeted by the Local Government, is not self-explanatory, and I beg leave to enquire to whom are those contributions made, and is it at all possible that this expenditure may be further reduced?

"Under the heading of 'Excise' the Hon'ble Member in charge of the Budget refers to the enhanced fee for wholesale licenses, which he states, has been raised from Rs. 50 to Rs. 600 a year. I shall be glad to know that the latter sum should be stated to be Rs. 300, as notified in the Gazette. He also observes that changes have been made in the duties on retail licenses, and I beg leave to enquire whether the Government will give further consideration to the letter addressed by the Secretary to the Calcutta Wine, Spirit and Beer Association to the Secretary, Board of Revenue, under date the 2nd of March, 1893, in which it is urged that a very great hardship will be inflicted upon retailers by the enhancement of the annual license fee from Rs. 600 to Rs. 1,000 per annum."

The Hon'ble MR. RISLEY said:—"I will now do my best to reply to the questions of the hon'ble member, so far as they arise out of the budget figures before us and involve points of finance only. I am, however, not prepared to deal with the larger questions of administration which the hon'ble member's remarks incidentally raise, and some of which concern the Imperial rather than the Provincial Government.

"*First*, I may say that there appears to be no *primâ facie* objection to the proposal that the financial review should be presented in future years in much the same form as it has assumed to-day, except, of course, that it will not in future be necessary to go into matters of history, and the review will therefore be much shorter. With that exception, the review will take much the same shape as it has taken to-day, and there should be no difficulty in presenting it with other explanatory papers in time to admit of the review being read one week and the discussion on it taking place in the following week. There can be no doubt that it would very materially facilitate discussion upon questions which may arise. In that case, however, I should wish to add that the task of replying impromptu to questions which may arise on the budget will not be an easy one. If the statement is circulated beforehand in the manner proposed, I think it will be a matter for consideration whether some notice, formal or informal, should not be given; otherwise it seems to me that any hon'ble member with a turn for propounding financial conundrums will have it in his power to embarrass the Financial Secretary by asking questions to which he will be unable to reply. At the same time it would, I think, be convenient to give more detailed figures showing the sub-heads subordinate to the major heads, without which the figures of the budget must always be difficult to follow.

"Turning now to the details of the budget, as far as I could follow the hon'ble member, I may explain under the head of 'Salt' that the allotment of Rs. 1,20,000 shown in 1892-93 includes the sum of Rs. 75,000 paid to Mr. Kilby as his honorarium for inventing a most useful salt-weighing machine, and also Rs. 20,000 for improvements in the Salt Golahs at Sulkea, including a railway siding, &c., and also certain pontoons and appliances to facilitate the

landing of salt, as against Rs. 10,000 put down for the same purpose in the current year. Rs. 31,000 may be taken to represent the normal expenditure of the Salt Department. The income of Rs. 90,000 is mostly derived from salt bonded in warehouses. The income from rents of warehouses tends to decline, owing to a great change which has taken place in the salt trade. Instead of coming in sailing ships and being kept a long time in bond, salt is now imported in steamers and is left only a short time in warehouses, and the Provincial revenues do not get so much in the way of rent as hitherto. No doubt it may be said that the customs revenue gains by this change; but while the Imperial revenue gains, the Provincial revenue loses to some extent.

"Then with regard to 'Customs'. The hon'ble member remarks upon the sum of Rs. 35,52,000, which includes the cost of collecting the tax on salt. As this duty belongs solely to the Imperial revenues, the Government of Bengal gets no credit from the Government of India, except so far as the customs establishment is included in the lump sum assigned by the Government of India for provincial purposes.

"Under the head of 'Interest', the sum of Rs. 1,84,000 is made up of the following items:—Interest on educational securities, Rs. 14,000; interest on arrears of public works cess, Rs. 45,000; miscellaneous interest, Rs. 2,000, and a large sum (Rs. 1,23,000) on loans under the Local Authorities Loan Act of 1879, which enables the Local Government to lend money to local bodies, and loans to cultivators, &c., and to people who want it for purposes of irrigation and cultivation on the security of their crops. That makes up by far the larger portion of the sum. A very large portion of this is granted by the Government under the Act for dealing with the water-logged portions of the country round about Calcutta, and the peculiarity of this Statute is, that the interest is not payable in such cases until the project is complete. One large project of this kind is now being carried—the Rajapur drainage scheme—and the interest will not be collected till the scheme is complete. These loans do not include any sums lent to the Municipal Corporation of Calcutta, or the Calcutta Port Commissioners, which are included in the Imperial accounts.

"Law and Justice cost Rs. 8,76,000. I may explain that this head includes only the cash receipts of the Small Cause Courts, that is to say, fees, forfeitures, &c. The Small Cause Court receipts on court-fee stamps appear under the head of 'Stamps'. It comes then to this: that we do not separate Small Cause Court receipts from other judicial receipts, and in order to make up any sort of profit and loss account, it would be necessary to have separate accounts made up. I am not in a position to say now whether we shall be able to do that or not; but at any rate, part of the receipts come under two or three or more heads of Law and Justice, and under various minor receipts under the head of Stamps; so that under these figures, as they stand, it is impossible to say precisely what the receipts from the Small Cause Court are.

"Under the head of 'Stamps', the total receipts are 157 lakhs, of which the Provincial Government gets three-fourths. Out of this, 113 lakhs represent the receipts from court-fee stamps and 44 lakhs from what are called 'general stamps', being the large sheets of paper with an engraved stamp at the top upon which legal documents are executed. In consideration of getting three-fourths of these receipts, the Provincial revenues are required to bear the whole cost of maintaining the judicial establishments which, as the statement shows, enormously exceed the receipts under the head of 'Courts of Law'.

"Under 'Marine' I have already mentioned that the estimate of Rs. 10,37,600 includes Rs. 1,50,000 for the cost of a new pilot-vessel to replace the *Coleroon*, and it also includes the cost of bringing the vessel round from Bombay, and so forth. Marine receipts vary, of course, with the tonnage of vessels visiting Calcutta.

"Under the head of 'Railway Receipts' the entry of 32 lakhs represents half the net receipts after paying the working expenses. All the interest charges are met by the Government of India and do not appear in the Provincial accounts.

"Under the head of 'Irrigation', I should explain that the origin of these works really goes back to the time of the Orissa famine. That history is given at length in the second part of this review, and it will show why it is that the receipts do not cover the charges for interest. I may further explain that there are two kinds of irrigation works—major works for which a capital account is kept, and on the capital outlay for which interest is charged, and minor works for which no interest is charged. The receipts from the major works are called direct receipts, and they consist of navigation receipts, water-rates, rents, &c. The receipts from the minor works consist of rents from surplus lands.

"Under the head of 'Contributions', the account is somewhat puzzling. Our contribution to the necessities of the Imperial Government is shown under

the head of 'Land Revenue Adjustments', amounting to Rs. 14,39,000, which is reduced by certain sets-off to Rs. 13,50,000, as shown there. But the contribution amounting to 10 lakhs on the expenditure side of the account, to which allusion has been made, represents for the most part grants to District Boards for the maintenance of schools, ferries, pounds, dispensaries, &c., made over to their charge This is done under the Local Self-Government Act, III of 1885, which gives extensive powers for making over the administration of these matters to District Boards. The principle on which these arrangements are worked out, and out of which these charges for contribution arise, is this: certain revenues are made over to the District Boards with a stated income as compared to so much expenditure, and we get out a certain excess expenditure which was calculated in 1886, and then the Government gave them a sufficient grant to bring them into a state of equilibrium. We deal with them in the same way as the Government of India deals with us; and these 10 lakhs represent those grants. Within the last two years or so, these contributions have been increased. Not only have more roads been made over to them with corresponding grants, but also certain provincial buildings, and that has enabled the Government to effect certain economies in the way of dispensing with Public Works establishment. The deficit of Rs. 1,74,000, I may explain, will be met from the accumulated balance, which stands to the credit of the Provincial Government.

"I think the explanations I have given have covered most of the points to which the hon'ble member drew attention. There is only one more point, as regards excise licenses, upon which I think I made a mistake in stating that it is proposed to raise it from Rs. 50 to Rs. 600. I should have said Rs. 300 a year. I may add that a grievance relating to the legal definition of 'a dozen,' brought to notice by Messrs. Cutler, Palmer & Co., has been referred to the Government of India, and legislation may have to be undertaken."

The Hon'ble THE PRESIDENT said:—"I think, short as the discussion has been, it has brought out two points pretty clearly. One of these points is, that we must make an endeavour, in future years, to present the Financial Statement at an earlier period and must put our accounts in a fuller form. The form in which the accounts have been put before the Council on this occasion gives only the receipts and expenditure under the major heads. I have no doubt that it will not be difficult to have the statement of accounts drawn up so as to show the receipts and expenditure under all the sub-heads of account, so that they shall contain a good deal of information which will avoid the necessity of asking questions in Council, and will also assist Hon'ble Members, while discussing them, in defining more clearly what the particular point is on which information is desired.

"There has been no desire on the part of the Government to press or to hurry on this discussion to the inconvenience of anybody. As you are aware, the Council was summoned for last Saturday, and I put it off to to-day, in order that more time might be afforded for the circulation and perusal and study of the Financial Statement. There was a miscalculation as to the amount of time that would be required. We thought there would have been ample time; and it was not seen, this being the first occasion on which discussion has taken place, that although the figures were presented to hon'ble members a week ago, the explanatory statement could hardly have been drawn up so soon. In future, I trust this difficulty will be removed.

"The second point is that to which the Hon'ble Mr. Risley drew attention, namely, the difficulty which the Financial Member of Council will always experience if he is expected to answer questions arising out of the multifarious and complicated detail of the provincial accounts, such as those which the Hon'ble Mr. Playfair has put. In the Rules which relate to the working of the new Council, it is expressly laid down that interpellations which require answers should be presented a certain number of days beforehand, so that the answer might be prepared with accuracy. No such provision has been made with regard to financial questions. I suggest that we should follow the same practice which obtains in what I may call in parliamentary language 'another place', that any hon'ble member who intends to ask questions or to discuss a particular point in connection with the budget, should send intimation beforehand to the Secretary of the Council or to the Member in charge of the Department concerned, so that he might be prepared to give the information which may be required, although, according to the Rules, no particular period of time is fixed for sending such intimation beforehand and for preparing the answers.

"I think the Hon'ble Mr. Risley has answered all the points of the Hon'ble Mr. Playfair's interpellations except one, and that is, with regard to the extension of the Central Bengal Railway. This is a matter in which the Bengal Government has taken considerable interest, and the year before last I expressly arranged a part of my tour during the rains, so as to visit those parts and get first-hand information, in order to ascertain how far the railway could compete with water-carriage. This has always been a point of difficulty with regard to the projects in the Eastern districts of Bengal. When the Bengal Central Railway to Khulna was first projected, it was assumed that a very large traffic might be calculated upon if the Railway carried the surplus of production of the Jessore and Khulna districts. We all know that it did not gather up that traffic, or anything like it. Water navigation competed successfully with it, and for a long time the Bengal Central Railway produced hardly any net earnings at all. It had to go to the Government of India *in formâ pauperis* and get a guarantee given to it, and it is only within the last two or three years that it has began to earn that guarantee, or something more than it. Of course the difficulty of the Government of India in considering any project of extension is this : they say, you ask us to sanction the extension of the Railway to Madaripur or any other part of the country, as the case may be ; will you not be encountering the same competition and the same financial difficulty as in the case of the first opening to Khulna? The conclusions to which I came was this, that there will always remain competition with the water traffic ; but the water route in that part of the country is so circuitous and so difficult that there is good reason to think that the Railway will be able to compete successfully with it. If it is open to Madaripur, it will attract a large quantity of traffic, especially jute traffic, while it will not, to any considerable extent, rob the parent line at Goalundo of the traffic which it already possesses. It is all very well to say that a new line will take up a certain traffic, but if we are already carrying off that traffic by another route, we should lose in one hand what we gain by another; the projectors must show that there is new traffic to be got, and must not deprive the old line of the traffic which it now possesses. It is on these grounds that the Bengal Government sent up its report to the Government of India with regard to the Madaripur extension in September or October, 1891. Since then we have had a little dropping correspondence from time to time, but we have been met with the usual difficulty that, however much the Government of India may accept our arguments and our calculations, yet funds are wanting before that extension can be carried out. They have so many urgent and important schemes before them, relating to the opening up of partial communications throughout the whole Empire of India, that they are not able to afford funds for this particular local extension. At present, then, it stands in this way : that on the whole it is favourably considered, but it is lying over for want of funds till other projects which are considered more urgent have been completed, and then it takes its place in the front rank.

"It now only remains for me to announce that the Council is adjourned *sine die*, and in doing so, I will draw attention briefly to the fact that this is the last occasion on which the Bengal Council meet in the same condition in which it has met for the last twenty-six years or thereabouts. The next meeting will, I hope, be a meeting of the enlarged Council, which cannot naturally be called together under a space of about two months. I hope it may be found possible for that Council to meet in July and August and take in hand the Bengal Municipal Bill, which the Select Committee has been working at so diligently and so usefully during the past few months. We all have great hopes that increased efficiency and increased good to the country will arise from a larger representation of the interests which exist in this enormous Province. But I am sure I may honestly and sincerely say that the Government cannot hope to have greater help and more loyal devotion to the public weal in that Council than they have received from the Council which I am now addressing for the last time."

The Council anjourned *sine die.*

C. H. REILY,

Assistant Secretary to the Govt. of Bengal,
Legislative Department.

CALCUTTA;
The 4th April, 1893.

FINANCIAL REVIEW FOR BENGAL.

Published for general information.

PART I.

The origin of Provincial Finance, and the Budget for 1893-94.

In laying before the Council the first Provincial Financial Review, I propose, with the permission of the President, to explain as briefly as possible how the system of Provincial Finance came to be introduced, and the main differences which distinguish it from the centralised financial system which it displaced. An attempt will then be made to compare Provincial Finance as understood in India with the cognate systems of Federal Finance as practised in the German Empire and the American Commonwealth. Finally I shall explain the most prominent and characteristic features of the Budget of the year 1893-94. In order to save the time of the Council, which has other business to transact, the full account of the working and results of the Provincial system has been included in the second part of this Review, which I do not propose to read to you now, though it will be published in the Gazette for the information of the public.

2. A high authority has stated that it was not until after the Mutiny in 1857 that anything deserving the name of systematic finance was introduced into India. The era of administrative development and opening up of the country which then set in gave rise to heavy expenditure in all directions, and a system of strict financial control became indispensable. In the first instance this control was necessarily vested in the Government of India, and was, as Sir John Strachey points out, of a severely repressive character. From the time of the Mutiny to the year 1871-72, when the system of Provincial Finance was brought into working, the Local Governments possessed no powers of financial control, and had no financial responsibility. The Supreme Government administered the minutest details of the public expenditure. Without its authority no official, however small his salary, could be employed at the cost of public funds, and even district roads and buildings and local works of improvement were hampered by the same onerous conditions.

3. The evils of applying this highly centralised system to an area so heterogeneous in respect of its physical conditions and the character of its inhabitants as the continent of India, became more and more apparent as time went on. As long ago as 1861-62 Mr. Laing laid stress in his Financial Statement on the defects of the then existing system:—

> 'If this great empire is ever to have the roads, the schools, the local police, and other instruments of civilisation which a flourishing country ought to possess, it is simply impossible that the Imperial Government can find either the money or the management. The mere repair of the roads, where anything like a sufficiency of good roads has been made, is a matter altogether beyond the reach of any central bureau. It is of the first importance to break through the habit of keeping everything in dependence on Calcutta, and to teach people not to look to the Government for things which they can do far better for themselves. . . .
>
> It is most desirable to break through the system of barren uniformity and pedantic centralisation, which has tended in times past to reduce all India to dependence on the bureaus of Calcutta, and to give to Local Governments the power and the responsibility of managing their own local affairs. The great branches of the expenditure, such as the army and national debt, are imperial; and while this is the case, the great branches of revenue must remain imperial also. But there is a wide field, both of revenue and expenditure, which is properly local, which in England is met by local rates, and which, in fact, must be met locally, or not at all.'

4. At about the same time the late Sir Henry Maine wrote with reference to the same subject:—'I do not think that anybody can have observed the recent workings of our system of financial control without coming to the conclusion that, if it be not on the point of an inevitable collapse, it is at all events in great danger of going to pieces unless the strain be lightened somewhere.'

5. Nor were the evils complained of by any means confined to the purely financial branches of the administration. It was bad enough of course that

insufficient funds were available for local purposes, and that the utmost uncertainty prevailed as to the amounts likely to be sanctioned for Provincial expenditure. But the worst consequences were those which took effect on the administration itself, and on the relations between the Provincial and Supreme Governments. The constant scramble for the largest share of the public revenues—a scramble in which the least scrupulous were apt to come off best—brought with it serious differences of opinion as to petty details of expenditure and led to constant interference on the part of the Supreme Government in matters of which it was necessarily very ill informed. This was resented by the Local Governments, who were in touch with the facts and knew their own wants, and in this way a state of tension and conflict was brought about which added greatly to the difficulties of Indian administration.

6. In the Resolution of the 14th December 1870, the Supreme Government reviewed the entire question. They observed that, under the existing system, the division of responsibility was ill-defined, and that this led to conflict of opinion injurious to the public service. In order to avoid these conflicts, the obligation to find the funds necessary for administrative improvements ought to rest upon the authority whose immediate duty it is to devise such measures. They went on to say that the Supreme Government was not in a position to understand fully local requirements, nor did it possess the knowledge necessary for the successful development of local resources. Each province had special wants of its own, and might have means for supplying them which could not be properly diverted to Imperial purposes. A tax applicable to the circumstances of one part of the country might be distasteful or unsuitable elsewhere, and everywhere rates might be proper for provincial or local purposes, which could not be taken for the Imperial revenue.

7. In order to give effect to these principles, the Government of India accordingly made over to the Bengal Government for the year 1871-72 the financial control of the following services:—Jails, Registration, Police, Education, Medical Services (except Medical establishments), Printing, Roads and Miscellaneous Public Improvements, Civil Buildings, a certain proportion of Public Works establishments, and a certain proportion of tools and plant. The allotment given to meet these services amounted to Rs. 1,16,85,920 which was arrived at by adding up the actual charges of the year 1870-71, and taking this as the Provincial assignment, less a deduction of a rateable proportion of Rs. 3,50,000 which was resumed by the Imperial Government. By a subsequent Resolution of the 20th March 1871 a special allotment of Rs. 5,32,870 was made in order to enable the scheme to be inaugurated successfully. This sum was treated as the opening balance of the year 1871-72.

8. The Government of India undertook to maintain for the future the assignments for Provincial services at the amounts thus fixed, unless some fiscal misfortune, such as a heavy loss in the opium revenue, or some national disaster, such as war or severe famine, should occur; and pledged itself in any case not to reduce them without previous consultation with the Governments concerned. It was left to the discretion of the Governments to distribute the total grant among the several departments for which they had become responsible, and it was laid down that any portion of the assignment made to any province that might be unspent at the end of the year would not lapse to the Imperial revenue, but would remain at the disposal of the Local Government. It was further provided that each Local Government should publish its own yearly estimates and accounts in the local gazette, together with a financial exposition (which should, where possible, be made before the local Legislative Council) analogous to that annually made in the Legislative Council of the Governor-General.

9. The financial control thus entrusted to the Local Government was to be exercised subject to the conditions that without the previous sanction of the Government of India no appointment on more than Rs. 250 a month should be created; that no class or grade of officers should be created or abolished; and that no addition should be made to the pay or allowances of any individual or class of officers that would lead to increase in the emoluments of any public servants doing duty in the same province whose pay and allowances are charged to Imperial revenues. No public money might be invested, and no services rendered to other departments by the transferred departments were to be diminished, nor might the latter claim increased services from other departments. The rules of the Supreme Government as to leave of absentee and absentee deputation and superannuation allowances were to be observed,

and returns, accounts and estimates were to be submitted to the Supreme Government in such form and at such times as might be prescribed.

10. In addition to these conditions, which were based in the main on financial considerations, the Local Government was reminded that increased powers of financial control would be accompanied by a corresponding increase of administrative responsibility, and that in respect of general principles it must follow the main lines of policy laid down by the Imperial Government. It was added that the procedure of the departments of Registration, Jails and Police was to a large extent governed by law; and that, although no law existed on the subject of education, the policy of the Government had been declared and prescribed in despatches from the Secretary of State, the authority of which and of the rules sanctioned by the Government of India regarding grants-in-aid and other matters of general principle was not affected by the policy of decentralisation.

11. In introducing this far-reaching administrative reform, the Government of India expressed the belief that it would produce greater care and economy; that it would import an element of certainty into the fiscal system which had before been absent, and that it would lead to more harmony in action and feeling between the Supreme and the Provincial Governments than had formerly prevailed. Beyond all this there was a greater and wider object in view. It was felt that local interest, supervision and care were necessary to success in the management of funds devoted to education, sanitation, medical, charity and local public works. And it was hoped that the operation of the new scheme would afford opportunities for the development of self-government, for strengthening municipal institutions, and for the association of Natives and Europeans to a greater extent than before in the administration of affairs.

12. On looking at the system thus introduced it is impossible not to be struck by its resemblance to the systems of federal finance which prevail in the German Empire and in the American Commonwealth. In these countries the functions of the Imperial and the Local Governments are divided in much the same way as they are in India. Thus in Germany the revenues derived from Customs, the indirect taxes upon salt, tobacco, brandy, and sugar, the revenues from stamps, bills of exchange, securities and playing cards are set apart for the Imperial Budget, the expenditure side of which includes the cost of the Federal Government—the Army, Navy, Post Office, Telegraph, State Railway, Supreme Court, Imperial Bank, Pension and Invalid Funds, Currency and Debt. Any deficit which remains after the sources of revenue reserved for the Empire have been exhausted is met by contributions raised from the individual States according to their population. The actual demands under this arrangement varied in the Budget of 1892-93 from £9,405,191 levied on Prussia to £12,392 paid by the little State of Schaumburg-Lippe. In America the Federal Government raises its revenue by indirect taxation and chiefly by duties of customs and excise. Direct taxes were levied during the war, and stamp duties were also resorted to, but no stamp revenue is now collected by the National Government. The individual States on the other hand derive almost the whole of their revenue from direct taxation, as the levying of import or export duties by a State is forbidden by the Federal Constitution.

13. Close as these resemblances are, there is no reason to suppose that the Indian system was modelled or has been materially influenced by these Federal systems of finance. Provincial finance is a plant of natural growth, developed under the pressure of administrative necessity, and owing nothing to the example of other countries. It was in fact devised, if not actually introduced, before the German system, which it most closely resembles, had come into existence; and it was developed on lines which, though leading to substantially the same result, started from diametrically opposite directions. Both in Germany and America the individual States came first, and they were the sole repositories of sovereign power. The Federal system was created by the States stripping themselves of certain attributes of sovereignty and making them over to the Central Government. In India this order of things was reversed. All power resided in the group of departments forming the Government of India, and for a long time this central bureaucracy absorbed and exercised all the functions of Government and itself transacted all financial business from the negotiation of a State loan down to sanctioning of a chaukidar's pay. At length the burden became too heavy and the complication too great, and the Central Government transferred some

of its powers to the Local Governments to be exercised subject to the conditions stated above. Thus they arrived by an independent process of development at substantially the same results as the German Imperial Government. The main differences are, first, that in Germany the division of taxation between the Empire and the individual States is effected by reserving all indirect taxation for the former, and leaving to the States direct taxes which the Empire does not levy, and secondly; that the contributions of the States to the Empire are regulated with reference to the population concerned. In India, on the other hand, no attempt is made to set apart certain kinds of taxation as exclusively Imperial, and the division is effected by assigning arbitrary fractional shares to the Provincial Governments. Similarly the amount of the contributions levied from time to time by the Imperial Government is not regulated by any intelligible principle, but varies like the medieval benevolences according to the necessities of the moment. The Indian system, though less precise and logical than the German, is probably a good deal more elastic, and admits of being modified at intervals of five years, or even oftener, in accordance with the requirements of Imperial Finance.

14. I now turn to the current contract, which began to take effect on the 1st April 1892. After a lengthy correspondence with the Government of India, the terms and conditions of this contract were finally settled on the 17th March 1892. It was then arranged that the revenue and expenditure shown in the schedule attached to the Government of India's letter of that date should be Provincial in certain specified proportions, and that, from the revenues thus assigned, a deduction of Rs. 14,39,000 should be made through the Land Revenue head. The Bengal Government has no means of knowing on what basis, or by what method of calculation, the sum of Rs. 14,39,000 was arrived at. On the receipt side of the account, the Provincial Government gets the whole of the following items:—Twelve per cent. on the Land Revenue collected from Government estates; rents of Salt Warehouses; fines and other minor receipts; Provincial rates; minor customs receipts; interest on local loans; receipts from Courts of Law, Jails, Police, Marine, Education, Medical, Botanic Gardens, Cinchona, Fairs, and Emigration and receipts in aid of superannuation; also Stationery and Printing, except the value of supplies to Railways and local bodies, and all receipts from Irrigation, Navigation, and Civil Works. It receives one-half of Assessed Taxes, Forest receipts, and Registration receipts, and of the traffic earnings on the Eastern Bengal Railway System; one-fourth of Excise and of minor Land Revenue heads, and three-fourths of the important head of Stamps. The revenue from these sources for 1893-94, excluding the opening balance, is estimated at Rs. 4,22,30,000.

15. On the expenditure side the Government of Bengal is required to meet all charges under the head of Land Revenue, except Survey and Settlement; all expenditure for Provincial rates, and the transferred heads of Customs and Salt and Interest; also charges arising under the heads Courts of Law, Jails, Police, Marine, Education, Medical, and, with certain exceptions, Political; the whole of Scientific and Minor Departments, except Census, Ancient Manuscripts and certain Veterinary charges; the whole of Stationery and Printing; working expenses of Irrigation and Navigation and Civil Works, with the exception of Imperial Buildings It is also responsible for one-half of the expenditure under Assessed Taxes, Forest, and Registration, and for half of the working expenses of the Eastern Bengal Railway System; for three-fourths of Stamp expenditure and a quarter of Excise.

16. Concurrently with the settlement of this contract, the general rules regulating Provincial finance were republished with the modifications they had undergone up to date, and it was also laid down that, if any considerable charge of an exceptional nature, which ought ordinarily to be borne by one Province were paid in another Province, the question of a corresponding adjustment between the two would be specially dealt with. This latter provision was rendered necessary by the decision to stop inter-provincial adjustments. It was further arranged that, on the score of the technical character of the work and the necessary uniformity in the working of all State Railways, the Provincial Government should not exercise any administrative or financial powers in regard to the Eastern Bengal Railway; but in order to maintain the Local Government interests in the constructing feeder roads and in the general development of communition in the tract served by the Railway, half the net earnings should

be Provincial; that the capital expenditure required to complete the Higili Canal should be advanced on certain terms from Imperial funds; that the expenditure on Survey and Settlement operations during the term of the contract, being in its nature liable to great variations, and difficult to reduce to a uniform yearly average, should be met by Imperial revenues; and lastly, that if the recoveries on account of the Survey and Settlement operations in Bihar should fall short of the expenditure which is recoverable from the zamindars and raiyats, the difference should be charged to Provincial revenues.

17. With reference to doubts which had arisen concerning the interpretation of former contracts, the Government of India took the opportunity of declaring the contract to be a consolidated one, and not a collection of separate contracts for each Provincial head. They also stated that the representations made by the Government of Bengal, regarding each separate head, had received careful consideration, and that the adjusting figure of Rs. 14,39,000 had been fixed, so as to place the revenue and expenditure in equilibrium on the basis generally of the existing stage of growth. The Local Government, it was said, would be expected to maintain all the Provincial services in a state of administrative efficiency, providing any increased expenditure necessary for that purpose either by reductions of expenditure or from increased revenue. It was added that the Bengal Government would not be entitled to assistance from Imperial revenues to meet future increases of expenditure or decreases of revenue, of whatever nature, classified under Provincial heads.

18. I pass on to notice in somewhat fuller detail those heads of the Budget for 1893-94 which seem to stand in need of comment or explanation.

RECEIPTS.

19. *Land Revenue.*—The Government of India have accepted the estimate of total collections under this head, as passed by the Local Government for 1893-94, amounting to Rs. 3,84,33,000. The estimate provides Rs. 5,07,000 for "12 per cent. on collections from Government estates." Including this amount, the Provincial share of land revenue comes to one-fourth of (Rs. 3,84,33,000—5,07,000) + 5,07,000=Rs. 99,88,000.

The debit of Rs. 13,50,000 to Provincial shown under Land Revenue adjustment is made up as follows:—

	Rs.	Rs.
For fixed contribution to Imperial revenues ...	......	14,39,000
For interest on the capital advanced from Imperial revenues for remodelling the Hidgelee Tidal Canal	......	21,000
Total deduction ...	......	14,60,000
Add—		
For capital outlay on Hidgelee Tidal Canal ...	1,00,000	
For Imperial buildings transferred to District Boards	10,000	1,10,000
Net deduction ...	......	13,50,000

It may be here mentioned that for reasons of account all transfers as between Imperial and Provincial revenues are effected through the head of Land Revenue under the sub-head of adjustments.

20. *Stamps.*—The estimate of total revenue from stamps for 1893-94 amounts to Rs. 1,57,00,000. The growth of this most important and expansive branch of Provincial revenue during the past four years has been as follows:—

		Increase.
	Rs.	Rs.
1887-88	1,38,16,000	......
1888-89	1,38,39,000	23,000
1889-90	1,42,38,000	3,99,000
1890-91	1,42,47,000	9,000
1891-92	1,51,00,000	8,53,000
Total ...	.....	12,84,000

The increase amounts to Rs. 12,84,000, or an average of more than three lakhs a year. The smallness of the increase in 1890-91 was due to the reduction in the rate of copying fees from 4 annas to 3 annas per folio, with effect from 1st April 1890. The revised estimate for 1892-93 amounts to Rs. 1,55,50,000, and the estimate for 1893 94 has been placed at Rs. 1,57,00,000. As the stamp duty is fixed by substantive law at rates which cannot be altered, the revenue under this head cannot be materially affected by administrative measures. All that can be done is to watch the working of the law carefully, to look out for evasions, and to see that adequate penalties are levied for breaches of the law and rules.

21. *Excise.*—The Accountant-General estimated the total revenue for the year 1893-94 at Rs. 1,12,00,000, against Rs. 1,10,64,413 estimated by the Board of Revenue. In Government order No. 654T.-F., dated the 24th October 1892, sanction was given to the enhancement of duty on wholesale licenses for the vend of imported liquor in the town of Calcutta from the nominal sum of Rs. 50 a year to Rs. 50 a month, or Rs. 600 a year, from 1st April 1893. Some changes have also been made in the duties on retail licenses. The effect of these orders will be to increase the revenue to a considerable extent. A substantial increase is also anticipated next year under the head "Farm of drugs," owing to the present rates of duty on all kinds of ganja being raised by one rupee per seer with effect from 1st April 1893, under the orders of the Government of India, in the Finance and Commerce Department, No. 784, dated the 23rd February 1891. It was calculated that the total increase on this and other accounts would not be less than three lakhs, and accordingly the Accountant-General's estimate was raised from Rs. 1,12,00,000 to Rs. 1,15,00,000, and this has been accepted by the Government of India.

22. *Provincial Rates.*—The head *Provincial Rates* represents principally the proceeds of the Public Works Cess, but it includes also the recoveries from District Funds of the proportionate cost of collecting Road Cess and the Rates for the general management of Wards' and Attached Estates. The receipts have been as follows:—

	1887-88.	1888-89.	1889-90.	1890-91.	1891-92.	Revised estimate, 1892-93.	Estimate, 1893-94.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(a) Public works cess	38,19,860	37,97,870	39,11,698	38,93,461	40,79,753		41,50,000
(b) Proportionate cost of collecting road cess.	3,13,524	2,68,084	3,12,096	3,55,052	3,64,355		3,31,000
(c) General management of wards' and attached estates.	1,03,154	90,369	82,235	71,420	80,419		80,000
Total ...	42,36,538	41,56,323	43,06,024	43,19,933	45,24,527	45,40,000	45,61,000

The variations under (*a*) were due to progress in valuation and revaluation of districts. The gross rental assessed on the introduction of the road cess was Rs. 13,11,68,432, and on the same basis the statistics furnished by the Board of Revenue show that it amounted to Rs. 14,60,45,236 in 1890-91, and Rs. 14,78,83,221 in 1891-92. Large recoveries of the arrears of rate on wards' estates were effected from the Burdwan Raj in 1887-88, and this accounts for the larger receipts under (*c*) in the first year of the contract. The comparatively smaller receipts under (*c*) in 1890-91 and 1891-92 were due to the release from Government management of a large number of estates during the course of the former year.

Head (*b*) is a new head of account which appeared in the Provincial Account in consequence of the introduction of the Local Self-Government Act. Prior to the extension of the Act, the charges for the collection of both the Road and Public Works Cesses were shown in the District Road accounts, the cost of collecting the Public Works Cess being paid to the District Road Committees through the adjusting head of Contribution, an assignment of Rs. 47,000 being made in the Provincial Contract under that head. The arrangement has now been reversed. The collection of the cess in the districts, where the Local Self-Government Act has been introduced is shown as a Provincial charge, and is recovered from the District Funds before the net collections of the Road Cess are made over to the District Boards.

23. *Assessed Taxes.*—The Accountant-General placed the estimates of total receipts for 1893-94 at Rs. 43,50,000. Looking to the steady growth of revenue under this head, the estimate was raised by this Government to Rs. 44,00,000, but this has been reduced by the Government of India to Rs. 43,30,000, with reference to the actuals of 12 months ending January 1893, which amounted to Rs. 43,28,000.

24. *Forests.*—The following table shows the estimates of receipts and expenditure for the year 1893-94, compared with the actuals of 1891-92 and the sanctioned and revised estimates of 1892-93:—

BUDGET HEADS.	Actuals, 1891-92.	Sanctioned estimates, 1892-93.	Revised Estimates, 1892-93.	Budget estimates, 1893-94.
RECEIPTS.	Rs.	Rs.	Rs.	Rs.
I.—Timber and other produce removed from the forests by Government agency ...	41,503	59,400		25,100
II.—Timber and other produce removed from the forests by consumers or purchasers ...	6,95,062	7,21,000		7,07,250
III.—Confiscated, drift and waif wood ...	8,210	17,000		12,180
IV.—Revenue from forests not managed by Government ...	......	......		......
V.—Miscellaneous ...	44,778	34,600		29,470
Total ...	7,89,553	8,32,000	7,50,000	7,74,000
EXPENDITURE.				
A.—Conservancy and Works.				
I.—Timber and other produce removed from the forests by Government agency ...	25,004	41,040		
II.—Timber and other produce removed from the forests by consumers or purchasers ...	49,156	48,744		
III.—Confiscated, drift and waif wood ...	4,112	5,000		
IV.—Revenue from forests not managed by Government ...	......	......		
V.—Rent of leased forests and payments to share-holders in forest managed by Government ...	......	......		
VI. Live-stock, stores, tools and plant ...	35,945	26,600		
VII.—Communications and buildings ...	19,841	46,400		
VIII.—Demarcation, improvement and extension of forests ...	29,495	37,656		
IX.—Miscellaneous ...	5,645	5,560		
Total A—Conservancy and Works ...	1,69,198	2,11,000		
B.—Establishments.				
I.—Salaries ...	1,98,631	2,30,240		
II.—Travelling allowances ...	30,886	33,360		
III.—Contingencies ...	9,804	6,400		
Total B—Establishments ...	2,39,321	2,70,000		
GRAND TOTAL OF EXPENDITURE ...	4,08,519	4,81,000	4,45,000	4,81,000
Surplus ...	3,81,034	3,51,000	3,05,000	2,93,000

The estimates provide for a surplus of Rs. 2,93,000 at the end of 1893-94, against Rs. 3,05,000, the latest estimate for 1892-93.

25. *Registration.*—The Accountant-General placed the revised estimate for 1892-93 at the same figure as the original estimate for the year, which was Rs. 13,60,000. This amount was also proposed as the estimate for 1893-94. The actuals for the twelve months ending January 1893, were Rs. 14,08,000, and the revised estimate for 1892-93 has been placed at Rs. 14,10,000, and the estimate for next year at Rs. 14,20,000. Half the receipts only are Provincial.

26. *Jails.*—The total receipts for 1893-94 were estimated by the Inspector-General at Rs. 9,72,000, while the Accountant-General placed them at Rs. 9,09,000, reducing the estimate under the head Jail Manufactures by Rs. 63,000. The Lieutenant-Governor considered that the probable receipts under this head had been under-estimated by the Accountant-General, and thought they might safely be placed at Rs. 9,50,000. The total estimate of receipts was accordingly placed at Rs. 9,59,000.

27. *Police.*—The Accountant-General estimated the total receipts for 1893-94 at Rs. 2,46,000, against Rs. 4,60,000, the sanctioned estimate for 1892-93, and Rs. 4,48,634, the actuals of 1891-92. The decrease is due to the exclusion of receipts on account of village police in the Chota Nagpur Division, which have been transferred from Provincial to Local. The estimate has been further reduced by Rs. 27,000 on account of the transfer of fees for the inspection of steam-boilers from the Provincial account.

28. *Marine.*—The Accountant-General estimated the total receipts for 1893-94 at Rs. 9,28,000, against Rs. 9,68,000, the sanctioned grant for 1892-93, and Rs. 9,65,408, the actuals of 1891-92. The actual receipts, during the twelve months ending January 1893, were Rs. 9,04,000. The revised estimate for

1892-93 has accordingly been placed at Rs. 9,05,000, and the estimate for 1893-94 at Rs. 9,12,000.

29. *Education.*—The total receipts of the Education Department for 1893-94 are estimated at Rs. 5,71,000, against Rs. 6,10,000, the sanctioned estimate for 1892-93. The actuals of 1891-92 amounted to Rs. 5,95,123, and those of the twelve months ending the 30th September 1892 to Rs. 5,70,758.

30. *Medical.*—The estimate of receipts for the year 1893-94 was placed by the Accountant-General at Rs. 1,49,000, against Rs. 1,50,000, the sanctioned estimate for 1892-93. The estimate has been raised by Rs. 2,000 as some receipts are anticipated in consequence of the circular what the Sanitary Board have issued to all municipalities laying down the rate of fees to be levied from them for the preparation of plans and estimates for drainage and water-works schemes.

31. *Scientific and other Minor Departments.*—The principal items of receipts under this head are from Cinchona manufacture and Emigration fees. The total receipts are estimated at Rs. 1,62,000.

32. *Civil works by Civil Officers*—The Provincial receipts from ferries for the year 1893-94 are estimated at Rs. 2,27,500, and the receipts from cemeteries at Rs. 2,500, against Rs. 2,23,500 and 2,500, respectively, the amounts sanctioned for 1892-93.

EXPENDITURE.

33. *Land Revenue.*—The Accountant-General's estimates for 1893-94 under all the Provincial heads and sub-heads of expenditure amount to Rs. 34,19,000, as follows:—

	Rs.
Charges of district administration	29,43,000
Management of Government estates	4,01,000
Land Records and Agriculture	75,000
Total Provincial ...	34,19,000

The estimate was raised by this Government by Rs. 4,000 in order to provide for revision of office establishment in the Deputy Commissioner's office, Sonthal Parganas. The increased provision, however, does not appear in the estimate of the Government of India.

34. *Salt.*—The Accountant-General estimated Rs. 31,000 for expenditure of the Salt Department during 1893-94, which is the ordinary normal expenditure of the Department. A provision of Rs. 10,000 has, however, been kept in reserve to meet any further improvements that may possibly be made in order to provide increased facilities for the trade at Sulkea, Chittagong, or Narainganj, and the estimate has therefore been raised to Rs. 41,000. The revised estimate for 1892-93 amounts to Rs. 1,25,000, which includes a special provision of Rs. 75,000, the amount payable to Mr. Kilby as an honorarium for his patent salt weighing machine.

35. *Stamps.*—The total expenditure for 1893-94, of the Stamp Department, is estimated at Rs. 6,14,000, against Rs. 5,68,000, the sanctioned grant for 1892-93, and Rs. 4,51,779, the actuals of 1891-92. The actuals of 1891-92 did not include the cost of plain paper for use with Court-fee Stamps, which, under the terms of the new Provincial Contract, is charged to this head with effect from 1892-93, instead of to "Stationery and Printing." The Provincial share amounts to Rs. 4,61,000.

36. *Excise.*—The chief variations in this budget are due to the reduction of the salary of Excise Commissioner from Rs. 2,900 to Rs. 1,800, as under the orders of the Secretary of State, the Excise Commissioner will now ordinarily be a Magistrate of the second grade. Larger provision has, however, been made for the construction and completion of distillery buildings, and the total grant now stands at Rs. 7,16,000, of which the Provincial share is only one quarter, or Rs. 1,79,000.

37. *Assessed taxes.*—The total expenditure of the Income-Tax Department during 1892-93 was originally estimated at Rs. 1,90,000, and this amount was reproduced by the Accountant-General as the revised estimate for the year, while he placed the estimate for 1893-94 at Rs. 1,89,000. It has been taken by the Government at Rs. 1,93,000, of which the Provincial share is one-half. The Accountant-General's estimates for 1893-94 include a provision

of Rs. 3,600 for the local allowance of Rs. 300 per month drawn by the Superintendent of Preventive Service for performing the duties of the Collector of Income-Tax, Calcutta. As Mr. Kilby, the permanent Superintendent, has retired from the service, and a whole-time Collector of Income-Tax on Rs. 700—1,000 per mensem has been appointed, a provision of Rs. 8,400 as salary, and Rs. 1,200 as house allowance, has accordingly been made under this head.

38. *Judicial Courts.*—The following table compares the estimates of expenditure for 1893-94 with the sanctioned grants for 1892-93 and the actuals of 1891-92:—

	Actuals, 1891-92.	Sanctioned estimates, 1892-93.	Estimate, 1893-94.
	Rs.	Rs.	Rs.
High Court	11,41,299	11,35,000	11,40,000
Law Officers	3,14,862	2,82,000	2,90,000
Coroner's Court	14,358	13,000	13,000
Presidency Magistrate ...	70,430	63,000	63,000
Civil and Sessions Courts ...	43,59,269	43,90,000	44,50,000
Courts of Small Causes ...	2,01,489	1,82,000	1,78,000
Criminal Courts	22,44,523	22,45,000	22,56,000
Pleadership Examination charges	7,822	8,000	8,000
Refunds	1,28,755	1,15,000	1,30,000
Total ...	84,82,807	84,33,000	85,28,000

The increased provision of nearly a lakh of rupees under Civil and Session Courts on the actuals of 1891-92 represents the financial effect of the increase which has been found necessary in the number of Subordinate Judges, and Munsifs and Judicial establishments generally. There has also been sanctioned an addition to the ministerial establishment of the Civil Courts in consequence of the recommendations made in the reports of Messrs. Toynbee and Stevens, who were appointed to enquire into the subject.

The grants for 1893-94 for the Jail Department are as follows:—

Jails.	Sanctioned grant.
	Rs.
Superintendence	52,836
Presidency Jail	98,826
Central Jails	4,93,894
District „	5,81,958
Lock-ups	1,20,457
Reformatary Schools	35,975
	13,83,946
Add for rounding	54
Total ...	13,84,000
Jail manufactures	7,95,000
GRAND TOTAL ...	21,79,000

The total grant amounts to Rs. 21,79,000 against Rs. 20,22,000 the actuals of 1891-92 and Rs. 20,90,000 the revised estimate for 1892-93. The increase in expenditure, which is partly counterbalanced by an increase in receipts, is necessitated by the increase of jail population, and adequate provision has to be made for the high prices of food-grains for ration expected to prevail during the year.

39. *Police.*—The total expenditure of the Police Department for 1893-94 was originally estimated at Rs. 56,80,000, from which were deducted Rs. 21,000, the charges connected with steam-boiler inspection, and Rs. 75,000 under the head of temporary transport for the South Lushai Hills. The Government of India have accepted the deduction only of the first item, so that the grant now stands at Rs. 56,59,000. The estimate under Special Police, amounting to Rs. 4,98,000, includes a lump provision of Rs. 4,46,000 for expenditure during the ensuing year under the head South Lushai Hill Force. The estimate has been accepted provisionally, subject to any modifications which Government may hereafter

find it necessary to make in view of the approaching transfer of the South Lushai territory to Assam.

40. *Marine.*—The difference of Rs. 10,000 under this head between the estimate of the Government of India and that of the Local Government represents the provision made by this Government for compensation payable to Captain Petley, the Port Officer, on account of his enforced retirement, which is payable by the Provincial revenues, but which does not appear to have been included in the budget passed by the Government of India. A sum of a lakh and a half required to meet the balance of the cost of the new pilot vessel to replace the *Coleroon*, which is now being built at the Government Dockyard at Bombay, has been provided under the head of Purchase and hire of ships and vessels.

41. *Education.*—The estimate provides for a total expenditure of Rs. 25,73,000 against Rs. 25,30,000, the revised estimate for 1892-93. The increase is chiefly for grants-in-aid for primary education, and for additional staff sanctioned for the Sibpur Engineering College. This heavy expenditure includes the cost of Government Colleges which accounts for Rs. 5,20,000, Government schools Rs. 5,45,000, and grants-in-aid Rs. 5,89,000. These are institutions for general education, but special or technical education is also fairly well supported—Government Professional Colleges costing Rs. 1,21,000 and Special Government schools Rs. 1,45,000.

42. *Medical.*—The grant for the Medical Department for 1893-94 stands—

	Rs.
Medical Establishment	5,86,000
Hospitals and Dispensaries	3,83,000
Sanitation and Vaccination	1,92,000
Grants for medical purposes	3,500
Medical Schools and Colleges	2,68,000
Lunatic Asylum	1,10,000
Lock Hospitals	16,000
Chemical Examiner	26,000
Refunds	500
Total ...	15,85,000

The total grants amount to Rs. 15,85,000 against Rs. 15,67,000 the actuals of 1891-92—Rs, 15,80,000 the revised estimate for 1892-93 proposed by this Government. and Rs. 16,00,000 the revised estimate of the Government of India. The incease on the actuals of 1891-92 is due to the normal growth of the administrative charges.

The estimate of the Local Government includes an additional provision of Rs. 4,000 for remuneration to Civil Surgeon's clerks for doing vaccination work. The provision does not appear in the estimate of the Government of India. This additional duty forms a portion of a large scheme of reorganization which has been recently carried out, and which is expected to bring about a great extension of vaccination, and materially to enhance its efficiency in rural areas.

43. *Scientific and other Minor Departments.*—The following table shows the details of the grants under this head:—

	Rs.
Provincial Museums	16,140
Donation to Scientific Societies	14,000
Experimental cultivation	19,500
Cinchona Plantations	1,03,552
Public Exhibitions and Fairs	12,350
Imperial Institute	500
Veterinary charges	19,000
Botanic and other public gardens	1,10,009
Emigration	22,754
Census	1,700
Registration of Railway Traffic	2,320
Registration of River and Road-borne Traffic	18,108
Provincial statistics	2,500
Examinations	3,000
Refunds	713
Charges in connection with the Indian Factories Act ...	18,400
Total Provincial ...	3,64,546

The estimate for 1893-94 is Rs. 3,64,000 against Rs. 3,13,000 the actuals of 1891-92 and Rs. 3,25,000 the revised estimate for 1892-93. The increase is chiefly for the provision of two new items, veterinary charges (19,000) and charges of Indian Factories Act (18,400), which were not in existence in 1891-92.

44. *Stationery and Printing.*—The estimate under this head amounts to Rs. 13,05,000, but it is hoped there will be some reduction of expenditure under this head in consequence of the recent orders issued to revise each form, whenever necessary, only once in a year, and not to introduce new forms, except under special orders, till the old stock is exhausted.

45. *Civil works by Civil officers.*—The difference of Rs. 32,000 under this head between the estimate of this Government and that of the Government of India is due to the provision struck out by the Local Government for the construction of bridges in the South Lushai Hills.

46. The closing balance, as now estimated by the Government of India, is Rs. 20,72,000, *i.e.*, Rs. 72,000 in excess of the minimum balance, which the Provincial Government is required to maintain under the orders of the Government of India.

The foregoing paragraphs explain, in as full detail as is appropriate to the occasion, the figures of the Provincial Budget estimate of 1893-94. For the results of the system of Provincial Finance from its first introduction in 1871-72 to the close of the financial year 1891-92, a period of twenty years marked by great financial vicissitudes, I must refer the Council to the second part of this Review, which, as I have already stated, will be published in next Gazette for the information of the public. It is sufficient to say here that the Bengal of the present day owes to Provincial Finance most of the facilities and conveniences which distinguish it from the Bengal of 20 years ago: its railways, its irrigation and navigation canals, many of its most important roads, and a host of administrative improvements which it would be tedious to enumerate, amongst them the Council Chamber in which we are now assembled. The period of 20 years which we have to look back upon was one, as I have already said, of many vicissitudes and public calamities. At its opening the province had hardly recovered from the shock of one famine and was soon to suffer from another. Cyclones, floods, wars and rumours of wars, a falling exchange, grave alternations of agricultural depression and prosperity, serious changes of policy affecting the revenues of the State, all these things form a series of events beyond the control of the Provincial Government, which are liable to recur at any moment, and which constantly threaten the security of the Provincial finances.

PART II.

The Working of Provincial Finance.

The contract of 1871—77.

In attempting to gauge the results of the process of decentralisation which commenced in 1871-72, and to indicate the direct and tangible benefits which Bengal has derived from it, it will be convenient to follow in the main the periods at the close of which the arrangement, of late years called a contract between the Imperial and Local Governments, has been revised. The first of these periods embraced the six years, 1871-72 to 1876-77. Since then the contract has been revised at intervals of five years.

Accounts of Provincial Services from 1871-72 *to* 1876-77.

Major Heads.	Receipts.					
	1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Allotment from the Government of India.	1,23,09,990	1,32,03,836	1,23,43,066	1,10,41,600	1,10,60,337	1,11,11,574
II. Provincial rates and taxes.	......	......	... ..	......	......	......
III. Jails	5,45,300	7,77,702	9,67,971	8,71,980	7,91,296	7,22,837
IV. Registration ..	3,66,978	4,34,657	4,71,861	5,65,734	5,80,467	6,31,053
V. Police	4,58,246	27,918	49,486	41,895	38,356	65,802
VI. Education ...	3,90,360	3,80,007	4,78,540	5,02,363	4,95,287	4,75,239
VII. Medical ...	47,753	76,490	1,12,253	1,53,876	1,30,912	1,49,246
VIII. Printing	24,602	53,571	53,921	55,192	57,851	64,131
IX. Marine	.. ...	......	... ..	409	300	300
X. Miscellaneous ...	98,460	1,30,624	{ 33,70,092 *2,797	} 77,29,059	1,00,80,806	1,04,305
XI. Public Works ...	95,633	1,45,268	2,94,120	1,32,860	1,36,350	3,00,033
Debt heads ...	3,06,813	4,59,098	2,79,351	4,26,688	3,67,532	2,90,746
Total ...	1,46,44,135	1,56,89,478	1,84,23,459	2,15,21,659	2,37,39,494	1,39,15,236
Opening balance ...	5,32,870	22,23,126	35,58,298	—19,037	23,64,287	5,01,180
Grand Total ...	1,51,77,005	1,79,12,604	2,19,81,757	2,15,02,622	2,61,03,781	1,44,16,416

Major Heads.	Expenditure.					
	1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Refunds ...	16	27,248	28,413	22,505	67,031	41,879
II. Provincial rates and taxes.	......	... ..	...	... .	......	......
III. Jails	14,84,100	16,82,453	19,23,105	17,90,083	17,83,414	16,42,198
IV. Registration ...	2,86,732	3,05,191	3,.5,434	3,98,824	4,31,286	4,80,581
V. Police	50,30,304	45,39,047	46,41,393	39,77,918	41,64,767	39,96,762
VI. Education ..	19,58,190	20,31,719	21,65,495	25,11,658	26,32,444	24,47,958
VII. Medical ...	9,00,359	11 36,289	13,78,747	13,14,289	14,86,053	13,62,662
VIII. Printing ...	1,16,439	1,60,436	3,00,542	2,73,928	2,97,586	2,95,243
IX. Marine ...	... .	......	... .	485	897	1,083
X. Contributions...	......	.....	47,30,763	29,36,665	97,36,646	1,81,449
XI. Miscellaneous .	2,512	1,49,058	} 4,19,904	{ 1,36,984	6,51,395	5,20,773
XII. Minor Establishment.	19,489	42,517		{ 2,84,192	3,97,279	3,90,133
XIII. Public Works . XIV. Petty construction and repairs.	} 27,42,733	36,07,314	52,31,770	48,49,762	34,77,467	25,75,727
XV. Rents, rates, and taxes.	71,087	1,60,545	1,81,065	1,70,942	1,87,398	......
Debt heads ...	3,41,918	5,12,489	3,65,163	4,30,099	2,88,938	1,91,604
Total ...	1,29,53,879	1,43,54,306	2,20,00,794	1,91,38,335	2,56,02,601	1,41,27,952
Closing balance ...	22,23,126	35,58,298	—19,037	23,64,287	5,01,180	2,88,464
Grand Total ...	1,51,77,005	1,79,12,604	2,19,81,757	2,15,02,622	2,61,03,781	1,44,16,416

* Adjustment of old error.

2. Before proceeding to comment in detail on the figures of this statement, it will be convenient to recapitulate briefly the various classes of estimates and accounts with which the Provincial Government then had to deal. There were, *first*, the estimates and accounts of *Imperial Services*, that is to say, of those branches of revenue and expenditure which had not been made over to provincial control and management. In its relation to these services, the Local Government was in the same position that it held before the introduction of the Provincial Services scheme in 1871-72. *Secondly*, there were the estimates and accounts of *Provincial Services*, or of those branches of revenue and expenditure, originally Imperial, made over to the management of the Local

Government under the system of provincial contracts. *Thirdly*, there were the estimates and accounts of the funds constituting the *Provincial Reserve*, that is, of those Local Funds, the balances of which were at the disposal of the Local Government for provincial purposes. *Fourthly*, there were the estimates and accounts of those *Local Funds* (properly so called) which are by law or by their constitution devoted to particular local and limited objects. The amount of control which could be exercised over these by Government varies considerably, and might be said to be at a minimum in the case of the District Road Fund, and at a maximum in the case of the Port Funds. Both these strictly Local Funds, and those included under the Provincial Reserve, might be divided with reference to their origin into two classes, thus—

(I)—Funds supported by compulsory rating, or by payments under sanction of law, or orders having the force of law.

(II)—Funds made up of payments of the nature of rents, tolls, or fees for services or facilities rendered or privileges conferred.

Lastly, there were the accounts and estimates of *Municipal Funds*. These, though strictly speaking local funds, were not dealt with in the Local Funds Budget of this Government, under which only the funds of the *fourth* class were treated together.

3. By its Resolution No. 1886, dated the 28th March 1877, the Government of India directed that the transactions of the Local Government, under the heading of 'Provincial Services,' should be re-incorporated in the general estimates and accounts. The effect of this order was to amalgamate, for the purposes of the Imperial Budget, the *first* and *second* classes of accounts and estimates described in the preceding paragraph. A later Resolution, No. 1072 of the 20th February 1878, re-incorporated with the estimates and accounts of Provincial Services "those resources recorded under 'Local Funds' which were at the free disposal of the Local Government for expenditure in any part of its jurisdiction without legal let or hindrance." The effect of this was to incorporate with the estimates of Provincial Services, and therefore with the Imperial estimates, the transactions of the funds treated in Bengal as Provincial Reserve (*i.e.* the *third* class above described).

4. Turning now to the statement, it must be observed first of all that the figures for the years 1871-72, 1872-73, 1873-74 include the receipts and charges of Assam, while those for the last three years of the period include the accounts for Bengal only. Secondly, it must be remembered that the Imperial assignments, originally fixed at Rs. 1,16,85,920, underwent a number of modifications, according as certain services were transferred to the management of the Government of Bengal or withdrawn from its control. The most important of these, and the only one which need be mentioned in a historical review, is the reduction of Rs. 13,30,000 on the separation of Assam. This sum was arrived at by allotting to Assam the actual average expenditure on provincial services within its limits during the last three years of its connexion with Bengal, the Bengal estimate being reduced by that sum. The average expenditure was ascertained to be Rs. 5,30,000 on provincial public works and Rs. 8,00,000 on other provincial services, and by deducting this sum the Bengal assignment was reduced in 1874-75 to Rs. 1,10,41,000, as shown in the statement. It may be added that the large increase in the allotment which appears in the year 1872-73 was due to a special grant from the Supreme Government of Rs. 8,66,677 for the price of the old Sadar Court building, and of one lakh for expenditure on the relief of the so-called Burdwan fever, which caused heavy mortality in that year.

5. Turning now to the detailed heads, we find under *Jails* an increase of nearly two lakhs in charges, against which we must set an increase of rather less than the same amount in receipts. Extended manufactures brought about larger sales on the one hand, and on the other involved increased purchases of raw material; establishments were to some extent increased, and in the scarcity years 1873—75, the larger jail population swelled the expenditure on diets.

6. The *Registration* receipts were nearly doubled owing to Sir George Campbell's liberal extension of rural sub-registry offices, but although there is no doubt that this department earned a profit on the whole, and was indeed the only

department of those transferred in 1870 in which the income was susceptible of much development, still the exact earnings cannot be stated, as the charges for buildings were provided for in the Public Works budget.

7. Owing doubtless to the transfer of the Assam districts, and probably also to some change in the form of the accounts, the *Police* figures show a reduction of nearly four lakhs under Receipts and ten lakhs under Charges.

8. *Education* receipts rose by nearly a lakh and the charges by nearly five lakhs, notwithstanding the transfer of territory to Assam. The increase under the head of receipts was mainly due to the large grants made to primary schools under the policy introduced by Sir George Campbell, while greater liberality in the bestowal of scholarships, larger grants to Muhammadan schools and district schools, and the strengthening of the inspecting agency which this policy involved, also contributed to the same result.

9. In the *Medical* Department the receipts rose from under half a lakh to about a lakh and a half, and the charges from nine lakhs to over thirteen and a half. This was due partly to the Burdwan epidemic fever, but mainly to the great extension of dispensaries and hospitals initiated by Sir G. Campbell, who admitted that in this he had not exercised so severe an economy as in other branches of administration.

10. The figures shown under the three heads *Miscellaneous*, *Contributions* and *Public Works*, are greatly complicated by transactions relating to the scarcity of 1873—75. Thus the receipts under Miscellaneous rose from Rs. 98,460 in 1871-72 to Rs. 33,70,092 in 1873-74 and to Rs. 77,29,059 in 1874-75, owing to the inclusion under this head of the special famine grants of Rs. 22,89,100 and Rs. 76,38,139 made by the Government of India for expenditure on relief works. Then the heavy charges shown under Contributions represent the special grants made by the Local Government to District Road Committees for the same purpose, while the greatly enhanced expenditure of the Public Works Department during the two years is also due to relief operations.

11. The same cause, unforeseen and uncontrollable expenditure on relief, accounts for the startling fluctuations which appear in the balances. In the first two years the strict economies of Sir George Campbell effected savings aggregating about seventeen lakhs of rupees under the Provincial Service heads, and the year 1872-73 opened with a balance under those heads of Rs. 22,23,126, while the balance under Provincial Reserve had risen to Rs. 16,12,440, making a grand provincial balance of Rs. 38,35,566. For the year 1872-73 very liberal grants were made under Education, Medical, Public Works, and other headings; but the closing balance under 'Service' rose to Rs. 35,58,298. This result is, however, partly to be explained, as has been mentioned above, by a special grant from the Supreme Government of Rs. 9,66,677 on account of the Sadar Court buildings, capitalization of Calcutta rents, and Burdwan fever relief. The greater part of this special grant was meant to be reserved for the erection of public offices for the Bengal Government. Under Reserve the balance fell to Rs. 9,80,683, making the aggregate provincial balance at the opening of 1873-74 Rs. 45,38,981. In 1873-74 the Local Government was called upon to face the enormous expenditure on relief works caused by the famine in Bengal and Bihar, and the year closed with a deficit of Rs. 19,037 under 'Services,' while the balance under Reserve had fallen to Rs. 5,14,704. The net provincial balance at the opening of 1874-75 was thus only Rs. 4,95,667. During 1874-75 the expenditure upon relief works continued to be heavy, but a special grant of Rs. 76,38,139 was received from the Supreme Government, and the year closed with a credit balance of Rs. 23,61,287 under Services, and of Rs. 8,23,465 under Reserve, the aggregate being Rs. 32,92,752. In the year 1875-76 the final adjustment of the famine account between the Supreme and Local Governments took place. It was estimated that if all charges on account of famine had been excluded from the accounts, the closing balance under 'Services' in 1873-74 would have been Rs. 19,21,069, in 1874-75 Rs. 13,87,787, and in 1875-76 Rs 12,97,981. The balance under Provincial Reserve at the end of 1875-76 being Rs. 7,21,464, that year would, famine apart, have left the Local Government with about 20 lakhs of rupees in hand. The demand of the Imperial Government on account of that portion of the relief works chargeable to the Provincial Public Works

Budget being far in excess of this sum, it was arranged that the Bengal Government should surrender to the Imperial Government about 15 lakhs of its estimated credit balance; that all outstanding famine charges beyond that amount should be debited to the Imperial Government; and that the accounts should be so adjusted as to leave to the Government of Bengal an opening balance of Rs 5,00,000 on the 1st of April 1876. Owing to some trifling discrepancies in the accounts, the actual opening balance of the year 1876-77 was Rs. 5,01,180.

Contract of 1877—82.

12. With that year the scheme of decentralization, which was introduced in 1871, underwent a considerable development. Under the system as originally started, the Local Government was entrusted with the management chiefly of spending departments, such receipts as accompanied them being supplemented by large consolidated allotments for their maintenance. The only department in which the revenue outstripped the charges was Registration; Police, Jails, Education, and Medical were services under which the receipts could never be expected to bear more than a very small ratio to the charges. It was therefore chiefly with a view to economy in administration that the Government of Lord Mayo determined to make the Local Government responsible for the financial management of these branches of the Administration. In 1877 the system of decentralization took another step in advance. The Government of India, while handing over other great departments of expenditure to the Local Government, also entrusted to its use and responsibility on fixed terms of progressive payment all the principal revenues which could be deemed capable of steady expansion under careful local management. The success of the earlier measure had been sufficient to secure some extension of the principle; but the form which the extension took was in great measure determined by the decision to which the Secretary of State had come on the great question of famine relief. In his financial statement of March 1877, Sir John Strachey announced that it was the intention of the Government of India to meet charges for famine and unremunerative works out of revenue for the future. He proposed to place the Government in a position to do this, not by introducing any new Imperial taxation, but by extending the system of decentralization, and by making each Local Government responsible for the management and charges of the great public works which had been constructed, and for the construction and maintenance of those to be subsequently undertaken. He declared that the fundamental principle to be pursued in regard to public works was the enforcement of Provincial responsibility only. Bengal was the only Province, however, which was then considered able to bear the whole of its own burden. The charge for interest on productive Public Works was transferred to the Provincial account, and the Lieutenant-Governor was invited to raise by taxation the funds necessary to meet existing charges, as well as to provide for new works. The Public Works Cess Act of 1877 was accordingly introduced. Provincial responsibility for all productive works, existing and future, was definitely assumed, and the policy which the Secretary of State had affirmed was in regard to this Province carried into effect.

13. The decentralizing measures of 1877 were of a threefold character—(1) Certain departments of Revenue were made over to Provincial management, some for fixed payments, some for progressive contributions to the Imperial Treasury. (2) Certain departments of expenditure were made over to it with fixed allotments. (3) The Public Works which had been or were to have been constructed with borrowed money were made over to it without any assignment. The arrangements were mutually interdependent. The first and second were connected, because, although fixed allotments only were made for expenditure, it was well recognised that expenditure could not be fixed, but must be progressive, and it was intended that the necessary increase in charges should be met out of the profits which the Provincial Government might derive from the assigned revenues over and above the amount of its contribution. The first and third were connected, because it was similarly recognised that the large responsibilities assumed by the Local Government in regard to Public Works should be merged in the aggregate of its ways and means. It was only reasonable, therefore, that the progressive contributions under the heads of assigned

revenue should be so fixed as to leave the Local Government a margin for the discharge of its actual responsibilities, as well as for the improvement of the Province.

14. In addition to the Departments of Police, Jails, Registration, Medical, Printing, Roads and Civil Buildings transferred by Lord Mayo's Government in December 1870, with an assignment of Rs. 1,16,85,920, which had been reduced by March 1877 to Rs. 1,11,11,574, the Local Government was further entrusted, under the contract of March 1877, with the management of the following heads of revenue:—(1) *Excise*; (2) *Customs* (Miscellaneous receipts); (3) *Salt* (Minor items); (4) *Stamps*; (5) *Law and Justice* (Proper); (6) *Marine*, and (7) *Miscellaneous*, and of the following heads of expenditure:—(1) *Refunds* of the Assigned Revenues; (2) *Land Revenue*; (3) *Excise*; (4) *Customs*; (5) *Salt*; (6) *Stamps*; (7) *Administration*; (8) *Minor Departments*; (9) *Law and Justice*; (10) *Marine*; (11) *Miscellaneous*, and one or two smaller items. The allotment made under the heads of expenditure was Rs. 1,34,70,000, and the total, including the existing allotment under the heads previously transferred, was Rs. 2,45,29,000. From this was deducted a lump sum of Rs. 5,90,000, and the net consolidated grant was thus reduced to Rs. 2,39,39,000. The payments to be made on account of the assigned reductions in the first year amounted to Rs. 1,91,07,000, and this was to be increased every year by Rs. 3,75,000 under the heads of Excise, Stamps, Law and Justice. The balance represented the Imperial allotment to the Provincial revenues, which, subject to adjustments, was thus to be Rs. 48,32,000 in 1877-78, Rs. 44,57,000 in 1878-79; Rs. 40,82,000 in 1879-80; Rs. 37,07,000 in 1880-81, and Rs. 33,32,000 in 1881-82.

15. The following table shows the progress of the Provincial revenue and expenditure during the five years 1877—82. The Revenue side of the account includes the proceeds of the Public Works cess, and the receipts from Railways and Canals. On the expenditure side appear the charges for interest on the Capital expended and the cost of maintenance. The sum entered as a receipt under Assessed Taxes is simply the grant made to the Provincial revenues to meet the cost of collections and refunds on account of the License-tax.

Revenue.

	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.
	Rs.	Rs.	Rs.	Rs.	Rs.
Opening balance	2,88,000	*26,90,000	42,79,000	51,04,000	49,91,000
Land Revenue	1,07,000	......	...	....	......
Excise	65,68,000	70,28,000	72,07,000	85,53,000	93,74,000
Assessed Taxes	....	2,98,000	4,74,000	3,50,000	3,50,000
Provincial Rates	21,05,000	36,40,000	36,14,000	35,15,000	35,50,000
Customs	75,000	90,000	99,000	1,30,000	86,000
Salt	2,72,000	1,24,000	1,03,000	1,35,000	1,47,000
Stamps	1,08 15,000	1,07,85,000	1,14,99,000	1,13,92,000	1,20,24,000
Registration	6,61,000	9,89,000	10,29,000	10,30,000	10,18,000
Minor Departments	... ..	1,25,000	1,51,000	1,65,000	1,97,000
Law and Justice—					
Law and Justice Proper	8,05,000	10,52,000	10,80,000 }	17,58,000	17,17,000
Jails	6,89,000	5,94,000	6,96,000 }		
Police	92,000	4,32,000	4,76,000	4,86,000	5,23,000
Marine	14,57,000	11,76,000	11,23,000	12,76,000	10,82,000
Education	5,20,000	4,80,000	4,52,000	4,88,000	5,73,000
Medical	1,59,000	1,96,000	2,66,000	1,58,000	1,36,000
Stationery and Printing	78,000	1,10,000	98,000	1,22,000	1,22,000
Interest	... ..	45,000	12,000	13,000	21,000
Miscellaneous	8,83,000	7,96,000	8,48,000	7,53,000	7,01,000
Railways	7,32,000	17,53,000	25,14,000	29,59,000	32,70,000
Irrigation and Navigation	4,95,000	15,27,000	16,69,000	16,71,000	19,55,000
Other public works	98,000	8,38,000	7,56,000	6,86,000	7,76,000
Contributions	......	......	6,000	...	1,39,000
Total Revenue ...	2,69,11,000	3,20,78,000	3,41,72,000	3,56,40,000	3,77,61,000
Imperial allotment	48,55,000	47,57,000	46,66,000	40,39,000	83,69,000(a)
GRAND TOTAL ...	3,20,54,000	3,95,25,000	4,31,17,000	4,47,83,000	5,11,21,000

* Includes Rs. 14,52,000 transferred from "Provincial Reserves" and Rs. 44,000 transferred from the old "Wards Fund."

(a) Includes 20 lakhs, being the refund of the special contribution from Provincial given during the Afghan War; and 28½ lakhs being the special grant to Provincial as an incident of the contract.

Expenditure.

	1877-78.	1878-79.	1879-80.	1880-81.	1881-32.
	Rs.	Rs.	Rs.	Rs.	Rs.
Interest	20,00,000	32,14,000	34,92,000	36,32,000	33,61,000
Refunds	6,32,000	6,51,000	9,32,000	7,39,000	2,33,000*
Land Revenue	24,37,000	25,43,000	25,09,000	27,30,000	27,58,000
Forest	1,000	......	......	......	......
Excise	3,06,000	2,83,000	2,61,000	2,62,000	2,73,000
Assessed Taxes	......	2,79,000	1,95,000	1,68,000	96,000
Provincial Rates	10 000	13,000	......	......	......
Customs	7,16,000	6,99,000	6,95,000	6,98,000	6,86,000
Salt	40,000	48,000	33,000	18,000	18,000
Opium	......	......	2,000	1,000	13,000†
Stamps	2.48,000	2,51,000	3,81,000	3.99,000	4,24,000
Registration	4,56,000	5,96,000	6,04,000	6,38,000	6,29,000
Administration	13,22.000	14,77.000	14,57,000	14,70,000	14,72.000
Minor Departments	2,65,000	2,45,000	2,80,000	2,75,000	5,03,000
Law and Justice—					
Law and Justice Proper	63,77,000	64,63,000	65,57,000	} 83,76,000	87,43,000
Jails	16.51,000	18,56.000	18,41,000		
Police	41.87,000	40,21,000	40,12,000	40,18,000	40,87,000
Marine	12.72,000	12,37.000	10,68,000	10,86,000	10,55,000
Education	25,24,000	24,88,000	24,75,000	25,56,000	27,76,000
Ecclesiastical	8,000	8,000	9,000	8,000	8,000
Medical	13,85,000	12,31,000	11.70,000	11,10,000	10,75,000
Stationery and Printing	8,61,000	9,52,000	8,73,000	9,46,000	8,80,000
Superannuations	....	.. ..	1,000	2,000	5,000
Miscellaneous	3,21,000	2,82.000	4,32,000	3,72.000	6,65,000
Railways	6,26,000	13,47,000	20.05,000	18,98,000	30,34,000
Irrigation and Navigation	7,03,000	15,20,000	18,61,000	24,34,000	36,60,000
Other public works	25,12,000	33,45,000	33,72,000	47,60,000	67,58,000
Total ..	3,08,60,000	3,50,52.000	3,65,17,000	3,85,96,000	4,32,12,000
Contributions to Local	......	1,94,000	1,81,000	1,96,000	3,66,000
Ditto to Imperial	......	......	13,15,000	10,00,000	......
	3,08,60.000	3,52.46,000	3,80,13,000	3,97,92,000	4,35.78,000
Closing balance ..	11.94,000	42,79,000	51,04,000	49,91,000	75,43,000
GRAND TOTAL ...	3,20,54,000	3,95,25,000	4,31,17,000	4,47,83,000	5,11,21,000

* Decrease owing to the miscellaneous refunds now being charged against the particular service heads to which they refer.

† This is for cost of European stores included in accounts and future estimates under contingencies of the minor heads of service for which the stores are purchased.

‡ Includes Rs. 11,31,862 on account of 42 (now 41)—Miscellaneous Railway Expenditure.

16. Owing to short collections of the Public Works Cess in 1877-78, to the absence of any receipts under assessed taxes, the license tax not having then been introduced, and to various differences in the form of the accounts, it is only from 1878-79 that accurate comparison of the condition of the finances in the different years is possible. The gross revenue was Rs. 3,20,78,000 in 1878-79; it had risen to Rs. 3,77,61,000 by 1881-82. In other words, the revenue had increased at the rate of about 15 lakhs of rupees a year during the three years, though there had been no new taxation in the interval.

17. The progress of the revenue under *Excise* during this period is remarkable. While the revenue increased from 70¼ lakhs in 1878-79 to 85½ in 1880-81 and 93¾ in 1881-82, the cost of collecting it declined from Rs. 2,83,000 to Rs. 2,73,000. This was the result partly of the extension of the outstill system, and partly of the great prosperity of the province during this period.

18. A succession of good harvests with high prices had provided the people with money to spend on luxuries, and among these exciseable articles, in this as in all countries, hold a high place. There was a large increase in the consumption of duty-paying liquor where the sadar distillery system had been maintained, and also in the consumption of excise opium, of piece-goods, and of everything on which prosperous peasants are disposed to spend their surplus funds. The revenue from excise opium was Rs. 12,49,000 in 1877-78, Rs. 13,35,000 in 1878-79, Rs. 13,62,000 in 1879-80, Rs. 13,95,144 in 1880-81 and Rs. 14,47,000 in 1881-82. The increased consumption of piece-goods also bore unmistakeable testimony to the increased prosperity of the country, and confirmed the view that the excise revenue had been to a great extent improved by the greater spending power of the people. The value of these goods carried to Bengal or Bihar districts by the Eastern Bengal and East Indian Railways was Rs. 6,44,31,000 in 1879-80 and Rs. 6,91,16,000 in 1880-81.

19. The excise revenue was made over to the management of the Provincial Government for a payment rising from 64 lakhs in 1877-78 to 68 lakhs in 1881-82. The gross profit made by the Bengal Government was thus roughly 4½ lakhs in the first year, 5¼ lakhs in the second, 6 lakhs in the third, 18½ lakhs in the

fourth, and 25¾ lakhs in the fifth. The fixed grant for managing the revenue was Rs. 2,92,000. The actual cost was Rs. 3,06,000 in 1877-78. This was reduced by careful management to Rs. 2,73,000 in 1881-82. Thus in 1881-82 the excise receipts exceeded the receipts of 1877-78 by no less than twenty-five lakhs of rupees, while the expenditure for collecting the revenue and managing the department showed a reduction of Rs. 33,000.

20. Under *Stamps* the increase, though less rapid than under Excise was nevertheless very satisfactory and sustained. The actual receipts in 1876-77 were Rs. 95,48,000, and the revenue was made over to the Provincial Government for a payment rising by 2½ lakhs a year from Rs. 98,50,000 in 1877-78 to Rs. 1,08,50,000 in 1881-82. In 1877-78, however, there was a large increase in receipts owing to the operations under the Land Registration Act, and the actual revenue collected was Rs. 1,08,15,000. In 1878-79 the receipts were Rs. 1,07,85,000. In 1879-80 the receipts rose to Rs. 1,14,99,000, and in 1881-82 to Rs. 1,20,24,000. The increase in the estimated receipts, however, arose from a change introduced by the High Court in the procedure for obtaining copies of documents, and there was a corresponding decrease in fees formerly credited to Law and Justice, and an increase in the cost of establishments debitable to the same head. The steady and substantial increase in the Stamp Revenue from Rs. 95,48,000 in 1876-77 to Rs. 1,20,24,000 in 1881-82 was undoubtedly to a great extent the result of the increased circulation of wealth in the country, and of increased facilities for obtaining justice. But much of the increase was also due to the improved administration of the department and to the special measures taken to discover and check fraud in the use of stamps. The gross profit of the Provincial Government was roughly 9½ lakhs in 1877-78, 6¾ lakhs in 1878-79, 11½ lakhs in 1879-80, 8 lakhs in 1880-81, and 11¾ lakhs in 1881-82. The fixed grant for managing this department of the revenue was Rs. 2,38,000. The actual cost was Rs. 2,48,000 in 1877-78 and Rs. 2,51,000 in 1878-79. It amounted to Rs. 4,24,000 in 1881-82. The increase in the first year corresponds with the increase in the receipts. Larger sales of stamps must be attended by increased charges for discount. The increase in the later years was due to the transfer of the actual cost of the stamps from the head of "Stationery." The fixed grant under "Stationery" for both stamps and stationery was Rs. 4,98,000. The actual expenditure on both was Rs. 6,89,000 in 1878-79.

21. Under *Registration* the receipts steadily increased, though the progress was not so rapid in the later as it was in the earlier years. The figures from 1878-79 included Record-room receipts and Land Registration fees transferred from Land Revenue. The Registration receipts proper were Rs. 6,61,000 in 1877-78, Rs. 8,70,000 in 1878-79, Rs. 9,09,000 in 1879-80. They were only Rs. 3,66,978 in 1871-72, the first year that the revenue was under Provincial management. With increased receipts there was naturally an advance in the charges for commission on fees, by which most of the Sub-Registrars are remunerated.

22. *Law and Justice* was the third of the branches of revenue surrendered in 1877 for a progressive payment. The actual receipts in 1876-77 were Rs 7,30,000. The revenue was surrendered to the Provincial Government for a payment rising by ¼ lakh a year from Rs. 7,25,000 in 1877-78 to Rs. 8,25,000 in 1881-82. The actual receipts were Rs. 8,05,000 in 1877-78, Rs. 10,52,000 in 1878-79, and Rs. 10,80,000 in 1879-80, while they rose to Rs. 17,17,000 in 1881-82. The increase in the revenue was chiefly under the head of Fees, and corresponded in some measure with the increase under Stamps. The falling off in the later years is explained by the new procedure already alluded to in connection with stamps. The expenditure under Law and Justice showed a large increase from Rs. 63,77,000 in 1877-78 to Rs. 87,43,000 in 1881-82. The fixed grant for this service under the five years' settlement between the Imperial and Local Government is Rs. 62,97,000. There was thus a heavy charge on Provincial Funds. It was, however, precisely in order that the Local Government might have the means of providing for improved administration, involving increased expense, that improveable revenue was made over to it. The Lieutenant-Governor was able to strengthen the Subordinate Executive Service, and to increase the number of munsifs to meet the growing wants of the country in the administration of Civil Justice.

23. Under *Jails* the receipts were Rs. 6,89,000 in 1877-78. They amounted to Rs. 6,96,000 in 1879-80. The charges, on the other hand, rose from Rs. 16,51,000 in 1877-78 to Rs. 18,41,000 in 1879-80. For 1880-81 they are estimated at Rs. 17,00,000, and for 1881-82 at Rs. 22,52,000.

24. The fixed grant for the charges on account of *Land Revenue* made in 1877 was Rs. 22,62,000. With the charges which this was intended to cover were amalgamated others, chiefly for sub-divisional establishments, which were originally Provincial. The gross cost of all in 1876-77 was Rs. 23,53,000. The growing wants of the administration, however, since carried the expenditure far beyond this limit. A grant of Rs. 1,80,000 was made for the management of Government estates. Establishments were strengthened and made more efficient, and additions were sanctioned to the staff of Deputy Collectors.

25. The expenditure on *Education* was Rs. 19,58,000 in 1871-72. This included the charges in Assam. In 1875-76 the expenditure in Bengal amounted to Rs. 26,32,000. In the next year Sir Richard Temple under financial pressure reduced the expenditure to Rs. 24,48,000. Sir Ashley Eden was able to make full provision for the needs of this important department. He replaced one lakh of rupees reduced from the grant for Primary Education in 1876-77, and the gross expenditure allowed for 1881-82 was the liberal sum of Rs. 27,76,000.

26. In the *Medical* administration important savings were made. The management of the Metropolitan Hospitals was reformed and much waste of public money prevented. Government aid to dispensaries in the interior no longer took the form of a free supply of expensive instruments and drugs, and careful management ensued from the responsibility thus thrown on the directing Committees. The charges which amounted to Rs. 14,86,000 in 1875-76, Rs. 13,63,000 in 1876-77, and Rs. 13,85,000 in 1877-78, were reduced to Rs. 12,31,000 in 1878-79 and Rs. 10,75,000 in 1881-82. With this reduction in cost there was an increase in the number of persons actually receiving medical aid.

27. It will be convenient to consider together the figures under *Public Works* and the figures of the *Interest* payable on the capital invested in them. In 1877 the following works were made over to the management of the Government of Bengal with the responsibility for the payment of the interest charges on the capital expended on their construction:—Northern Bengal Railway, Tirhut Railway, Nalhati Railway, Orissa Canals, Midnapore High Level Canal, Hidgellee Canal, and Sone Canals. The Calcutta and South-Eastern Railway was also made over; but as this line had been making barely sufficient to cover the working expenses, no interest was charged on the capital. The amount of capital expenditure on which the Provincial Government was liable for interest up to the end of 1877-78 was—

	Rs.
Railways	2,10,17,000
Canals	4,56,43,000
	6,66,60,000

The sum due for interest on this capital was Rs. 30,00,000; but in consideration of the short levy of Public Works Cess, the Government of India only took Rs. 20,00,000 in that year. In 1878-79 the capital expenditure on Railways was Rs. 66,41,000 chiefly on the extension of the Northern Bengal line and the construction of the Patna and Gaya line. The expenditure on Canals was Rs. 25,44,393. In 1879-80 the expenditure was Rs. 22,12,000 on Railways and Rs. 16,14,000 on Canals. Of the first sum, however, Rs. 3,15,000 was provided from Provincial Funds in order to expedite the completion of the Patna-Gaya line. In 1881-82 the expenditure on Railways amounted to Rs. 30,34,000. chiefly for the extension of the Tirhoot line to Bettiah on the west and Peepra Ghât on the east, and Rs. 36,60,000 for expenditure on Canals.

28. In 1877-78 the receipts under *Railways* amounted to Rs. 7,32,000 and the charges to Rs. 6,26,000, while the charges for interest amounted to Rs. 8,26,000. The Northern Bengal line was only opened from Porada to Jalpaiguri in January 1878; and the extensions from Parbatipur to Rangpur and from Siliguri to Jalpaiguri were only ready for traffic, the former in July and the latter in November 1878. The Patna-Gaya line and the extension of

the Northern Bengal line to Kaunia on the Teesta were opened for traffic in June 1879. In 1880 the Lieutenant-Governor was permitted by the Government of India to begin, as a Provincial work, the construction of a line from Sonapore on the Calcutta and South-Eastern line to Mugra Hát, an important mart in the 24-Parganas district, and a sum of Rs. 2,20,000 was expended upon it from Provincial Funds. This line was constructed on the broad gauge, and was afterwards extended to Diamond Harbour. The estimates for 1881-82 included a charge of Rs. 7,50,000 for expenditure on this line. Provision was also made for the expenditure of Rs. 4,50,000 for preliminary work on a line to connect Parbutipur on the Northern Bengal Railway with the important town of Dinajpur, and of two lakhs for raising and bridging the road from Mugra to Diamond Harbour to make it available for railway extension.

29. The *Canals* which were taken over by this Government in 1877 were financially of a very different character from railways, and there was no hope of their being in a position to pay the interest on the capital invested in them for many years to come. The construction of the Orissa, Midnapore, and Hidgelee Canals was originally undertaken in 1863 by the East Indian Irrigation and Canal Company, with the most extravagant expectations of profit. Five years after the work had been begun, the Government of India purchased the canals from the Company for Rs. 1,17,28,560, and proceeded to develop a modified scheme. Up to the present these works have been a heavy drag on Provincial resources, which have to bear the charges. The receipts from irrigation on the Orissa and Midnapore Canals, however, show a steady increase; leases are taking the place of yearly agreements; and, as the system of distributaries is extended, it is hoped that the revenue will gradually develop. The opening of the Sone Canals gave a great impetus to the extension of sugarcane cultivation, and caused a considerable increase in the agricultural wealth of the tracts supplied. The Commissioner, in 1879-80, estimated the increase of profit derived from this source by the people of Shahabad at Rs. 4,73,000 per annum.

30. The following table shows the net receipts from each work during the period 1877-82, with the interest charges payable in each year:—

	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.
	Rs.	Rs.	Rs.	Rs.	Rs.
Orissa Canals ...	—54,970	—57,090	—96,996	—40,000	(—)1,06,000
Midnapore " ...	—33,730	—2,120	92,822	27,000	22,000
Hidgellee " ...	81 720	87,610	3,500	29,000	19,000
Sone " ...	—1,51,110	67,120	1,74,291	6,000	2,79,000
Total net receipts ...	—2,08,090	45,520	1,73 614	22,000	2,14,000
Interest charges ...	20,03,270	21,20,416	22,04,767	22,75,000	20,75,000

31. Apart from these schemes, the Government of Sir Ashley Eden also undertook other irrigation and canal works from Provincial Funds. A sum of Rs. 6,28,000 was spent on a canal to connect the river Gunduk with the principal water-courses of the Saran district. A still more important work was the Joojooty Scheme, whereby a constant supply of pure water from the river Damoodah was poured into old channels in the Burdwan and Hooghly districts. The silting up of these channels was undoubtedly for many years the cause of much disease and suffering throughout a large tract of country, and the introduction of a copious supply of pure water for drinking and irrigation purposes was expected to have a marked effect on the health and prosperity of the people. With the admission of the river water there was an almost entire disappearance of the epidemic which so long raged among the villages situated on the banks of the silted-up channels in the Hooghly district. It was calculated that nearly nine-tenths of the inhabitants of these villages were swept away in the epidemic which prevailed before 1877. The beds of these water-courses were studded with pools of stagnant water, which, as the dry season advanced, became more and more fœtid and noxious, and spread disease and death among the people who consumed the fluid. At the same time the drainage of the country was obstructed by the endeavours of the people to collect and retain water for agricultural purposes.

32. Sanction was also given to the construction, from Provincial Funds, of a navigation canal to connect the existing tidal canal in Hidgellee with the Orissa system. This was a work of the first importance. Orissa was then wholly

dependent on the sea for its communications with Bengal; the coasting trade could only be carried on by large vessels; the ports were bad; and if any serious failure of the crops occurred, it was impossible to throw a sufficient supply of food into the province. The projected canal was intended to bring Orissa into direct inland communication with Bengal, so that steamers and country boats would be able to ply at all seasons of the year, and while the province will be protected from famine, a large expansion of trade might be confidently expected.

33. It is not possible to make any useful comparison of the expenditure under *other Public Works* before and after the contracts of 1877. The expenditure on works during the scarcity of 1874 was abnormal, the Provincial balances were exhausted, and the Government of India found it necessary to accept the outlay, and to make the local Government a net grant of five lakhs with which to begin the year 1876-77. The expenditure on Ordinary Public Works during that year was Rs. 25,59,000. In 1877-78 Sir Ashley Eden found it necessary to proceed with extreme caution in the matter of expenditure. The charges thrown upon the Provincial revenues on account of Productive Public Works were very serious; the full outturn of the Public Works Cess could not be obtained during the year; and he recognized the necessity of securing a substantial working balance to provide for emergencies. The expenditure in this year was therefore restricted to Rs. 25,12,000. In framing the revised estimates for 1878-79, the Lieutenant-Governor found it possible to make provision for various important and useful schemes that had been left in abeyance for want of funds; but in this year and the next the expenditure was, under instruction, kept down in consequence of the financial difficulties which famine, war, and adverse exchange had brought upon the Government of India. In 1879 the Government of India found itself compelled to call upon Local Governments to make all possible reductions in expenditure. The orders went so far as to direct that no new work estimated to cost more than Rs. 2,500 should be commenced, even though it might have already received the sanction of Government. In order to avoid the necessity of peremptorily putting a stop to works, the Lieutenant-Governor offered a special contribution of 20 lakhs to Imperial Funds. Under the influence of the same policy of retrenchment unduly low estimates were made for 1880-81, but the Lieutenant-Governor was afterwards permitted by the Government of India to increase the grant by 20 lakhs, and the expenditure during the year was Rs. 47,60,000. In 1881-82, the Public Works expenditure aggregated Rs. 67,58,000 and included, besides miscellaneous improvements on buildings, and on the construction, bridging, and metalling of Provincial roads, provision for new Court-houses at Sealdah, Jessore, Mymensingh, Dacca, Ranchi, Gaya, Darbhanga, and Motihari, for various sub-divisional buildings and Munsifs' Courts, for new Jails at Jalpaiguri, Bogra, Pabna, Gaya, Darbhanga, and Motihari, for a college at Rampur-Boalia, and a Railway school at Kurseong, and for the completion of the new Secretariat buildings and the new Obstetric Hospital at the Medical College.

34. That the system of decentralization was up to this time thoroughly successful in Bengal is sufficiently clear from the foregoing sketch. The revenues increased rapidly, independently of any new taxation; useless expenditure was curtailed; and funds were made available for improvement under all branches of the Administration. The three heads of improveable revenue made over to the management of the Provincial Government, with an income of 165¼ lakhs in 1876-77, showed an income of not less than 213 lakhs in 1881-82. In the meanwhile, the Government was able to carry out numerous works of improvement, many of which, under the previous system, would have been indefinitely postponed. Besides making a special contribution of 20 lakhs to the Imperial treasury in time of need, means were found during these five years to increase the staff of executive and judicial officers; to provide increased facilities for the administration of justice; to increase the grant for education; to make grants-in-aid of district communications, and of works of drainage, sanitation, and municipal improvement; to build schools, colleges, and hospitals; to replace the huts in which the public business was transacted, or prisoners were confined, by substantial masonry court-houses and jails; to spend 20 lakhs on railways which have since brought in a large return, 5½ lakhs on tramways, ¾ of a lakh on a steamer service to improve communications with Assam, and 2 lakhs on a road to develop the trade with Thibet; to lay out 11 lakhs on the first portion of a work which will develop the trade of Orissa and protect it from famine;

and to devote 38¼ lakhs to improving navigation and providing a supply of pure water for the people. While 77½ lakhs were thus expended on great measures of material improvement, and the expenditure on Ordinary Public Works was increased from Rs. 25,12,000 in 1877-78 to Rs. 67,58,000, exclusive of expenditure on preliminary works of railway construction, in 1881-82, and while no legitimate outlay was spared to strengthen every department of the Administration, the five years' period, which opened with a credit balance of Rs. 2,88,000 only, closed with a credit balance of Rs. 75,43,000. When it is recollected that under the system which prevailed before 1871 every new charge required the sanction of the Imperial Government, that the decision on the demands of each province took no cognizance of the extent to which it had contributed to the general Exchequer, that nothing was to be gained by economy, because money left unspent by any one Government was practically lost to it, and only went to increase the amount to be scrambled for by all, some idea may be formed of the advantages which Bengal had reaped up to this time from the control of its own finances.

25. The principal features of the contract of 1877 have been described above. The Local Government was allowed, as in the first contract of 1870, to appropriate the whole of the receipts under the heads of Police, Jails, Registration, Education, Medical, Printing, Roads and Civil Buildings, and received in addition a gross annual allotment of Rs. 1,10,59,000 to meet the charges on account of these departments. The receipts from *Excise*, *Stamps*, and *Law and Justice* (proper) were also made over to the Provincial Government in consideration of a payment to the Imperial Treasury of lump contract sums, which were to increase by one lakh per annum in the case of Excise, and 2¾ lakhs per annum in the case of Stamps and Law and Justice. The following heads of revenue were also made over in return for fixed contract payments, viz., *Customs* (miscellaneous receipts), *Salt* (minor items), *Marine* and *Miscellaneous*. On the expenditure side, the Local Government was entrusted with the management of the following heads of expenditure, receiving in each case an annual grant of fixed amount:—*Refunds* of the assigned revenues, *Land Revenue*, *Excise*, *Customs*, *Salt*, *Stamps*, *Administration*, *Minor Departments*, *Law and Justice*, *Marine*, *Miscellaneous*, and one or two smaller items. Simultaneously—and this was one of the most important elements of the contract—the gross receipts of certain railways and canals which had been, or were to be, constructed with borrowed capital were transferred to the Local Government, which also became responsible for the working expenses of the same and for the payment to the Imperial Government of the interest charges on the capital with which they had been constructed. As these interest charges were expected to exceed considerably the net earnings of the works thus provincialised, the Lieutenant-Governor was authorised to impose special provincial taxation to make up the deficiency, and to this end the Public Works Cess was imposed by Act II (B.C.) of 1877. The provincialisation of these charges for interest, and the introduction of the Public Works Cess, formed integral parts of Sir John Strachey's scheme of famine finance.

26. The contract of 1877 thus fell naturally into three parts—(1) in respect of the branches of service which had been provincialised by Lord Mayo, the old principle was retained: a fixed annual grant was made from Imperial revenues, which, together with the receipts of those departments, was expected to cover their expenditure, any growth of charges being provided for from the increase in the receipts. (2) In respect of the civil heads of revenue and expenditure then provincialised for the first time, a separate contract was made for each head of revenue and for each head of expenditure; the rates of increase in the payments on account of the revenue from Excise, Stamps and Law and Justice being advisedly taken at a low figure, so as to leave the Local Government a margin wherewith to meet the normal growth of civil expenditure for which no direct allowance was made. (3) In respect of public works constructed from borrowed capital, the Lieutenant-Governor was authorised to resort to local taxation to make good the deficit of interest charges in excess of net earnings.

27. The contract, which came into force in 1882, differed materially from that which it succeeded. The principles on which it proceeded were the following:—

Contract of 1882—87.

Instead of giving the Local Government a fixed sum of money to make good any excess of provincialised expenditure over provincialised receipts, a certain proportion of the Imperial revenue was devoted to this object. A few heads

were reserved as Imperial; others were divided in proportions, for the most part equal, between Imperial and Provincial; the rest were made Provincial. The balance of transfers, being against the Local Government, was rectified by a fixed percentage on its Land Revenue otherwise reserved as Imperial. At the same time a distinct declaration was made of the policy to be followed during the term of the contract. The Imperial Government was to make no demand on the Local Government, except in the case of disaster so abnormal as to exhaust the Imperial reserves and resources, and to necessitate a suspension of the entire machinery of public improvement throughout the Empire. On the other hand the Local Government was to look for no special aid from the Imperial Government, except in the case of severe famine, and then only within the following limits:—(1) current income must have been exhausted, every avoidable expense in every department having been retrenched, and the public works grants applied to famine work to the very utmost possible; (2) savings of past years in excess of the ordinary working balance must have been drawn upon to two-thirds of their total amount; (3) the margin of Provincial surplus in normal was made be liable for the completion of works begun as relief works, and where there was no need of such completion, was to be chargeable up to one-fourth at most for payment of interest on any Imperial loans which may have been raised to meet the excess cost of the famine in general.

28. The following were the principal additions made to the provincial receipts and charges under the new scheme:—This Government was admitted to a half share in the receipts from Forests and Assessed Taxes, and took all the receipts under the heads of Superannuations, Miscellaneous, and Other Public Works, except contributions from the military and medical funds; gain by exchange on Imperial transactions, premium on bills and unclaimed bills of exchange; receipts from military works; and any unspecified miscellaneous receipts exceeding Rs. 10,000. Under Forests and Assessed Taxes it was liable for half the charges. The Imperial Government only retained under Land Revenue the same percentage on charges for collection and on the cost of surveys and settlements as was retained of land revenue. To the existing provincial charges was added under Law and Justice and Medical all that was reserved as Imperial; under Stationery and Printing all except the cost of stationery purchased from central stores; and under Other Public Works, the charges for Museums, Educational Buildings, and Light-houses. On the other hand, one-half the net receipts from Excise, Stamps, and Registration, including record-room fees, was surrendered to the Imperial Government. The percentage of Land Revenue was, however, only calculated after allowing for the claim of the Government of India to share in the general improvement that had resulted to the Provincial revenues during the five years then just expired. That share was fixed at 30 lakhs a year. From this the Government of India deducted three lakhs to be expended on the improvement of the Subordinate Executive and Judicial Services and the establishment of the new district of Khulna. In order, too, that the Local Government might not be embarrassed by a sudden reduction of 27 lakhs in its income, His Excellency the Governor-General in Council added a sum of 28½ lakhs to the credit balance of the Province for 1881-82.

29. The amount of percentage of Land Revenue which, under the new scheme was assigned to this Government, was calculated, as stated above, upon the basis of the regular estimate for the year 1881-82. It was fixed at 32·2284. A sum of Rs. 30,00,000 was, on account of the annual contribution to the Government of India, added to the Provincial deficit, provision being at the same time made for an additional expenditure of three lakhs for the improvement of the Subordinate Civil Service and for a new district of Khulna.

30. The chief points in which the contract of 1882 differed from that of 1877 were the following:—*First*, the excess of provincialised expenditure over provincialised receipts was balanced, not by an annual allotment of fixed amount, but by a fixed percentage of the land revenue of the Province. Inasmuch as the receipts credited under Land Revenue are to some extent capable of improvement, and ordinarily show a tendency towards steady, if small, increase, this change was to the advantage of the Local Government. *Secondly*, the Local Government was no longer permitted to appropriate the whole of the increase in the three principal sources of improvable revenue, viz., Excise, Stamps, and Registration. Under the former contract, the increase which the Loca

Government had to surrender was only one lakh of rupees per annum under Excise, 2¾ lakhs per annum under Stamps (combined with Law and Justice), and *nil* under Registration; whereas the actual rate of increase averaged nearly six lakhs per annum under Excise, 4¾ lakhs under Stamps and Law and Justice, and Rs. 90,000 under Registration. Under the old contract the whole of this profit went to the Local Government: under the new arrangement one-half went to the Government of India. This change operated greatly to the disadvantage of the Provincial revenues, whose expansive power was thereby largely diminished.

31. The *third* point of difference between the contracts of 1882 and 1877 lay in the extension of the interest of the Local Government to the revenue heads of *Assessed Taxes* and *Forests*, and to the receipts and expenditure under *Superannuations*, and certain sub-heads of branches of service of which the bulk was already Provincial.

32. The last important point of difference was that the contract of 1882 was a *consolidated* contract. In other words, no attempt was made to estimate the future receipts and expenditure under separate heads and to fix distinct assignments for each. The new arrangements were applied to the revised estimates for 1881-82 as a whole; the total receipts were compared with the total expenditure; and (after making a deduction of 27 lakhs from the Revenue side, being the share of the profit on the old contract which the Imperial Government decided to appropriate) the adjusting percentage of Land Revenue was calculated so as to balance the account.

33. following statements show the actual receipts and expenditure of the period 1882-87.

REVENUE.

RECEIPTS.	Actuals, 1882-83.	Actuals, 1883-84.	Actuals, 1884-85.	Actuals, 1885-86.	Actuals, 1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.
Opening balance	75,43,005	21,46,903	6,86,636	12,02,044	14,69,818
Principal Heads of Revenue—					
I.—Land Revenue	1,30,54,115	91,93,743	1,28,31,915	1,29,60,300	1,31,10,080
III.—Salt	1,64,999	99,984	1,24,556	1,01,470	11,02,120
IV.—Stamps	61,06,765	62,88,457	64,95,607	66,29,030	67,31,589
V.—Excise	48,94,483	52,12,696	50,26,110	47,92,350	50,62,913
VI.—Provincial Rates	36,06,713	38,14,746	37,64,961	38,71,170	39,95,252
VII.—Customs	71,276	54,224	61,032	51,180	68,810
VIII.—Assessed Taxes	7,60,169	7,58,797	7,48,248	7,66,800	7,66,798
IX.—Forest	3,46,079	3,47,167	2,85,576	2,98,710	3,26,817
X.—Registration	5,19,942	4,91,480	5,41,200	5,46,930	5,19,218
Total ...	2,95,25,141	2,62,61,294	2,98,79,200	3,00,17,940	3,06,83,597
XII.—Interest	44,227	67,614	74,243	73,340	82,640
Post Office, Telegraph and Mint—					
XIV.—Telegraph	......	94	22	50	1,063
Receipts by Civil Departments—					
XVI.—Law and Justice—					
Fees, fines and forfeitures of Judicial Courts	8,23,309	7,63,875	7,54,500	7,40,870	7,56,324
Jails	8,46,672	6,45,823	7,28,720	7,86,762	7,44,617
XVII.—Police	4,86,449	5,62,803	6,95,862	6,90,630	6,69,260
XVIII.—Marine	9,51,880	8,96,260	7,71,644	8,51,000	8,97,193
XIX.—Educatoin	5,2[illegible],235	5,31,648	5,23,556	5,24,310	5,28,817
XX.—Medical	1,32,954	1,41,756	1,48,262	1,46,270	1,56,482
XXI.—Scientific and other Minor Departments	1,67,830	2,05,567	1,55,519	1,17,980	1,22,221
Total ...	39,30,318	37,47,732	37,78,063	38,57,822	38,74,914
Miscellaneous—					
XXII.—Receipts in aid of Superannuations ...	72,793	75,347	61,669	52,650	46,247
XXIII.—Stationery and Printing	1,46,615	1,20,715	1,08,493	1,93,970	2,02,530
XXV.—Miscellaneous	5,58,726	7,14,621	8,37,682	6,07,550	7,02,760
Total ...	7.73,139	9,10,683	10,07,844	8,54,170	9,51,537
Railways—					
XXVI.—State Railways (gross earnings) ...	37,88,454	41,94,074	42,87,293	44,72,801	52,71,606
Irrigation—					
XXIX.—Major works (direct receipts)	13,03,246	11,69,841	13,07,521	15,84,935	13,86,629
XXX.—Minor works and Navigation	7,68,259	7,92,338	7,77,818	10,32,040	8,39,164
Total ...	20,71,505	19,62,179	20,85,339	26,16,975	22,25,793
Buildings and Roads—					
XXXII.—Civil Works—					
By Public Works Department ...	2,13,126	2,02,292	6,39,152	2,28,670	3,86,255
By Civil Department	5,22,510	5,88,345	6,21,303	5,17,696	4,81,091
Total ...	7,35,636	7,90,637	12,60,455	7,46,366	8,67,346
Contributions	21,754	......	20,000	.....	16,104
Total Revenue ...	4,08,90,474	3,78,64,307	4,23,92,458	4,26,39,464	4,39,74,600
GRAND TOTAL ...	4,84,33,479	4,00,11,210	4,30,79,094	4,38,41,508	4,54,44,418

EXPENDITURE.

Expenditure.	Actuals, 1882-83.	Actuals, 1883-84.	Actuals, 1884-85.	Actuals, 1885-86.	Actuals, 1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.
Direct demands on the Revenues—					
1. Refunds and drawbacks	1,21,264	1,42,429	1,39,772	1,28,920	1,20,319
Charges in respect of collection—					
3. Land Revenue	30,93,568	33,03,038	32,75,069	33,67,390	34,99,676
4. Opium	19,017	......	......	......	......
5. Salt	17,626	18,320	21,048	18,130	11,005
6. Stamps	2,13,830	2,20,350	2,33,664	2,46,210	2,42,576
7. Excise	1,33,958	1,36,147	1,44,333	1,61,320	1,88,903
8. Provincial Rates	......	......	......	......	37,772
9. Customs	5,57,547	4,85,898	4,98,143	4,90,160	5,13,707
10. Assessed Taxes	47,416	48,342	46,947	43,780	43,780
11. Forests	1,91,063	1,93.849	2,05.663	1,85,180	2,11,391
12. Registration	3,13,650	2,78,933	2,96 741	3,00,680	2,81,187
Total ...	47,08,937	48,27.306	48,61,380	49,41,680	51,50,316
Post Office, Telegraph and Mint—					
16. Telegraph	......	2,814	955	640	863
Salaries and expenses of Civil Departments—					
18. General administration	15,10,493	15,45,027	16,05,594	15,82,360	15,93,887
19. Law and Justice—					
Judicial Courts	92,76,255	93,18,108	94,09,177	97,39,430	79,52,620
Jails					16,66,127
20. Police	44,60,624	45,85,893	48,02,147	47,87,580	47,03,840
21. Marine (including River Navigation) ...	9,51,039	8,60,143	8,47,151	8,29,070	8,53,014
22. Education	30,16,318	31,55,400	34,00,405	32,94,530	33,53,893
24. Medical	13,71,873	13,63,645	14,56,187	14,39,010	14,64,036
25. Political	......	447	......	......	......
26. Scientific and other Minor Departments ...	3,50,541	3,97,685	3,50,866	3,54,230	2,95,128
Total ...	2,09,37,143	2,12,35,350	2,18,71,527	2,20,26,210	2.18,82,544
Miscellaneous Civil Charges—					
29. Superannuation allowances and pensions ...	11,79,455	11,40.086	11,99,258	12,39,270	12,67,353
30. Stationery and Printing	10,51.283	9,27,844	10 86 430	11,13,920	10,39,353
32. Miscellaneous	4,52,573	3.70,628	3,97,467	4,51,730	3,76,830
Total ...	26,83,311	24,38,558	26,83,155	28,04,920	26,83,536
Famine Relief and Insurance—					
33. Famine relief	......	......	5,770	1,23,840	......
37. Construction of Railways	......(a)	......(a)	......(a)	21,580	3,362
Railway Revenue Account—					
38. State Railways—					
Working expenses	20,40,250	24,99,810	30,72,039	30,30,260	31,42,937
Interest on debt	14,13 620	15,93,830	17,15,257	19,07,310	20,67,753
40. Subsidized Companies, Land, &c.	10,600	39.723	57,984	25,970	1,074
41. Miscellaneous Railway expenditure ...	18,49,463	—27,60,039	1,31 643	29,890	54,863
Total ...	53,13,933	13,73,524	49,76,923	50,02,230	52,66,630
Irrigation—					
42. Major Works—					
Workings expenses	11,47,967	10,69,394	11,79,758	11,53,420	13,32,600
Interest on debt	21,15,506	21,60,760	22 12,627	22,49,190	22,73,490
43. Minor Works and Navigation	23,67,231	11,77,816	8,16,172	10,62,950	6,90,635
Total ...	56,30,704	44,07,970	42,08,557	44,65,560	42,96,725
Buildings and Roads—					
45. Civil Works—					
By Public Works Department	66,82,211	45,75,267	27,15,149	27,26,650	38,85,406
By Civil Department	46,679	1,43,549	2,99,183	58,070	76,650
Total ...	67,28,890	47,18,816	30,14,332	27,84,720	39,62,056
Contributions ...	2,83,663	3,20,431	2,54,451	2,00,310	1,99,462
Total ...	4,62.86,581	3,93,24,575	4,18.77,050	4,23,71,690	4,34,45,494
Closing balance ...	21,46,898	6,86,635	12,02,044	14,69,818	19,98,924
GRAND TOTAL ...	4,84,33,479	4,00,11,210	4,30,79,094	4,38,41,508	4,54,44,418

(a) Included under 41 Miscellaneous Railway expenditure.

34. The following figures illustrate the progress of the province during the contract of 1882—87 :—

Revenue.

	(Contract estimate.)	1882-83.	1886-87.
	Rs.	Rs.	Rs.
Land Revenue ...	1,22,32,000	1,30,54,000	1,31,10,000
Stamps ...	59,00,000	61,07,000	67,32,000
Excise ...	49,55,000	48,94,000	50,63,000
Provincial rates ...	35,40,000	36,07,000	39,95,000
Assessed taxes ...	8,25,000	7,60,000	7,67,000
Forests ...	3,14,000	3,47,000	3,27 000
Registration ...	4,96,000	5,20,000	5,19,000
Law and Justice ... / Jails ...	16,00,000	16,70,000	15,01,000
Marine ...	10,44,000	9,52,000	8,97,000

Expenditure.

	(Contract estimate.)	1882-83.	1886-87.
	Rs.	Rs.	Rs.
Land Revenue ...	28,91,000	30,94,000	35,00,000
Forests ...	1,98,000	1,91,000	2,11,000
Registration ...	3,05,000	3,14,000	2,81,000
Law and Justice ...	88,33,000	92,76,000	79,53,000
Jails ...			16,66,000
Police ...	41,32,000	44,61,000	47,04,000
Education ...	26,77,000	30,16,000	33,51,000
Marine ...	10,97,000	9,51,000	8,53,000
Civil works ...	67,52,000	67,29,000	39,62,000
Contributions ...	3,33,000	2,84,000	1,99,000
State Railways (capital) ...	11,32,000	18,49,000	58,000
Irrigation (capital) ...	19,29,000	8,40,000	2,18,000

35. The figures shown in the last paragraph against *Land Revenue* receipts are the net sum credited to Provincial after all adjustments had been made. Eliminating these, we get the following result :—

	Contract estimate.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Land revenue proper ...	1,21,34,000	1,22,28,000	1,22,20,000	1,20,60,000	1,24,28,000	1,24,97,000
Grant for Government estates	1,95,000	3,94,000	3,69,000	3,94,000	3,85,000	4,25,000
Total ...	1,23,29,000	1,26,22,000	1,25,89,000	1,24,54,000	1,28,13,000	1,29,22,000

36. When it is remembered that only a small part of Bengal is temporarily settled, and that 1884-85 and 1885-86 were years of unfavourable harvests, the improvement seems fairly satisfactory. The improvement on the grant for the management of Government estates (which was then fixed at 10 per cent. on collections and has since been raised to 12) was much greater than in the case of Land Revenue proper. This, however, did not represent any real relief to the Provincial revenues, as the whole amount of this grant was devoted to the improvement of the estates in question.

37. The expenditure charged under *Land Revenue*, which was wholly Provincial (except the charge for Surveys and Settlements, which was divided in the same proportion as the receipts are divided), rose from Rs. 28,91,000 to Rs. 35,00,000, or by Rs. 6,09,000 in five years. The chief causes of increase under this head were the creation of the district of Khulna, the improvement in the pay and position of the Subordinate Executive Service (half of whose salary is shown against Land Revenue, and half against Law and Justice), and the additional expenditure on Government estates, which was balanced by the higher receipts referred to in the last preceding paragraph. The pay of the Directorship of Agriculture, which was sanctioned in 1884 temporarily for two years, was also shown under this head, as well as the Provincial share of the survey of Muzaffarpur under the Tenancy Act. These two items, which were not in existence when the contract was made, alone account for Rs. 1,12,000 of the total increase.

38. Under the head of *Stamps*, the development of he revenue was steady and continuous. The total receipts, which had risen from Rs. 1,08,15,000 in 1877-78 to Rs. 1,20,24,000 in 1881-82, again rose to Rs. 1,32,58,000 in 1885-86, and to Rs. 1,34,63,000 in 1886-87. The contract estimate of receipts (Provincial share) was taken at 59 lakhs, while the actuals were Rs. 61,07,000, Rs. 62,88,000, Rs. 64.96,000, Rs. 66,29,000, and Rs. 67,32,000 respectively. The profit of the Local Government on the contract under this head was therefore about 2 lakhs in the first year, $3\frac{3}{4}$ lakhs in the second, 6 lakhs in the third, $7\frac{1}{4}$ lakhs in the fourth, and $8\frac{1}{3}$ lakhs in the fifth. The increase was uniformly distributed over the whole period of the contract. There was no legislation during this period affecting the

stamp laws, but a material portion of the improvement in the revenue was undoubtedly due to the arrangements under which process-serving fees in revenue courts, and copying fees, were levied in court-fee stamps instead of in cash. To the former cause at least Rs. 50,000 of the increase in 1884-85 were due, and larger sums in the following years. The remainder of the increase, of which two lakhs came under non-judicial stamps, and upwards of 10 lakhs under court-fees, was attributable to improved administration and greater facilities for obtaining justice. The expenditure of this department, the contract grant for which was fixed in 1881-82 at Rs. 2,17,000, was Rs. 2,14,000, Rs. 2,20,000 Rs. 2,34,000, Rs. 2,46,000, and Rs. 2,43,000 in each year of the contract, the ultimate increase being only Rs. 26,000. More than half of this increase, small as it is, was due to the greater cost of the new description of court-fee stamps introduced during 1884-85 for greater security against fraud. The direct cost of raising the stamp revenue in Bengal was slightly over 3¾ per cent.

39. Under the previous contract, the extraordinary development of the revenue from *Excise*, and the consequent profit to the Provincial revenues, were among the most striking features of the financial history of the period. Between 1877-78 and 1881-82 the receipts from this source rose from Rs. 68,68,000 to Rs. 93,74,000, or by close upon 25 lakhs of rupees; and the whole of this, except 4 lakhs, represented clear gain to the Local Government. Simultaneously the corresponding charges were reduced by improved administration from Rs. 3,06,000 to Rs. 2,73,000. This remarkable increase was due partly to the outstill system, the general adoption of which dates from the first year of Sir Ashley Eden's government and also to the bumper harvests, the activity of trade, and the general prosperity of the country which marked the three years 1879-80, 1880 81, and 1881-82.

40. A serious check in the excise revenue was anticipated by Sir Ashley Eden, and his anticipations were fulfilled to the letter. The flood tide of commercial and agricultural prosperity reached high-water mark in 1883, and the ebb was swift and extreme. The rainfall in that year was deficient and unevenly distributed; and though no actual distress occurred at that time, the advance in the price of food and the recession in the wages of labour in the western districts injuriously affected the settlements of the outstills, which are highly sensitive to seasonal influences. The revenue from country spirits in 1884-85 fell short of that of the previous year by Rs. 1,13,000 (the decrease being almost entirely in the Patna Division), and this would have been more than doubled but for a large apparent increase of Rs. 1,28,000 in Calcutta, which represented advance payments for the triennial period 1884-87. In 1884 and 1885 the rainfall was again unfavourable in quantity and distribution, and the failure the crops was so serious in parts of the Burdwan, Presidency, and Rajshahi Divisions as to exhaust the reserves of the villagers and necessitate the opening of relief works by Government. In 1883, a Commission was appointed under the presidency of Mr. Edgar, C.S.I., to enquire into the working of the outstill system and its chief recommendations were approved by Government and carried into effect. The Sadar distillery system was re-introduced into all considerable towns where country liquor is the principal alcoholic drink of the people. These include Patna, Gaya, Arrah, Chapra, Bettiah, Muzaffarpur, Darbhanga, Monghyr, Jamalpore, Bhagalpur, Murshidabad, Berhampore, Burdwan and Dacca. The hours of working and sale were contracted. The sale of liquor to children was rigidly prohibited. District officers were instructed to allow District and Municipal Boards a voice in the selection of sites and other matters of local interest; and a large addition was made to the supervising and detective staff including ten Special Deputy Collectors, who were selected for their knowledge of and aptitude for excise work, and who were employed on that work alone. The increase of expenditure incurred in giving effect to these proposals was considerable.

41. The head of *Provincial Rates*, which is wholly Provincial, represents principally the proceeds of the Public Works Cess, but it includes also the rates for the general management of Wards' and Attached estates, and from October 1886 the recoveries from District Funds of the proportional cost of collecting Road Cess. The contract estimate of receipts was taken in 1881-82 at Rs. 35,40,000, and the actuals in each year were Rs. 36,07,000, Rs. 38,15,000, Rs. 37,65,000, Rs. 38,71,000, and Rs. 39,95,000. The profit of the Local Government was

therefore Rs. 67,000 in 1882-83, Rs. 2,75,000 in 1883-84, Rs. 2,25,000 in 1884-85, Rs. 3,31,000 in 1885-86, and Rs. 4,55,000 in 1886-87. This increase was due to revaluations which were in progress in almost every district during the period of the contract.

42. The head of *Assessed Taxes*, which was wholly Imperial under the former contract, and was equally divided between Imperial and Provincial in the contract of 1882, represents the receipts of the abolished License-tax. The Income-tax was at first wholly Imperial; and the figures shown under this head for 1886-87 merely represent the grants made by the Supreme Government—of amounts equal to those credited to Provincial in 1885-86—to avoid the disturbance of the contracts The depression of trade, which marked the greater part of the period 1882—87, and which was intensified for Bengal by special causes, such as the through opening of the Rajputana-Malwa State Railway in the latter part of 1881, and the consequent diversion of a part of the trade of Northern India to Bombay, injuriously affected the receipts from this source. The contract of 1882 was framed on the basis of a revenue of Rs. 8,25,000 (Provincial share) from this source, whereas the actuals were Rs. 7,60,000, Rs. 7,59,000, Rs. 7,48,000, Rs. 7,67,000, and Rs. 7,67,000, respectively. The aggregate loss to the Provincial revenues exceeded therefore 3¼ lakhs of rupees during the currency of the contract, notwithstanding that special efforts were made to ensure the accuracy of the assessments, and to prevent the escape of persons legally liable.

43. The Public Works Cess and the License-tax represent the taxation imposed in Bengal (the former being peculiar to the province) in connection with the scheme of "famine finance," with which the name of Sir John Strachey is associated. That scheme proposed to improve the financial position of the Empire to the extent of two crores of rupees a year, of which 50 lakhs were to be regarded as a normal working surplus, while 150 lakhs were to be devoted to famine insurance, being expended either on actual relief, on reduction of debt, or on the construction of remunerative works calculated to prevent or mitigate the severity of famine. Part of this sum it was proposed to provide by new taxation (*i.e.* by the License tax), and part by throwing additional charges on the Provincial Governments; but as far as Bengal is concerned, the whole contribution paid towards the so-called Famine Fund was raised by additional taxation; for the charges thrown on Provincial by the Contract of 1877, which consisted mainly of the interest on provincialized railways and canals, were met by the imposition of the Public Works Cess, which, as already stated, is peculiar to Bengal. The total net sum contributed by Bengal in each year since 1878-79 under these two heads was as follows:—

Net contribution (receipts, less cost of collection).	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Assessed taxes ...	17,21,000	20,88,000	12,18,000	15,43,000	14,26,000	14,22,000	14,02,000	14,46,000	*14,46,000
Provincial rates ...	35,93,000	35,67,000	34,68,000	35,03,000	35,60,000	37,68,000	37,18,000	38,04,000	38,59,000
Total ...	53,14,000	56,55,000	46,86,000	50,46,000	49,86,000	51,90,000	51,20,000	42,50,000	53,05,000

* The substitution of the Income-tax for the License-tax makes it impossible to determine the correct contribution to be paid in 1886-87. But it may be assumed that the License-tax, if continued, would have yielded the same amount as in 1885-86.

44. In 1880-81 the minimum assessable limit was raised to Rs. 500, with the result of exempting about 66,567 assessees of the poorest classes, and giving up about 5¼ lakhs of net revenue. These figures show that since 1878-79, the first year in which the new taxes were in full operation, the people of Bengal paid rather more than half a million sterling per annum as an insurance against famine. During this period the only expenditure in the province on actual relief of famine or the construction of protective works was as follows:—

	1878-79.	1879-80.	1880-81	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Famine Relief	......	......	......	......	62,940	12,760	14,841	1,23,840	Nil.	2,14,381
Protective works, Railways ..	......	......	......	......	Nil.	Nil.	Nil.	Nil.	Nil.	......
Protective works, Irrigation ..	......	......	......	......	Nil.	3,00,000	4,00,000	Nil.	Nil.	7,00,000
Total .	......	......	......	......	62,940	3,12,760	4,14,841	1,23,840	Nil.	9,14,381

45. Under the heads of Forests and Registration, the following figures compare the net revenue in each year with the contract estimate :—

FORESTS.—(*Imperial and Provincial*)

	Contract estimate.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts ...	6,28,000	6,94,000	6,94,000	5,72,000	5,97,000	6,54,000
Expenditure ...	3,96,000	3,82,000	3,88,000	4,12,000	3,70,000	4,23,000
Net revenue ...	2,32,000	3,12,000	3,06,000	1,60,000	2,27,000	2,31,000
Provincial share .	1,16,000	1,56,000	1,53,000	80,000	1,13,000	1,16,000

REGISTRATION.—(*Imperial and Provincial.*)

	Contract estimate.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts ...	9,92,000	10,40,000	9,82,000	10,82,000	10,94,000	10,38,000
Expenditure ..	6,09,000	6,28,000	5,58,000	5,94,000	6,01,000	5,62,000
Net revenue ...	3,83,000	4,12,000	4,24,000	4,88,000	4,93,000	4,76,000
Provincial share ...	1,91,000	2,06,000	2,12,000	2,44,000	2,47,000	2,38,000

46. The *Forest* Department in Bengal is of comparatively little importance from a revenue point of view; and during 1882-87 the depression of trade caused a slackness in the demand for timber, especially for railway sleepers. The operations of the five years resulted in a small aggregate profit of Rs. 38,000. From 1883-84 revenue record-room receipts and charges were transferred from Registration to Land Revenue. These averaged about Rs. 85,000 and Rs. 70,000 a year respectively, so that the net revenue under Registration was really about Rs. 15,000 a year more than appears from the above statement. Allowing for this, it will be seen that the net revenue from this source increased in five years from Rs. 3,83,000 to Rs 4,91,000, or by over 28 per cent., while the profit of the Provincial Government amounted to Rs. 2,22,000 during the whole period of the contract. These satisfactory results were due to the steady introduction of rural in place of official agency, and to the increase of registrations consequent on the passing of the Bengal Tenancy Act.

47. Under the heads of *Law and Justice* (proper) and *Jails* the contract worked very unfavourably for the Local Government. On the receipt side the contract estimate was taken at 9 lakhs and 7 lakhs, respectively, the former including an item of 8 lakhs under the subhead of general fines, fees, and forfeitures, while the latter was almost wholly composed of the sale proceeds of jail manufactures. Under the latter head the estimate was realised, except in 1883-84, when the orders of Lord Ripon's Government restricting jail manufactures reduced the receipts from that source to Rs. 6,38,000. The total receipts from jails in each year were Rs. 8,47,000, Rs. 6,48,000, Rs. 7,29,000, Rs. 7,87,000, and Rs. 7,45,000, against the contract estimate of 7 lakhs. The receipts from fees and fines, however, never came up to the estimate, and the total receipts under Law and Justice (proper) were Rs. 8,23,000, Rs. 7,64,000, Rs. 7,55,000, Rs. 7,41,000, and Rs. 7,56,000, against the contract estimate of 9 lakhs. The net loss on the whole contract was about 4 lakhs of rupees. The expenditure on these two branches of the administration rose from a contract estimate (1881-82) of Rs. 88,33,000 to Rs. 96,19,000 in the last year, and the deficit which had to be made up from other sources was Rs. 4,43,000, Rs. 4,85,000, Rs. 5,76,000, Rs. 9,06,000, and Rs. 7,86,000 in each year since the contract was framed. Valuable reforms were carried out in the

Jail Department, including the reorganisation and complete equipment of the personnel of the superior staff, the development of the Central Jails at Dacca and Midnapore, the establishment of a district jail at Khulna, the introduction of warder guards in place of police, the establishment of a new Juvenile Reformatory at Hazaribagh, and the large development of that at Alipore. These measures cost nearly 1½ lakhs per annum. The rise in the price of food increased the expense of dieting prisoners by an equal sum. though the jail population steadily diminished in numbers. During the five years, the pay of the Subordinate Judicial Service was improved at a cost of about 1½ lakhs a year. Seven Subordinate Judges and 12 munsifs were added to the permanent staff, while numerous temporary officers were appointed. Three additional Judges were temporarily appointed to clear off arrears in the High Court. For the rest, the increase in litigation caused a steady continuous increase in the charges for ministerial establishments, for the service of processes, and for the copying of judicial documents.

48. Under the head of *Police* the contract grant was fixed at Rs. 41,32,000, and the actual expenditure in 1881-82 was Rs. 40,87,000. From the beginning of 1882-83, however, the cost of police in mufassal municipalities was assumed by Government, and a charge of about 4½ lakhs per annum, for which the terms of the contract made no provision, was thus added to the Provincial burdens. There was a set off against this of about one lakh under Medical, and half a lakh under Education, on account of various charges which were simultaneously transferred to Municipal Boards; and the net cost of this reform was about 3 lakhs a year since the beginning of the contract. This was increased by Rs. 61,000 a year from the beginning of 1884-85, when by Act IV (B.C.) of 1884 a similar measure of relief was extended to the Howrah and Suburban Municipalites, which since then paid only Rs. 49,000 a year for police, instead of Rs. 1,10,000 a year as formerly.

49. Under *Marine* the net receipts and charges in each year since 1882-83 were as follows:—

	Contract estimate.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Gross receipts* ..	11,09,000	10,17,000	9,61,000	8,37,000	9,16,000	9,62,000
Charges ...	10,97,000	9,51,000	8,69,000	8,47,000	8,29,000	8,53,000
Net receipts ...	12,000	66,000	92,000	.....	87,000	1,09,000
Net charges ...	......	......	.. ...	10,000	......	......

* Includes in each year a special allotment of Rs. 65,000 for the cost of the *Undaunted*, credited under Land Revenue.

The falling off in receipts was wholly due to the stagnation of trade. In 1881-82, the last year of Sir Ashley Eden's administration, the number of vessels which entered the Port of Calcutta was 1,074, with a total tonnage of 1,808,005, while the number of clearances was 1,058, with a total tonnage of 1,774,084. In both cases the number of vessels and the aggregate tonnage reached the highest figure ever recorded at Calcutta. By 1884-85 the shipping had fallen to 903 entries with a tonnage of 1,729,874, and 923 clearances with a tonnage of 1,745,271, representing the smallest aggregate trade that has visited Calcutta in any year since the opening of the Suez Canal.

Except in respect of pilotage the Bengal Marine Department is of little importance. The only matters of note during the five years 1882-87 were the grant of a subsidy of Rs. 35,000 a year to Messrs. Macneill and Company since 1883-84 for a rapid steamer service between Dhubri and Dibrughar; and a grant of Rs. 10,000 a year to the same firm, for a similar service to Sylhet. In both cases the subsidies were supplementary of similar grants made by the Chief Commissioner of Assam.

50. The expenditure on *Education* was taken in the contract estimates at Rs. 26,77,000. The actual expenditure in each year was Rs. 30,16,000 Rs. 31,55,000, Rs. 34,00,000, Rs. 32,95,000, and Rs. 33,54,000. Up to 1884-85 it was possible to provide annually increasing allotments for this branch of service, but since then the demands of other Departments swallowed up

the scanty increments of the Provincial revenues, and educational expenditure remained stationary. Efforts were, however, made to give effect to the recommendations of the Education Commission. The inspecting staff was strengthened by the appointment of two new Inspectors of Schools, four Joint and Assistant Inspectors, three Deputy Inspectors, and 16 Sub-Inspectors, while the pay of the latter class of officers was raised to Rs. 50 wherever it was less than that sum. These measures were carried out at a cost of Rs. 60,000 a year. The primary grant was gradually raised from 5 lakhs, at which it stood at the close of Sir Ashley Eden's term of office, to 7½ lakhs; while the annual provision for grants-in-aid of schools managed by independent agency was simultaneously raised by upwards of 1⅓ lakhs. The transfer of police charges to Government enabled Municipal Boards to increase their expenditure on education by upwards of Rs. 60,000 a year. The limited resources at the disposal of Government made it impossible to do much in the way of developing technical education, but it was not altogether neglected. The Engineering College at Sibpur was enlarged and developed, and the School of Art in Calcutta was sedulously encouraged, and made rapid strides in the number of its students and the quality of the instruction imparted.

51. The operation of the contract was more keenly felt in the *Public Works Department* than in any other branch of the public service. The Government of India originally proposed to settle the terms of the contract on the basis of a normal expenditure of 75 lakhs a year for public works of all kinds, including the maintenance, repair, and working expenses of all railways and canals, the construction of new works, and the construction, maintenance and repair of civil roads and buildings, but exclusive of interest charges. Sir Ashley Eden strenuously urged that the grant should not be less than 99 lakhs, the average of the preceding three years, but eventually the offer of the Government of India was accepted with the modification that a lump sum of 15 lakhs, equivalent to 3 lakhs a year, was credited to the Local Government.

52. The following table shows the actual expenditure incurred in each year since 1881-82:—

	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
State Railways (Capital).	11,32,000	18,49,000	8,27,000	1,32,000	51,000	58,000
Subsidised Railways	......	11,000	40,000	58,000	26,000	1,000
Irrigation (Capital)	22,09,000	17,18,000	5,03,000	2,02,000	3,77,000	2,18,000
Civil works ...	66,87,000	66,82,000	45,75,000	27,15,000	27,27,000	38,85,000
Total ...	1,10,28,000	1,02,60,000	59,45,000	31,07,000	31,81,000	41,62,000

53. The dwindling of the grants under every head was most striking. During the first two years of the contract funds were provided, though with difficulty, for the Dinajpur branch of the Northern Bengal State Railway, and for the completion of the Diamond-Harbour branch of the Calcutta and South-Eastern Railway, the whole cost of which was found from Provincial revenues. With the completion of these works, the construction of railways from Provincial funds was entirely suspended, the small sums shown in 1884-85 and subsequent years being merely on account of the Kaunia-Dhurlla State Railway which is a Provincial work. In respect of irrigation works, the course of events was almost precisely similar. No new work of any kind was undertaken during the term of the 1882—87 contract, and it was with the utmost difficulty that funds were provided for the improvement of the Calcutta canals, and the prosecution of the Orissa Coast Canal, both of which works had been undertaken during Sir Ashley Eden's term of office. The Orissa Coast Canal, designed to place Orissa in inland communication with Bengal, and likely to be of the highest value in the event of famine, was begun in 1881. The final opening of the canal was delayed in consequence of unexpected difficulties in locking the Burrabulong river, and of the damage done by the cyclone of September 1885, which also caused the estimates to be exceeded. This work was admittedly *protective* in its nature, and its

importance chiefly consists in the security it is calculated to afford against famine. Yet the only assistance which the Bengal Government received in its construction from the Famine grants consisted of two grants of three and four lakhs respectively, given on the condition that the Imperial Government should share proportionately in the receipts. The whole of the remainder of the cost, which was expected to amount to nearly 40 lakhs, was provided from Provincial Funds, and nearly 20 lakhs of this were found during the currency of the contract.

54. During the first two years of his administration, Sir Rivers Thompson endeavoured to provide for the completion of works in progress and to meet the demand for new works to the full extent of the balance at credit of the Province. The offices of the Bengal Government in Calcutta were completed, court-houses were completed or constructed at Jessore, Mymensingh, Faridpur, Pabna, Gaya, Ranchi, and Darbhanga; jails at Dacca, Midnapore, Buxar, Gaya, Ranchi, Darbhanga, Bogra, Mymensingh and Purulia; the Secretariat offices at Darjeeling since converted into the Deputy Commissioner's Court were begun; numerous sub-divisional court-houses and munsifis were constructed, and a variety of miscellaneous public improvements carried out. By the end of 1883-84, however, the Provincial balances had been reduced to Rs. 6,87,000, and at this juncture the Secretary of State issued orders that they should not ordinarily be allowed to fall below 20 lakhs. The Public Works grant for 1884-85 including Civil Works in charge of Civil Department was therefore restricted to 30 lakhs; and that for 1885-86 was, under pressure of the complications on the North-West frontier, cut down to Rs. 27,85,000.

55. Sir Rivers Thompson's power of making contributions from the Provincial revenues in aid of public objects was greatly circumscribed by financial pressure. The expenditure in no one year exceeded Rs. 3,20,000, and averaged about 2½ lakhs a year; and when it is remembered that nearly 1½ lakhs a year represent compulsory payments of an official nature, the available balance is seen to be exceedingly small. Nevertheless, it was found possible to give grants of Rs. 50,000 each to the municipalities of Burdwan, Bhagalpur, and the Suburbs of Calcutta in aid of local schemes of water-supply; of Rs. 46,000 to the District Road Committee of the 24-Parganas; of Rs. 55,000 to that of Champaran; and of Rs. 20,000 to that of Nadia, for feeder roads; of Rs. 30,000 to the Darjeeling Municipality for the construction of a market, a wire tramway for the removal of rubbish, and other local works; of Rs. 10,000 for the improvement of the town of Chittagong; of Rs. 15,000 for drainage works in Serampore; and of numerous smaller amounts to District Road Committees and Municipal Boards for miscellaneous objects. The Lieutenant-Governor also gave large grants from the balance of the Wahabee Fund for the improvement of the town and district of Patna, including a sum of Rs. 30,000 for a much needed road from the city chowk to the Railway Ferry Ghat, and a grant-in-aid of Rs. 10,000 towards the Anglo-Arabic School established for the special encouragement of Muhammadan education.

56. The following table shows the net financial result of the working of all Provincial *Railways* and *Canals*, whether technically classed as Productive Public Works or not, during each year from 1881-82 to 1886-87.

RAILWAYS.

	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs	Rs.	Rs.	Rs.	Rs.	Rs.
Gross receipts ...	32,70,000	37,88,000	41,24,000	43,10,000*	45,03,000	53,02,000
Working expenses	19,03,000	20,40,000	25,00,000	30,72,000	30,39,000	31,43,000
Net earnings ...	13,67,000	17,48,000	16,24,000	12,38,000	14,64,000	21,59,000
Interest ...	12,86,000	14,14,000	15,94,000	17,15,000	19,07,000	20,68,000
Net profit ...	81,000	3,34,000	30,000	......	......	91,000
Net loss ...	......	......	......	4,77,000	4,43,000	......

* From the 1st July 1884, the Calcutta and South-Eastern Railway was resumed by the Imperial Government, and its receipts and charges disappear from the Provincial account. A lump sum of Rs. 22,500 for 1884-85, and of Rs. 30,000 for each succeeding year (credited on this account under Land Revenue) is here added to gross earnings, and the interest charges are also diminished by the amount credited to Provincial on this account.

CANALS.

	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Gross receipts ...	19,55,000	20,72,000	19,62,000	20,85,000	26,17,000	22,26,000
Working expenses	14,51,000	17,97,000	17,44,000	17,93,000	18,39,000	18,05,000
Net earnings ...	5,04,000	2,75,000	2,18,000	2,92,000	7,78,000	4,21,000
Interest ...	20,75,000	21,16,000	21,61,000	22,13,000	22,49,000	22,73,000
Net loss ...	15,71,000	18,41,000	19,43,000	19,21,000	14,71,000	18,52,000

By the end of 1881-82, when the contract of 1877 came to an end, the total capital expenditure on State Railways in Bengal (exclusive of the East Indian Railway and private lines) amounted to 427 lakhs of rupees, and the mileage of lines open for traffic was 467. Interest, however, was payable only on 336 lakhs, the remainder consisting of Provincial contributions and the capital of the Calcutta and South-Eastern Railway. The principal lines which were then under the control of the Government of Bengal were the Northern Bengal State Railway with an open mileage of 230, the Tirhoot State Railway with 85 miles, the Patna-Gaya with 57 miles, the Calcutta and South-Eastern Railway with 33, and the Kaunia-Dharla (a Provincial railway) with 40. During the five years 1882-87, 19 miles were added to the Northern-Bengal State Railway by the opening of the branch to Dinajpur; the Tirhoot system was practically completed by the construction of branches to Bettiah, Jhinjarpur, and Hajipur, aggregating about 160 miles; a branch of the Calcutta and South-Eastern State Railway was constructed to Diamond Harbour; and an entirely new line, 85 miles in length, was constructed connecting Naraingunj, Dacca, and Mymensingh. A swift daily steamer service was started between Naraingunj and Goalundo on the Eastern Bengal State Railway, and the chief districts of Eastern Bengal were thus placed in close communication with Calcutta. These works cost 147½ lakhs of rupees, of which upwards of 124 lakhs bore interest at 4 per cent., the remainder having been provided from the Provincial revenues. Seventy-eight lakhs and a half were spent on the Assam Bihar State Railway, designed to link the Tirhut and Northern Bengal systems, and including the important bridge across the Gunduck to connect the Tirhut line with the Bengal and North-Western Railway. The early part of the contract of 1882-87 witnessed unusual activity in the construction of railways by private agency. Short branch lines were constructed by private bodies and firms connecting Tarkessur with Seoraphuli on the East Indian Railway and Baidyanath with Deoghur and Rohini. The Central Bengal Railway Company constructed lines aggregating 125 miles in length, connecting Ranaghat on the Eastern Bengal State Railway with Bongong and Khulna; and the Bengal and North-Western Company, receiving a guarantee from the Imperial Government, constructed a valuable and most successful railway, 460 miles in length, from the North-Western Provinces to Sonepore on the Ganges opposite Patna.

57. The table given in the last-preceding paragraph shows that while the gross receipts on the State Railways rose from Rs. 32,70,000 to Rs. 53,02,000 (or, excluding the Calcutta and South Eastern Railway, from Rs. 31,10,000 to Rs. 52,72,000), this improvement was accompanied by so heavy an increase of working expenses and interest that the net loss to the Provincial Government during the five years covered by the contract was Rs. 4,65,000. A considerable part of this was due to the locking up of capital on lines not yet open for traffic, or still in their infancy. For instance, close upon 90 lakhs of rupees was spent upon the Assam-Bihar line. The Bengal Government had to pay 4 per cent. per annum on this capital, which of course represented so much dead weight to be carried by the open lines. Similarly, 64 lakhs were spent on the Dacca State Railway, which, though certain to yield a handsome return ultimately, could do little more during the contract than pay its working expenses. For similar reasons part of the capital expended on the Tirhoot State Railway was only partially

productive. But much of the retrogression was undoubtedly due to the stagnation of trade in the years succeeding 1883-84, combined with the failure of the food grain harvests in parts of Bihar, and of the jute crop in Bengal. The only Provincial railways of importance which were open sufficiently long for a fair comparison are the Northern Bengal, the Patna-Gaya, and the Tirhoot State Railways. The following table shows the capital outlay on each of these lines (both Imperial and Provincial), the gross receipts, working expenses, net earnings, and percentage of earnings to capital, in each year from 1881-82 to 1885-86:—

NORTHERN BENGAL STATE RAILWAY.

	Capital to end of year.	Gross receipts.	Working expenses.	Net earnings.	Percentage of earnings on capital.
	Rs.	Rs.	Rs.	Rs.	
1881-82 ...	2,09,54.000	19.27,000	9,60,000	9,67,000	4·6
1882-83 ...	2,16,52,000	22,80,000	10,72,000	12.08,000	5 5
1883-84 ...	2,25,43,000	21,33,000	12,35,000	8,98,000	3·9
1884-85 ...	2,16,73,000	21,67,000	15,20,000	6,47,000	2·9
1885-86 ...	2,27,72,000	23,39,000	14,70,000	8,69,000	3·8

TIRHUT STATE RAILWAY.

	Capital to end of year.	Gross receipts.	Working expenses.	Net earnings.	Percentage of earnings on capital.
	Rs.	Rs.	Rs	Rs.	
1881-82 ...	1,15,17,000	5,79,000	3,49,000	2,30,000	1·9
1882-83 ...	1,18,14,000	7,10,000	4,41,000	2,69,000	2·2
1883-84 ...	1,40,56,000	9,82,000	6,79,000	3,03,000	2 1
1884-85 ...	1,50,73,000	12,50 000	9.68,000	2,82,000	1·8
1885-86 ...	1,52,71,000	12,80,000	9,12,000	3,68,000	2·4

PATNA-GAYA STATE RAILWAY.

	Capital to end of year.	Gross receipts.	Working expenses.	Net earnings.	Percentage of earnings on capital.
	Rs.	Rs.	Rs.	Rs.	
1881-82 ...	38,56,000	5,36,000	3,41,000	1,95,000	5
1882-83 ...	38,58,000	3,98,000	2,71,000	1,27,000	3·2
1883 84 ...	37,63,000	4,70,000	2,34,000	2,36,000	6·3
1884-85 ...	39,40,000	5,18,000	2,98,000	2,20,000	5·6
1885-86 ...	40,38,000	5,17,000	2,72,000	2,45,000	6

58. The net results of the working of the *canals* under the Bengal Government fluctuated less, chiefly for the reason that deficient rainfall, which tends to contract the traffic on railways, stimulates the demand for water for irrigation purposes. The works managed by the Bengal Government included the Orissa and Midnapore Canals, the Hidgellee Tidal Canal, and the Sone system, which are classed as Productive Public Works; and the Orissa Coast Canal, the Calcutta and Eastern Canals, the Nuddea works, and the Saran and Damoodar Canals, which are not classed as productive.

59. The general financial result of the contract of 1882 may be summarised thus—the revenue, which was estimated at Rs. 3,93,21,000, averaged

Rs. 4,15,52,000, giving an increase of Rs. 22,31,000; the expenditure, which was estimated at Rs. 4,48,53,000, averaged only Rs. 4,26,61,000, being a reduction of Rs. 21,92,000; and the deficit, which averaged Rs. 11,09,000, was met by drawing upon the accumulated balances of the province to the extent of Rs. 55,44,000. The chief branches of revenue which contributed to the increase in receipts were Stamps, Provincial Rates, and Registration; while the reduction in expenditure was almost wholly confined to the Public Works Department, in which the grants for civil works, for capital expenditure on railways and canals, and for irrigation (net charges) were cut down so as not merely to balance the account, but to provide for a large increase of expenditure on Revenue establishments, Judicial Courts, Jails, Police, Education, Superannuations, and the net charges of Provincial State Railways. The contract closed with a credit balance in the Imperial Treasury of only Rs. 19,99,000, which was short by Rs. 1,000 only of the minimum working balance of twenty lakhs which had been prescribed by the Secretary of State.

60. From these figures, and from what has gone before, it may readily be perceived how different was the task imposed on Sir Rivers Thompson from that which fell to the lot of his predecessor. Sir Ashley Eden enjoyed the advantage of a contract, which secured to the province under his control the entire benefit accruing from improved administration, and which in the event yielded financial results surpassing all anticipation. His term of office was favoured with entire immunity from famine and other forms of natural disaster; the commercial torpor then paralysing the industries of the civilized world had not yet spread to India; and a succession of splendid harvests raised the cultivating classes almost into temporary affluence. The ample resources thus unexpectedly brought within his reach he liberally employed in improving many branches of the machinery of Government and in supplying the province with railways, canals, public buildings and other permanent improvements, of which the want had long been admitted. During the five years 1882-87, the financial history of Bengal was altogether different. The contract of 1877 was succeeded by a settlement, which left little scope for the development of the Provincial revenues, and which speedily necessitated a serious contraction in the scale of Provincial expenditure. Trade at last succumbed to the influences which had produced universal stagnation in the commercial world of Europe and America, and its languishing vitality was promptly reflected in many branches of the public exchequer. A scanty and uneven rainfall in three years in succession swallowed up the profits of five years of plenty, and although actual distress was nowhere so acute as to call for the intervention of the State, except on a small and partial scale, in many districts the resources of the poorer classes were wholly exhausted, and no margin whatever left for expenditure on luxuries. It was often difficult to provide adequately for the ordinary requirements of the public service, and it was necessary rather to seek for opportunities of effecting economies than of introducing administrative reforms. The chief measures of Sir Rivers Thompson's Government of Bengal were of the class to which large financial resources are not indispensable. The Bengal Tenancy Act, the prosecution of the Kidderpore Docks for which the capital was found by the Government of India, the grant of an elective constitution to Municipal Boards, the inauguration of self-government in the interior, the introduction of competitive examinations for appointment to the Subordinate Civil Service, the appointment of the Commission for the revision of ministerial salaries, and the re-arrangement of work and authority in district and divisional offices—all these are measures whose importance is mainly economic and political and which leave little trace on the financial history of the time. Nevertheless funds were provided for certain reforms and improvements which the progress of the province had rendered more than ordinarily pressing. The establishment of an Agricultural Department supplied a want to which in other provinces a much higher degree of priority had been attached, and which the revision of the law of landlord and tenant in Bengal had forced into immediate prominence. The increase to the salaries of the Subordinate Executive and Judicial Services improved the prospects of a deserving body of public servants. The appointment of additional judicial officers supplied the means of a swifter, and therefore of a better, administration of justice. The progressive additions to

the grant for primary education kept pace with the downward filtration among the masses of the desire for mental improvement. The Calcutta Exhibition of 1883-84 was instrumental in spreading a wider knowledge of the raw products of India among the manufacturers of Europe, and in acquainting the native population of this country with the capabilities of European machinery. In taking over and carrying on the Iron-works at Barrakur, the Lieutenant-Governor kept alive the embers of an industry which cannot fail to have a great future before it, when the mineral wealth of Chota Nagpur and Central India shall have been adequately exploited. The Orissa Coast Canal was a work of supreme importance for the security of the province of Orissa, and its speedy completion forms the only safeguard against a repetition of the calamity of 1865-66.

Contract of 1887-92.

61. The following comparative statements show the results under receipts and expenditure according to the contract assignment with the Governmet of India for the five years 1887-92 compared with the actuals of the subsequent years:—

REVENUE.

RECEIPTS.	Contract consignment.	Actuals, 1887-88.	Actuals, 1888-89.	Actuals, 1889-90.	Actuals, 1890-91.	Actuals, 1891-92.
		Rs.	Rs.	Rs.	Rs.	Rs.
Opening balance		19,98,924	33,68,931	26 51,072	36,76,547	24,72,774
Principal heads of Revenue—						
I.—Land Revenue. Proper	98,53,000	97,88,195	95,87,775	1,00,16,495	99,92,530	1,14,02,385
I.—Land Revenue. Adjustment ...	—6,80,000	(—)2,40,185	(—)5,01,838	(+)1,61,032	(—)22,97,338	
III.—Salt	1,00,000	78.207	88,195	1,23,718	1,28,226	1,10,854
IV.—Stamps	1,00,87,000	1,03,62,028	1,03,79,239	1,06,78,523	1,06,85,194	1,13,25,346
V.—Excise	24,82,000	27,16,436	27,22,909	26,18,829	26,16,210	27,83,491
VI.—Provincial Rates	39,20,000	42,30,538	41,56,323	43,06,024	43,19,033	45,24,517
VII.—Customs	57,000	59,584	46,801	55,094	57,973	57,104
VIII.—Assessed Taxes	17,84,000	18,69,971	19,55,698	20,83,503	21,19,441	21,53,964
IX.—Forests	3,50,000	3,28,897	3,38,454	3,84,359	3,63,696	3,94,776
X.—Registration	5,38,000	5,08 912	5,46,772	6,00,033	6,19,539	6,67,156
Total ...	2,84,82,000	2,97,08,583	2,93,20,418	3,10,27,610	2,86,05,404	3,34,19,593
IIX.—Interest	73,000	67,094	97,383	1.04,207	92.509	1 18,103
Post Office, Telegraph and Mint—						
XIV.—Telegraphs	......	1,163	926	863	129	......
Receipts by Civil Department—						
XVI.—Law and Justice— Fees, fines, and forfeitures of Judicial Courts ...	7,69,000	7,74,255	7,89.538	8,04,582	8,06,337	8,81,016
Jails	8,46,000	7,10,279	7.75,021	8,59,502	7,6[illegible]	9,27,642
XVII.—Police	7,05,000	3,13,349	3 38,197	4.26,742	4,51,678	4,48,634
XVIII.—Marine	8,08,000	9,10,096	9,11,734	8,54,207	9,18,736	9,65,498
XIX.—Education	5,25,000	6,94,633	6,11,884	5,69,861	5,75,686	5,95,123
XX.—Medical...	1,46,000	1,38,554	1,36,165	1,46,352	1,42,812	1,46,848
XXI.—Scientific and other Minor Departments	1,41,000	1,56,308	1,65,154	1,55,780	1,77,394	1,96,040
Total ...	39,40,000	36,97,494	37,27,693	38,17,026	39,28,936	41,60,711
Miscellaneous—						
XXII.—Receipts in aid of superannuation ...	41,000	45,804	48,849	45,601	1,26,507	1,26,979
XXIII.—Stationery and Printing ...	1,23 000	1,88,397	1,75,074	1,50,506	2,94,115	1,57,368
XXV.—Miscellaneous	7,45,000	6,94,837	8,34,785	8,02,574	7,70,249	8,36,024
Total ...	9,09,000	9,28,738	10,58,708	9,98,681	11,90,903	11,20,371
Railways—						
XXXVI.—State Railways (gross earnings)	1,00,19,000	1,12,78.485	1,17,33,868	1,25,04,406	1,46.45.003	1,60,39,547
Irrigation—						
XXIX.—Major works (direct receipts)	13,30,000	11,63,229	13,94,369	15,21,274	13,46,728	16,02,710
XXX.—Minor works and navigation— By PublicWorks Department	9,44,000	8.63,662	8,67,844	7,88,642	8,41,062	8,17,934
By Civil Department ...		1,02,008	1,02,154	1,02,130	93,637	1,17,692
Total ...	22,74.000	20,67,899	23,64,367	24,12,046	22,84,427	25,38,336
Buildings and Roads—						
XXII.—Civil works— By Public Works Department	7,50,000	1,75,422	2,00.076	2.52,843	4.72,445	4,05,262
By Civil Department		2,27,379	2,74,564	3,16,756	2,64,451	
Total ...	7,50,000	4,02,801	4,74,640	5,69,601	7,36,896	4,05,262
Total ..	4,64 17,000	4,81,47,256	4,87,78,003	5,14,34,505	5,14,84,2[illegible]7	5,78,01,983
GRAND TOTAL ...	......	5,01,46,180	5,20,86,934	5,40,85,577	5,51,60,754	6,02,74,757

EXPENDITURE.

EXPENDITURE.	Contract assignment.	Actuals, 1887-88.	Actuals, 1888-89.	Actuals, 1889-90.	Actuals, 1890-91.	Actuals, 1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direct demands on the revenues—						
1. Refunds and Drawbacks	1,55,000	1,56,096	1,40,156	1,50,185	1,48,135	1,54,203
2. Assignments and Compensations	1,68,000	1,88,565	1,39,300	1,55,060	1,63,447	1,66,129
Charges in respect of collection—						
3. Land Revenue	34,08,000	34,05,966	35,13,059	35,47,957	36,30,963	41,14,334
5. Salt	11,000	12,369	21,224	46,521	68,258	51,608
6. Stamps	3,75,000	3,64,216	3,70,334	3,84,679	3,63,961	3,38,834
7. Excise	96,000	1,06,629	1,08,602	1,41,480	1,62,972	1,66,416
8. Provincial Rates	......	3,47,213	3,17,410	3,37,184	4,05,650	4,34,286
9. Customs	4,97,000	5,30,638	5,24,020	5,39,442	5,42,113	5,18,724
10. Assessed Taxes	85,000	75,705	74,865	80,649	87,930	90,014
11. Forests	2,25,000	1,94,839	1,88,101	1,95,985	2,06,686	2,10,235
12. Registration	2,95,000	2,89,231	2,99,729	3,14,316	3,14,872	3,41,736
Total ...	53,15,000	56,71,487	56,96,800	58,96,458	60,94,067	65,86,519
13. Interest on ordinary debt ...	......	......	45,803	67,037	84,461	1,01,134
Post Office, Telegraph and Mint—						
15. Post Office	......	......	......	......	......	4,498
16. Telegraphs	1,000	915	884	868	(−)481	......
Salaries and expenses of Civil Department—						
18. General Administration	15,62,000	15,42,879	15,71,096	16,20,623	15,84,964	16,16,331
19. Law and Justice—						
Judicial Courts	80,11,000	79,40,386	81,01,737	81,54,840	82,40,807	84,82,775
Jails	17,28,000	15,31,090	17,95,795	18,09,078	20,40,307	20,22,010
20. Police	47,48,000	47,86,787	48,34,099	52,93,625	58,65,884	59,61,810
21. Marine	7,81,000	9,16,601	10,71,190	12,11,342	9,40,470	9,42,251
22. Education	32,46,000	24,22,221	24,58,200	24,94,936	25,24,854	25,51,576
24. Medical	14,59,000	14,43,691	14,87,730	15,29,158	15,65,936	16,66,727
25. Political	......	......	24,462	21,273	21,801	34,508
26. Scientific and other Minor Departments.	3,30,000	3,03,598	3,10,050	3,04,008	2,97,048	3,12,858
Total ...	2,18,65,000	2,08,87,253	2,16,54,368	2,25,28,883	2,30,82,071	2,34,90,843
Miscellaneous—						
29. Superannuation, &c.	12,54,000	12,79,572	13,70,007	14,36,145	15,13,417	15,99,528
30. Stationery and Printing	10,59,000	10,46,423	10,21,438	9,89,272	11,51,087	13,35,840
32. Miscellaneous	3,48,000	3,43,134	2,40,632	2,44,974	2,25,640	2,95,254
Total ...	26,61,000	26,69,129	26,32,077	26,70,391	28,90,144	32,30,628
Famine Relief and Insurance—						
33. Famine Relief	......	......	54,338	1,34,269	12,682	......
37. Construction of Railways ...	......	(—)1,849	(—)10,803	235	13,010	7,750
Railways (Revenue Account)—						
38. State Railways—						
Working expenses	59,61,000	59,34,865	59,40,007	60,84,635	71,30,816	1,04,88,032
Interest on debt	28,02,000	30,81,696	32,61,382	34,32,670	35,81,548	36,98,508
40. Subsidized Companies—						
Land, &c.	......	49	(—)366	1,072	5,129	1,358
41. Miscellaneous Railway expenditure.	......	68,290	1,42,092	82,510	79,914	76,164
Total ...	87,63,000	90,84,900	93,52,715	96,00,887	1,07,97,407	1,42,64,062
Irrigation—						
42. Major works—						
Working expenses	11,25,000	15,03,585	14,18,090	13,55,565	13,51,272	13,54,171
Interest on debt	22,94,000	23,13,446	23,39,849	23,64,042	23,81,997	24,03,107
43. Minor works and navigation—						
Minor works by Public Works Department	11,48,000	15,18,533	14,75,746	14,19,180	15,02,988	15,59,706
Minor works by Civil Department	2,000	1,916	1,911	2,017	11,508	14,563
Total ...	45,69,000	53,37,480	52,35,596	51,40,804	52,47,765	53,31,627
Buildings and Roads—						
45. Civil works—						
By Public Works Department	31,14,000	27,61,075	39,04,303	31,24,008	35,06,058	40,25,425
By Civil Department		1,65,736	1,19,658	61,640	65,416	
Total ...	31,14,000	29,26,811	40,23,961	31,85,648	35,71,474	40,25,425
Contributions ...	1,59,000	2,61,063	7,50,1[illegible]	11,82,950	[illegible],94,150	8,78,940
Total ...	4,64,47,000	4,68,37,189	4,94,35,922	5,04,09,030	5,26,87,980	5,79,21,326
Closing balance ...	......	33,08,991	26,51,072	36,76,547	24,72,774	23,53,431
GRAND TOTAL ...	......	5,01,46,180	5,20,86,994	5,40,85,577	5,51,60,754	6,02,74,757
Provincial surplus (+) or deficit (—)	....	(+)13,10,067	(—)6,57,9[illegible]	(+)10,25,475	(—)12,03,773	(—)1,19,313

62. The contract of 1887 between the Government of India and the Government of Bengal was based on arrangements made by the Finance Committee. No material advance in the system of decentralisation was made, but by a redistribution of the shares of the Imperial and Provincial Governments in the three principal heads of Land Revenue, Stamps and Excise, and by certain reductions in expenditure which were considered feasble, a general standard of normal revenue and expenditure was obtained, which was adopted as the "Ruling account." The surplus of this accounnt,

amounting to Rs. 6.89,000, was appropriated by the Government of India through the Land Revenue head, leaving the province with a Revenue and Expenditure exactly equal. Under this arrangement the Government of Bengal was admitted to a quarter share in the land revenue collections, except those from Government estates, whilst under Stamps and Excise its share was changed from one-half to three-fourths and one-fourth respectively. The proportion of charges under Stamps and Excise followed the proportion of receipts. The cost of surveys and settlements and the maintenance of agricultural works and embankments was made entirely Provincial. Refunds and drawbacks followed the proportions assigned for the revenues. The Patna-Gaya State Railway was made Imperial, and the Eastern Bengal State Railway System Provincial, with this reservation that any excess over 30 lakhs in the net revenue from the Eastern Bengal State Railway proper would be credited to Imperial revenues, and that any deficiency below 20 lakhs would be made good by Imperial to Provincial. The interest on funds provided for outlay on State Railways and Irrigation Major Works was borne by the Provincial revenues and calculated on the entire capital outlay, including loss by exchange, from the commencement of operations, but excluding the amount advanced from Provincial revenues during the term of the contract.

The only important change made since the contract was finally settled was the transfer of the management of the Tirhoot State Railway to the Bengal and North-Western Railway Company from 1st July 1890. This change did not, however, materially affect the resources of the Provincial Government, although its accounts were swollen by the inclusion of the receipts and working expenses of the Railway, and the payment of the Company's share of the net receipts from the entire undertaking.

63. The first year of the contract, 1887-88, was a period of comparative prosperity. The receipts under the principal heads of revenue were highly favourable. Railways showed a great advance above the contract estimate, and at the same time there was a large reduction of expenditure in the Civil Department. To a considerable extent this reduction was fictitious, as the savings under the head of Education were adjusted by corresponding grants made to District Boards. But these adjustments were not completed within the year, and while the accounts closed with a small increase of expenditure over the contract assignment of only Rs. 3,90,189, the increase in receipts was Rs. 17,00,256. The net surplus of the year was Rs. 13,10,067 and the closing cash balance Rs. 33,08,991.

64. The year 1888-89 opened accordingly under favourable conditions. But the harvest generally was a poor one, and the elasticity of the revenues which had been marked under several years of prosperity suffered a severe check. For the first time for many years the stamp revenue receded. But the income from railways continued to show a satisfactory increase. It was from this cause mainly that the total receipts of the year were about 6¼ lakhs of rupees more than they were in 1887-88. The expenditure side showed, however, an increase of nearly 26 lakhs. This was largely due to the increased grant for civil works of about 11 lakhs. This grant was made when it was known that the credit opening balance of the year was more than 33 lakhs, and financial prospects in other directions were generally good. The additional grant was urgently required and was very profitably expended. There was an unavoidable increase in expenditure under Railways, under Contributions to District Boards, and an augmented outlay under most heads of general administration. The net financial results of the year were, however, less unsatisfactory than was at one time anticipated. The accounts closed with an increase of expenditure over the contract assignment of Rs. 29,88,922, and an increase in the receipts of Rs. 23,31,003. The net deficit was Rs. 6,57,919, and the closing cash balance was reduced to Rs. 26,51,072.

65. The receipts of the year 1889-90 were generally satisfactory. The principal heads of revenue showed a large increase, of which, however, about 2¼ lakhs were due to special assignments from the Government of India to the Local Government for special works, principally the Orissa Coast and Hijili Tidal Canals which, under the rules in force, are shown under the head of Land Revenue, and a grant of Rs. 1,91,423 was made under the same head for a new pilot brig. A grant of two lakhs was also made to the Provincial Government with effect from that year on account of the cost of the Metropolitan

Police. Stamps, Provincial rates, Assessed taxes, Forests and Registration all showed an increase. The item of Land Revenue proper was augmented by the payment of large arrears of revenue due from the Burdwan Raj estate for the preceding year. The receipts from Railways increased by nearly eight lakhs of rupees. On the other hand, there was a falling off in Excise, and the prospects of the year, which would otherwise have been very favourable, were clouded by bad harvests and distress in Bihar and Orissa. The increase in expenditure under ordinary heads was not more than must be expected under a progressive administration. A larger outlay was necessary to ensure a larger revenue. The increase under Police was principally due to the conversion of the entire cost of the Calcutta and Suburban Police as a Provincial charge with effect from the 1st April 1889, and under Marine to the purchase of the steamer *Guide*. The outlay on Famine Relief was of a special nature. The expenditure on Civil Works was curtailed. The accounts closed with an increase of expenditure over the contract assignment of Rs. 39,62,030, and an increase in the receipts of Rs. 49,87,505. The net surplus of the year was Rs. 10,25,475, and the closing cash balance amounted to Rs. 36,76,547.

66. The financial position of the year 1890-91 was primarily affected by the payment of ten lakhs of rupees, which was transferred under the orders of the Government of India from Provincial to Imperial revenues. This payment was adjusted under the head of Land Revenue. The large increase under Railways was principally due to the inclusion of the gross receipts of the Bengal and North Western Railway for the last nine months of the year. There was a corresponding increase on the expenditure side, and the net surplus was discounted by a credit for 10½ lakhs taken by the Government of India under the head of Land Revenue on account of the estimated net earnings of the Company for the nine months, from July 1890 to March 1891, which were not paid during the year. A credit for Rs. 3,17,000 was taken under Civil Works, being the estimated value of a portion of land in the Custom House premises made over to the East Indian Railway Company for the extension of their office building. The ordinary heads of revenue showed but little expansion, while the expenditure, on the contrary, showed a tendency to increase under almost all heads. There was a large increase under Land Revenue on account of Surveys and Settlement; under Law and Justice on account of the increase in Civil Courts; under Railways as already explained; and also under Irrigation and Civil Public Works. A special grant of four lakhs was made from Provincial Revenues to the Public Works Department to undertake urgent works, and especially to defray the cost of repairs and maintenance of the roads in the Darjeeling district, which had been much damaged by heavy rains, and to construct new feeder roads to the Railway in Chota Nagpur.

67. For the year 1891-92, the last year of the contract, the total revenue under all heads of account amounted to Rs. 5,78,01,983, which was Rs. 1,13,54,983 in excess of the figures in the contract assignment. But at the same time the expenditure had increased in a still larger proportion, and amounted to Rs. 5,79,21,326 or Rs. 1,14,74,326 in excess of the assignment.

68. The following table shows the receipts under the principal heads of revenue according to the contract assignment, and the receipts under the same heads for 1891-92:—

	Contract assignment. Rs.	Actuals, 1891-92. Rs.	Increase. Rs
Land Revenue (proper) ..	98,53,000	1,00,21,000	1,68,000
Ditto adjustment ...	(—)6,89,000	+13,81,000	20,70,000
Salt	1,00,000	1,11,000	11,000
Stamps	1,00,87,000	1,13,25,000	12,38,000
Excise	24,82,000	27,83,000	3,01,000
Provincial rates (proper) ..	39,20,000	41,60,000	2,40,000
Ditto (recoveries of cess collection charges from District Boards) ...	.....	3,65,000	3,65,000
Customs	57,000	57,000	Nil.
Assessed Taxes ...	17,84,000	21,54,000	3,70,000
Forests	3,50,000	3,95,000	45,000
Registration ...	5,38,000	6,67,000	1,29,000
Total ...	2,84,82,000	3,34,19,000	49,37,000

69. The large increase under Land Revenue was due to special assignments from Imperial to Provincial Funds, which are adjusted under this head. The other increases arose from the natural expansiveness of the revenues, especially under the head of Stamps and Assessed Taxes. The increase under Provincial Rates was principally due to a change in procedure under which the cost of collecting the Road and Public Works cesses is adjusted under Provincial Rates, the share debitable to district funds being shown as receipts under the same head. After eliminating adjustments and transfers of account, the real increase credited to the Provincial revenues under principal heads during the last year of the contract came to Rs. 25,02,000.

70. Under Railways there was an extraordinary increase during the same period of from Rs. 1,00,19,000 to Rs. 1,60,40,000, or nearly 60¼ lakhs of rupees, of which nearly half was nominal and due to the inclusion of the receipts of the Bengal North-Western Railway, while the remainder was a real Provincial asset derived from the successful administration of the Eastern Bengal Railway System.

71. A comparative statement of the expenditure under Revenue heads is also shown in detail—

	Contract assignment.	Actuals, 1891-92.
	Rs.	Rs.
Refunds and drawbacks	1,55,000	1,54,000
Assignments and compensation ...	1,68,000	1,66,000
Land Revenue	34,08,000	41,14,000
Salt	11,000	52,000
Stamps	3,75,000	3,39,000
Excise	96,000	1,66,000
Provincial rates	......	4,34,000
Customs	4,97,000	5,19,000
Assessed taxes	85,000	90,000
Forests	2,25,000	2,10,000
Registration	2,95,000	3,42,000
Total ...	53,15,000	65,86,000

72. The increase in round numbers amounted to 12¾ lakhs of rupees. The increase under Land Revenue was principally due to surveys and settlements. The increase of expenditure under Excise was the necessary accompaniment of the important changes which were made in the administration of this Department. The new charge shown under Provincial Rates is a matter of account only, and represents the cost of collecting the cesses in the districts to which the Local Self-Government Act has been extended. The other returns do not seem to call for explanation.

73. The items which compose the major head of Salaries and Expenses of the Civil Department may be compared as follows:—

	Contract assignment.	Actuals. 1891-92.
	Rs.	Rs.
General Administration	15,62,000	16,16,000
Judicial Courts	80,11,000	84,83,000
Jails	17,28,000	20,22,000
Police	47,48,000	59,62,000
Marine	7,81,000	9,42,000
Education	32,46,000	25,52,000
Medical	14,59,000	15,67,000
Political	. ...	34,000
Scientific and other Minor Departments ...	3,30,000	3,13,000
Total ...	2,18,65,000	2,34,91,000

74. Under some of these heads the increase in expenditure was very large. The increase of nearly 4¾ lakhs under Judicial Courts represents the financial effect of the increase which was found necessary in the number of Subordinate Judges and Munsifs and judicial establishments generally. The increase under Jails was on account of the large outlay on machinery and manufactures, and was in a measure

counterbalanced by a corresponding increase in receipts. The increase in the cost of Police amounts to nearly 12 lakhs of rupees. This was partly due to the cost of the Metropolitan Police, which was provincialised, partly to the large expenditure incurred in connection with subjugation of the South-Lushai country and the formation of the South Lushai Hill District, and partly to the improvements effected in the Police Department in consequence of the recommendations made by the Police Commission. The reduction under Education is fictitious only. A great portion of the expenditure under this head has ceased to be departmental, but is incurred by District Boards to which an equivalent grant is made for the purpose under the head of Contributions. A portion of the increase under the head of Medical was due to the establishment of a Sanitary Board.

75. Miscellaneous expenditure increased from Rs. 26,61,000 to Rs. 32,31,000. There was, however, a decrease under Miscellaneous (proper), and the real increase under this heading was due to Superannuation or pensionary charges, which rose from Rs. 12,54,000 to Rs. 16,00,000, and also to increased charges under Stationery and Printing, mainly on account of the census operations.

76. The expenditure on Railways increased from Rs. 87,63,000 to Rs. 1,42,64,000; of this amount the major portion was due to the inclusion of the working expenses of the Bengal and North-Western Railway and the Company's share of net receipts.

77. Irrigation expenditure increased from Rs. 45,69,000 to Rs. 53,32,000. The Interest charge rose from Rs. 22,94,000 to Rs. 24,03,000, and the remainder was due to expenditure on works. A large share of the expenditure on the Orissa Coast and Hidgilee Tidal Canals was contributed by the Government of India and credited under the head of Land Revenue.

78. The increase in expenditure on Civil Works from Rs. 31,14,000 provided in the contract to Rs. 40,25,000 in 1891-92 was unavoidable with reference to the necessities of so large a province.

79. The increase under Contributions from Rs. 1,59,000 to Rs. 8,79,000 was due to the development of Local Self-Government and the assignments it was necessary to make to local bodies in order to maintain an equilibrium between their receipts and the expenditure imposed on them.

H. H. RISLEY,

Secretary to the Government of Bengal.

The 1*st April* 1893.

RETIREMENT OF LIEUTENANT PETLEY, R.N., FROM THE APPOINTMENT OF PORT OFFICER, CALCUTTA.

No. 834 Marine.

GOVERNMENT OF BENGAL—MARINE DEPARTMENT.

Dated Calcutta, the 4th April 1893.

RESOLUTION.

READ—

Letter No. 132 of 30th January 1893, from the Government of India, Marine Department.

Letter No. 1175 of 1st April 1893, from Captain B. P. Creagh, R.I.M., reporting taking over charge of the appointment of Port Officer, Calcutta, from Lieutenant E. Petley, R.N., on the forenoon of the 1st of April 1893.

THE Lieutenant-Governor desires to record his appreciation of the valuable services rendered to this Government by Lieutenant E. Petley, R.N., during the five years during which he has held the appointment of Port Officer, Calcutta.

During Lieutenant Petley's tenure of office, he has, with the approval of Government, effected changes which have proved to be of much advantage to the junior officers of the Hooghly Pilot Service, of which he has been a respected and efficient administrator. Further, Lieutenant Petley's excellent relations with the commanders of merchant vessels frequenting the port, has enabled him to give the Lieutenant-Governor much useful information on difficult Marine questions. Sir Charles Elliott is glad that the Port of Calcutta will continue to benefit by Lieutenant Petley's knowledge and experience, as he retains the appointment of Deputy Conservator under the Port Commissioners.

By order of the Lieutenant-Governor of Bengal,

C. W. ODLING,

Secretary to the Govt. of Bengal.

DISTRICT ROAD FUND.

No. 2115R.C.

GOVERNMENT OF BENGAL—PUBLIC WORKS DEPARTMENT.

Road Cess.

Dated Calcutta, the 4th April 1893.

RESOLUTION.

READ—

Letter from the Accountant-General, Bengal, No. 934L.F., dated 24th March 1893, submitting an abstract of receipts and expenditure of the several District Road Committees in Bengal for the quarter ending 31st December 1892.

RESOLUTION.—The Lieutenant-Governor directs that the accounts of the receipts and expenditure of the several District Road Committees in Bengal for the third quarter of the year 1892-93 be published in the *Calcutta Gazette* and circulated to the officers concerned.

ORDER.—Ordered that a copy of this Resolution, together with a copy of the abstract of receipts and expenditure, be published in the Supplement to the *Calcutta Gazette.*

Ordered also, that a copy of this Resolution and of the abstract referred to, be forwarded to the Commissioners of the Rajshahi, Bhágalpur, Chittagong and Chota Nagpur Divisions; to the Superintending Engineers of the Northern and Western Circles; to the Inspector of Works, Eastern Circle; and to the Financial Department of this Government, for information.

By order of the Lieutenant-Governor of Bengal,

F. J. JOHNSTONE,

Secretary to the Govt. of Bengal.

DISTRICT

Statement of Receipts and Expenditure of the several District Road

RECE

Districts.	Balance in Treasury on 1st October 1892.	Provincial Rates. Cess on lands.	Cess on mines and railways.	One per cent. road cess.	Total.	Interest on arrears of road cess collections.	Public Works. Road tolls.	Ferry tolls.	Total.	Irrigation. Canal tolls.	Miscel[laneous]. Rent of serais and staging-bungalows.	Fees, fines and forfeitures.	Miscellaneous.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.	Rs.	Rs.	Rs.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Cess Districts.													
Darjeeling ...	20,613 3 0	1,715 15 7	34 10 3	......	1,750 9 10	0 3 1	......	......	......	......	......	......	1,022 12 0
Hazaribagh ...	13,075 15 5	11,863 6 10	2,788 3 8	......	14,651 10 6	29 9 7	......	......	......	......	63 8 0	7 4 0	180 1 3
Lohardaga ...	710 2 4	14,916 3 10	0 3 0	......	14,916 6 10	13 10 2	......	......	......	......	......	84 6 0	......
Manbhum ...	1,585 8 0	9,990 11 3	670 12 9	......	10,661 8 0	41 3 4	......	......	......	......	392 6 6	13 14 0	2,006 6 3
Palamau ...	4,101 14 4	4,574 5 5	......	......	4,574 5 5	11 6 6	......	......	......	......	2 8 0	......	123 0 0
Total	40,086 11 1	43,060 10 11	3,493 13 8	......	46,554 8 7	96 0 8	......	......	......	......	458 6 6	105 8 0	3,332 3 6
Non-cess Districts.													
Chittagong Hill Tracts ...	8,382 14 3	......	......	......	......	......	......	......	......	......	......	......	72 4 0
Santhal Parganas ...	14,853 11 11	......	......	......	......	......	......	......	......	......	242 6 0	......	1 12 0
Singhbhum ...	—211 8 9	1,493 7 6	157 8 8	......	1,651 0 2	......	......	......	......	......	6 0 0	54 4 0	311 6 5
Total ...	23,025 1 5	1,493 7 6	157 8 8	......	1,651 0 2	......	......	......	......	......	248 6 0	54 4 0	385 6 5
Grand Total ...	63,111 12 6	44,554 2 5	3,651 6 4	......	48,205 8 9	96 0 8	......	......	......	......	706 12 6	159 12 0	3,717 9 11

EXPEN

Districts.	Refunds. Cess.	Other receipts.	Total.	Provincial Rates. Establishment and contingencies of office of collection.	Administration. Establishment and contingencies of Committee's office.	Percentage cost of establishment for offices of account and control.	Total.	Stationery. Stationery and printing.	Public [Works]. Original works.	Repairs.	Establishment.	Tools and plant.	Toll and ferry establishment and contingencies.	Establishment of Divisional Superintendent of Works.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs.
Cess Districts.														
Darjeeling ...	......	......	......	225 6 8	219 4 8	409 8 0	628 12 8	15 9 5	......	914 10 1	70 0 0	......	...	......
Hazaribagh ...	......	......	......	167 9 0	204 5 4	943 8 0	1,147 13 4	46 6 9	294 15 8	7,426 0 6	1,580 11 9	11 5 0	...	......
Lohardaga ...	......	......	......	263 14 1	108 4 0	814 8 0	922 12 0	149 1 0	170 15 0	11,127 13 4	1,634 9 6	32 0 0	...	......
Manbhum ...	......	......	......	995 11 4	241 8 6	583 8 0	825 0 6	97 14 4	1,065 6 1	4,970 4 9	1,358 0 9	......	...	......
Palamau ...	......	......	......	443 12 0	7 8 0	......	7 8 0	10 4 0	......	164 0 0	464 8 0	49 6 0	...	......
Total ...	......	......	......	2,096 5 1	780 14 6	2,751 0 0	3,531 14 6	319 3 6	1,531 4 9	24,602 12 8	5,107 14 0	92 11 0	...	......
Non-cess Districts.														
Chittagong Hill Tracts ...	......	......	......	......	36 8 9	......	36 8 9	23 10 2	......	221 12 3	1,275 6 10	2 0 0	...	......
Santhal Parganas ...	......	......	......	......	190 9 0	......	190 9 0	......	4,239 10 0	6,849 5 4	1,558 9 8	10 0 0	...	......
Singhbhum ...	......	40 0 0	40 0 0	......	106 6 3	......	106 6 3	......	855 8 5	844 0 7	604 10 0	26 8 0	...	......
Total ...	......	40 0 0	40 0 0	......	333 8 0	......	333 8 0	23 10 2	5,095 2 5	7,915 2 2	3,438 10 6	38 8 0	...	......
Grand Total ...	......	40 0 0	40 0 0	2,096 5 1	1,114 6 6	2,751 0 0	3,865 6 6	343 13 8	6,626 7 2	32,517 14 10	8,546 8 6	131 3 0	...	......

Fort William,
The 11th March 1893.

ROAD FUND.

Committees for the Third Quarter ending 31st December 1892.

IPTS.

LANEOUS.		Suspense Account.										
Total.	Grant from Government.	Advance.	Deposit.	Total.	Provident Fund receipts.	Savings Bank investment withdrawals.	Total receipts.	Balance of imprest in hands of Engineers and others decreased.	Balance of uncashed cheques increased.	Total receipts, including balance.	Outlay.	Balance in Treasury on 31st December 1892.
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1,022 12 0	542 8 9	837 1 7	......	837 1 7	......	...	4,153 3 3	......	153 5 4	24,919 11 7	22,171 6 10	2,748 4 9
250 13 3	559 8 0	359 10 7	...	359 10 7	8 2 0	...	15,859 5 11	4 0 0	... ..	28,939 5 4	12,684 9 9	16,254 11 7
84 6 0	5,285 12 3	129 0 0	832 0 0	961 0 0	...	...	21,261 3 3	... ..	100 0 0	22,071 5 7	14,922 4 2	7,149 1 5
2,412 10 9	......	75 13 4	... ..	75 13 4	110 10 0	...	13,301 13 5	5 10 0	......	14,892 15 5	9,606 2 10	5,286 12 7
125 8 0	......	232 4 0	264 0 0	496 4 0	......	...	5,207 7 11	......	......	9,309 6 3	1,461 14 0	7,847 8 3
3,896 2 0	6,387 13 0	1,633 13 6	1,096 0 0	2,729 13 6	118 12 0	...	59,783 1 9	9 10 0	253 5 4	1,00,132 12 2	60,846 5 7	39,286 6 7
72 4 0	......	......	......	... ..	......	...	72 4 0	153 6 0	......	8,608 8 3	2,179 2 9	6,429 5 6
244 2 0	12,215 0 0	2,376 8 7	278 0 0	2,654 8 7	... ...	...	15,113 10 7	......	1,308 15 9	31,276 6 3	16,040 2 0	15,236 4 3
371 10 5	10,000 0 0	......	......	......	78 12 0	...	12,101 6 7	......	28 14 9	11,918 12 7	2,850 2 4	9,068 10 3
688 0 5	22,215 0 0	2,376 8 7	278 0 0	2,654 8 7	78 12 0	...	27,287 5 2	153 6 0	1,337 14 6	51,803 11 1	21,069 7 1	30,734 4 0
4,584 2 5	28,602 13 0	4,010 6 1	1,374 0 0	5,384 6 1	197 8 0	...	87,070 6 11	163 0 0	1,591 3 10	1,51,936 7 3	81,915 12 8	70,020 10 7

DITURE.

Works.	Irrigation.	Miscellaneous.						Suspense Account.								
Total.	Canal toll establishment and contingencies.	Staging-bungalow establishment and contingencies.	Staging-bungalow petty construction and repairs.	Miscellaneous.	Provident Fund contributions.	Total.	Contributions to Provincial Government.	Advance.	Deposit.	Total.	Provident Fund withdrawals.	Savings Bank investment deposits.	Total expenditure.	Balance of imprest in hands of Engineers and others increased.	Balance of uncashed cheques decreased.	Total outlay.
Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.	Rs.	Rs. A. P.	Rs. A. P.
984 10 1	...	......	......	......	......	......	...	20,317 0 0	......	20,317 0 0	...	......	22,171 6 10	...	.....	22,171 6 10
9,313 0 11	...	26 0 0	112 1 3	.....	12 3 0	150 4 3	...	549 6 6	... ..	549 6 6	...	... ..	11,374 8 9	...	1,310 1 0	12,684 9 9
12,965 5 10	...	31 0 0	161 9 3	148 10 0	......	341 3 3	...	......	280 0 0	280 0 0	...	......	14,922 4 2	...	...	14,922 4 2
7,393 11 7	...	......	5 8 0	... ..	36 14 0	42 6 0	...	73 0 0	50 0 0	123 0 0	...	110 10 0	9,588 5 9	..	17 13 1	9,606 2 10
677 14 0	...	......	......	123 0 0	......	123 0 0	...	179 8 0	......	179 8 0	...	......	1,441 14 0	20	......	1,461 14 0
31,334 10 5	...	57 0 0	279 2 6	271 10 0	40 1 0	656 13 6	...	21,118 14 6	330 0 0	21,448 14 6	...	110 10 0	59,498 7 6	20	1,327 14 1	60,846 5 7
1,499 3 1	...	......	......	......	......	......	...	......	......	......	...	......	1,559 6 0	...	619 12 9	2,179 2 9
12,657 9 0	...	16 0 0	......	......	......	16 0 0	...	3,176 0 0	......	3,176 0 0	...	......	16,040 2 0	...	......	16,040 2 0
2,330 11 0	...	65 0 0	85 0 7	14 14 6	—20 10 0	144 5 1	...	150 0 0	......	150 0 0	...	78 12 0	2,850 2 4	...	......	2,850 2 4
16,487 7 1	...	·81 0 0	85 0 7	14 14 6	—20 10 0	160 5 1	...	3,326 0 0	......	3,326 0 0	...	78 12 0	20,449 10 4	...	619 12 9	21,069 7 1
47,822 1 6	...	138 0 0	364 3 1	286 8 6	28 7 0	817 2 7	...	24,444 14 6	330 0 0	24,774 14 6	...	189 6 0	79,948 1 10	20	1,947 10 10	81,915 12 8

O. T. BARROW,

Accountant-General, Bengal.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 1st *April* 1893.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.				
BURDWAN DIVN.	1	Burdwan April 1, '93 Kalna ... Katwa ... Raniganj ...	Nil Nil Nil Nil	Weather—days hot, nights cool. Lands being ploughed. Sugarcane being pressed. Fodder and water sufficient. Prices of rice :— Srs. Burdwan ... ... 10½ to 13 } per rupee. Katwa ... ... 12¾ } per rupee. Raniganj ... ... 13 } per rupee.
BURDWAN DIVN.	2	Bankura „ 1, '93 Vishnupur ...	Nil Nil	Weather—hot and fair. Ploughing going on. Pressing of sugarcane nearly over. Fodder and water sufficient. Prices of common rice :— Srs. Sadar ... ... 11½ } per rupee. Vishnupur ... ... 11½ } per rupee.
BURDWAN DIVN.	3	Birbhum „ 1, '93 Rampur Hât ...	Nil Nil	Weather—getting hot. Harvesting of wheat, gram, &c., commenced. Ploughing going on. Sugarcane mills are briskly plied. Fodder and water sufficient. Rice selling at from 13 to 15 seers per rupee.
BURDWAN DIVN.	4	Midnapore „ 1, '93	Nil	Rain fell in Tamluk and Garhbeta. Weather much warmer. Ploughing going on. Prices of common rice :— Srs. Sadar ... ... 12 } per rupee. Contai ... ... 14 } per rupee. Tamluk ... ... 12 to 13 } per rupee. Garhbeta ... ... 11 to 12 } per rupee.
BURDWAN DIVN.	5	Hooghly „ 1, '93 Serampore ... Jahanabad ...	0·04 Nil Nil	Weather—hot. Sugarcane cutting still continues in parts. Sugarcane cultivation is also in progress. Ploughing for rice crops continues. Fodder and water plentiful except in Pandua. There is still some cattle-disease in the Sadar. Prices of common rice :— Srs. Sadar ... ... 11 } per rupee. Serampore ... ... 10 to 11½ } per rupee. Jehanabad ... ... 12 to 12½ } per rupee.
BURDWAN DIVN.	6	Howrah „ 1, '93 Uluberia ...	Nil Nil	Weather—hot. Garden crops doing well. Condition of cattle good. Fodder and water-supply sufficient. Price of rice 10 to 11½ seers per rupee.
PRESIDENCY DIVN.	7	24-Parganas „ 1, '93	Nil	Weather—seasonable. Ploughing going on. Sufficient fodder and water. No cattle-disease. Prices of common rice :— Srs. c. Sadar ... ... 10 to 13 0 } per rupee. Barasat ... ... 10 5 } per rupee. Dum-Dum ... ... 12 0 } per rupee. Basirhat ... ... 11 7 } per rupee. Diamond Harbour ... ... 13 0 } per rupee. Barrackpore ... ... 11 0 } per rupee.
PRESIDENCY DIVN.	8	Nadia „ 1, '93 Kushtia ... Meherpur ... Chuadanga ... Ranaghat ...	Nil Nil Nil Nil Nil	Weather—hot and fair. Harvesting of *rabi* crops continues Prospects fair. Ground is being prepared for the sowing of early paddy. Prices almost stationary. Supply of fodder and water good.
PRESIDENCY DIVN.	9	Khulna „ 1, '93 Bagerhat ... Satkhira ...	Nil Nil Nil	Weather—foggy in the morning and hot during day; sky cloudy in the morning. Cultivation of *bhadoi* forward. Prospect of *boro* damaged to some extent. Common rice selling at from 10 to 13 seers per rupee. Fodder and water sufficient.
PRESIDENCY DIVN.	10	Jessore „ 1, '93 Jhenida ... Magura ... Narail ... Bangaon ...	Nil Nil Nil Nil Nil	Weather— mornings and nights cool; days hot. Lands are being ploughed for *aus* and *aman*. Harvesting of *rabi* crops still going on. Prospects fair. Some cases of cattle-disease reported from parts of Bangaon. Fodder and water sufficient. Prices of rice stationary.
PRESIDENCY DIVN.	11	Murshidabad „ 1, '93	Nil	Weather—hot and sultry. Harvesting of *rabi* crops nearly finished. Indigo and mulberry progressing well. Transplanting of *boro* paddy still going on in Kandi. Common rice sells at 12 seers per rupee. Fodder and water sufficient for cattle.

BENGAL—*concld.*

Division	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and State and prospects of the crops.
CHITTAGONG DIVN.	12	Chittagong	...	...	Report not received.
	13	Noakhali	April 1, '93	0·81	Weather—seasonable. *Rabi* crops slightly damaged by rain and hail. Ploughing for *aus* in active progress. Cattle-disease reported from Fenny, Begumganj and Lakhipur. Fodder and water sufficient. Price of rice stationary.
	14	Tippera	„ 1, '93	0·03	Weather—seasonable. Harvest of winter crops almost complete. *Aman, aus*, jute and *til* being sown. Prices stationary.
	15	Chittagong Hill Tracts.	Mar. 30, '93	Nil	Weather—getting warmer daily. Condition of chillies, tobacco and other vegetables fair. *Jum* cutting continues. Condition of cattle reported to be good. Prices of common rice :— Srs. Rangamati ... ... 10 } Bandarban ... ... 10 } per rupee. Manicksury ... ... 16 }
DACCA DIVN.	16	Dacca	April 1, '93	Nil	Weather—hot by day, cold at night. Gathering of *rabi* crops nearly completed. Some damage done to standing crops by hail. Sowing of rice and jute going on. Fodder available. No cattle-disease. Common rice selling at from 11 to 13 seers per rupee.
	17	Faridpur Goalundo Madaripur	„ 1, '93	Nil Nil Nil	Weather—seasonable. Harvesting of *rabi* completed, and sowing of paddy and planting of sugarcane in progress. Early paddy doing well. Common rice sells at from 12 to 13 seers per rupee. Cattle in good condition and get fodder.
	18	Backergunge	„ 1, '93	Nil	Weather—seasonable. State and prospects of *rabi* crops fair. Ordinary rice selling at from 10 to 13 seers per rupee. Fodder and water sufficient.
	19	Mymensingh	„ 1, '93	0·46	Weather—getting hot. State and prospects of standing *boro* crop fair. Sowing of *aus* and jute has commenced. Common rice selling at from 11 to 14 seers per rupee. Condition of cattle good except at Burhatta outpost in Netrakona subdivision, where cattle-disease is reported. Supply of fodder and water sufficient.
RAJSHAHI DIVN.	20	Dinajpur Thakurgaon	„ 1, '93 ...	Nil Nil	Weather—hot during day; mornings still cool with easterly wind. Lands being prepared for *bhadoi* and jute. Price of rice at Sadar 13 seers 12 chittaks per rupee; that at Thakurgaon stationary. Cattle reported to be in good condition. Supply of fodder and drinking water sufficient.
	21	Rajshahi Nator Naugaon	„ 1, '93	Nil Nil Nil	Weather—seasonable. Manufacture of ganja finished. Harvesting of pulses going on. Prospects of other cold-weather crops reported fair. No cattle-disease reported. Fodder and water sufficient. Price of rice almost stationary.
	22	Rangpur Kurigram Nilphamari Gaibanda	„ 1, '93	Nil Nil Nil Nil	Weather—getting warmer. *Aus* seedlings coming on well. Jute being sown. Price of rice 12 to 14 seers per rupee.
	23	Bogra Sherpur Naukhila	„ 1, '93	Nil Nil Nil	Weather—seasonable. Ploughing for jute and paddy goes on. Common rice sells at 13½ seers per rupee. Fodder and water sufficient.
	24	Pabna	„ 1, '93	Nil	Weather—hot and occasionally cloudy. There being no rain during the week, ploughing and sowing are going on rapidly. Rice sells at 12 seers per rupee at Sadar and from Rs. 3-2 to Rs. 4-8 per maund at Sirajganj. Condition of cattle good. Water-supply and fodder sufficient.
	25	Darjeeling Siliguri	„ 1, '93 ...	0·05 Nil	Weather—warmer but still hazy. *In the hills* :—Wheat, barley and potatoes progressing favourably. Mustard being harvested. *Kangni, chhota marua* and *bhutta* coming up fairly. *In the Terai* :—Lands are still being ploughed. Wheat and barley are being reaped. Prices of coarse rice :— Srs. Hills ... ... 10 } Terai ... ... 12 } per rupee.
	26	Jalpaiguri	„ 1, '93	Nil	Weather—hot in day, cold at night. Ploughing for *bhadoi* crop continues. Harvesting of tobacco going on. Common rice sells at 14 seers per rupee. Fodder and water-supply sufficient. No cattle-disease.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
Bhagalpur Divn.	27	Monghyr April 1, '93 Begusarai ... Jamui ...	Nil Nil Nil	Weather—getting warm. Notwithstanding the damage caused by the late rain, the prospects of the *rabi* and opium crops are fair. Indigo is doing well. No cattle-disease reported this week. Plenty of fodder and water. Prices of common rice:— Srs. Sadar ... ... 13 to 15 } per rupee. Begusarai ... ... 15 } Jamui ... ... 14 }
	28	Bhagalpur " 1, '93 Banka ... Madhipura ... Supaul ...	Nil Nil Nil Nil	Weather—still fairly cool. Standing crops doing well. Outturn of wheat will be at least 12 annas. Price of common rice 15 seers 2 chitaks per rupee.
	29	Purnea " 1, '93 Kishanganj ... Araria ...	Nil Nil Nil	Weather—getting hot. Tobacco harvest finished; outturn good. *Rabi* harvest in progress with good results. Sowings of *bhadoi* and *aghani* beginning. Moisture good. Fodder and water sufficient. Prices stationary.
	30	Malda " 1, '93 Chanchal ... Shibganj ... Gajole ...	Nil Nil Nil Nil	Weather—days getting hot, but nights still fairly cool. Harvesting of *rabi* crops progressing; outturn generally good. *Boro* paddy is now being irrigated. Ploughing for *bhadoi* crops going on. Common rice sells at from 13 to 16 seers per rupee. Cattle-pox reported from Shibganj thana.
	31	Sonthal Parganas " 1, 93 Deoghur ... Godda ... Jamtara ... Pakur ... Rajmahal ...	Nil Nil Nil Nil Nil Nil	Weather—growing hot; winds generally westerly but variable; cool at night. Prospects of *mahua* and mango rather better. Wheat in Pakur expected to be 8 annas. Rice varies in price from 11 to 14 seers per rupee: rather dearer than at this time last year. Fodder and water sufficient.
Patna Division.	32	Patna " 1, '93	Nil	Weather—warm with cool mornings. *Rabi* crops being reaped. Opium gathering finished; weighment to commence next week; outturn expected to be satisfactory. Fields being prepared for sugarcane and millet sowings. Common rice selling at 16 seers per rupee at Sadar.
	33	Gaya " 1, 93 Nawada ... Jahanabad ...	Nil Nil Nil	Weather—clear with west wind. *Rabi* harvest well advanced. Opium collections completed. *Cheena* millet being sown in places. Prices stationary. Water and fodder-supply sufficient.
	34	Shahabad " 1, '93		The hot weather has begun with its usual characteristics. The *rabi* harvest proceeds, and the weather is all that can be desired for it. Fodder and water abundant. Prices still high and show no downward tendency.
	35	Darbhanga " 1, '93	Nil	Weather—getting warm. *Rabi* harvest in progress. Paddy and *mung* being sown. Indigo sowings finished. Collection of opium nearly over. Prices stationary. Fodder and water for cattle sufficient.
	36	Muzaffarpur " 1, '93 Sitamarhi ...	Nil Nil	Weather—much warmer; wind variable. Harvesting of *rabi* crops continues; outturn fair. No cattle-disease. Fodder and water sufficient.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR—*concld.*			
Patna Division—concld.			
37	Saran April, 1, '93 Siwan .. Gopalganj ..	Nil Nil Nil	Weather—nights not quite so cool, but days and nights still cooler than usual; alternate east and west winds. *Rabi* being harvested still. Indigo coming up. Water and fodder abundant. Prices tend to fall. Prices of common rice:— Srs. c. Chapra ... ... 14 4 } Siwan ... ... 13 2 } per rupee. Gopalganj ... ... 13 9 }
38	Champaran „ 1, '93	Nil	Weather—days getting warm, nights cool. *Rabi* harvest in progress. *Cheena*, &c., being sown. Indigo germinating. Opium collection nearly finished. Weighments will shortly commence. No marked change in prices. No cattle-disease. Water and fodder sufficient.
ORISSA.			
Orissa Divn.			
39	Cuttack „ 1, '93	0·07	Weather—warm. Supply of fodder and water sufficient. Prices of common rice:— Srs. c. Srs. c. Sadar ... ... 10 8 to 14 7 } Kendrapara ... ... 15 0 to 21 0 } Jajpur ... ... 15 12 to 18 6 } per rupee. Banki ... ... 17 0 }
40	Puri March 30, '93 Khurda ... Banpur ...	0·38 0·70 0·12	Unusual amount of rain for this season. Lands are being ploughed for the next *sarad* crop. *Dalua* paddy is ripening and is being harvested in places. Miscellaneous crops good. Rice sells at from 14 seers 7 chitaks to 17 seers 8 chitaks per rupee.
41	Balasore April 1, '93	Nil	Weather—much warmer. Ploughing continues. Fodder and water quite sufficient. No change in prices.
CHOTA NAGPUR.			
South-West Frontier Agency.			
Chota Nagpur Divn.			
42	Hazaribagh April, 1, '93 Giridi ...	Nil Nil	Weather—seasonable; warm with west winds. Harvesting of *rabi* crops nearly finished; outturn from 8 to 12 annas. Weighments of opium about to commence; yield expected to come up to estimates. Prospects of mango and *mohua* fairly good. Water and fodder sufficient.
43	Lohardaga „ 1, '93	Nil	Weather—getting hot. Ploughing continues. Harvesting of *rabi* commenced. Common rice selling at 13 seers per rupee. Fodder and water plentiful.
44	Palamau March 31, '93	Nil	Weather—seasonable. *Rabi* harvest continues. Insect pests are reported to have attacked the *rabi* in some parts. Wheat has been somewhat damaged by the rain and will not yield as much as was expected. *Mahua* crop is coming on well. A good deal of foot-and-mouth disease reported amongst the cattle. Rice selling at 13½ to 18½ seers per rupee.
45	Singhbhum April 1, '93	Nil	Weather—getting hot. *Rabi* indifferent in Kolhan and Chakradharpur, but good elsewhere. Common rice selling at from 12 to 16 seers per rupee. No cattle-disease reported. Water and fodder plentiful.
46	Manbhum „ 1, '93 Gobindpur ...	Nil Nil	Weather—still fairly cool in the morning. The *mahua* crop will, it is thought, be a better one than was anticipated. Mango is a very indifferent crop. *Rabi* outturn estimated at 10 annas. Fodder and water-supply sufficient.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 4th April, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the

QUANTITIES PER RUPEE IN

Number.	Districts.	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum. (Sorghum Vulgare.) Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
	BENGAL.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
	Burdwan Division.															
1	Burdwan ..	13 4	10 11	11 8	...	...	19 0	10 8	10 8	11 10	12 0	12 2	13 8	...	...	...
2	Bankura ...	12 0	12 0	11 4	18 0	18 0	17 0	10 0	10 0	12 12	11 12	11 4	15 8	.	...	...
3	Birbhum ...	10 4	10 4	10 8	9 0	9 0	...	11 8	11 0	11 0	13 8	14 4	13 0	...	...	...
4	Midnapore ...	11 0	11 0	11 0	...	...	...	10 0	10 0	10 0	12 12	12 12	13 0	...	...	...
5	Hooghly ...	11 0	11 0	13 0	11 0	11 0	...	8 0	8 0	8 0	10 0	10 0	12 0	...	...	...
6	Howrah ...	...	...	...	...	...	...	9 4	9 6	10 0	11 0	10 0	12 8	...	...	...
	Presidency Division.															
	Calcutta	12 4	11 5	11 5	17 0	17 0	15 5	7 4	7 4	8 3	10 0	10 0	11 6	20 0	18 3	15 9
7	24-Parganas ...	11 0	11 4	11 4	16 0	16 0	16 0	8 0	8 0	8 0	12 8	12 0	13 0	16 0	16 0	...
8	Nadia .	13 1	13 1	12 3	23 0	...	17 12½	10 0	10 0	10 10½	12 12	12 12	12 1	...	...	...
9	Khulna ...	...	...	...	...	...	...	10 10	10 10	10 8	12 14	12 4	12 0	...	...	...
10	Jessore ...	11 0	11 0	10 8	...	...	...	9 0	9 0	10 8	12 8	12 8	13 0	...	...	...
11	Murshidabad ...	13 0	13 0	12 0	...	...	...	10 0	10 0	9 0	13 0	12 8	12 0	...	...	...
	Chittagong Division.															
12	Chittagong ...	8 14	8 12	9 4	...	...	...	11 8	11 8	9 0	13 4	12 12	11 15	...	...	...
13	Noakhali ...	...	...	...	...	...	...	10 6	11 0	12 0	12 0	12 0	13 0	...	...	...
14	Tippera ...	11 0	11 0	10 0	...	...	...	8 12½	9 0	10 0	11 0	12 0	14 0	...	...	...
15	Chittagong Hill Tracts.	...	...	...	...	...	...	...	...	...	10 0	10 0	10 0	...	...	...
	Dacca Division.															
16	Dacca ..	11 0	...	11 0	25 0	...	...	10 8	11 0	11 0	11 4	11 8	14 8	...	...	...
17	Faridpur ...	11 4	11 4	20 0	20 0	20 0	20 0	8 0	8 0	11 0	12 0	12 0	14 0	...	...	...
18	Backergunge ...	...	...	...	...	...	...	10 4	10 8	10 8	11 8	11 1	12 0	...	...	...
19	Mymensingh ...	9 8	9 8	10 0	...	...	...	10 0	10 0	11 0	11 0	11 0	14 8	...	...	...
	Rajshahi Division.															
20	Dinajpur ...	9 10	10 12	12 0	15 12	15 12	18 0	10 12	10 12	9 8	13 12	14 6	12 0	...	...	...
21	Rajshahi ...	15 0	10 0	12 12	26 4	26 4	22 8	10 8	11 4	10 8	12 6	12 12	11 10	...	...	...
22	Rangpur ...	12 0	12 0	9 1	...	...	...	10 0	10 0	9 1	12 0	12 0	10 10	...	...	...

A In the subdivisions the retail prices of salt per rupee are :—Kalna 10 seers, Katwa 11¾ seers, and Raniganj 10½ seers.
B At Rampore Hát the retail price of salt is 11 seers per rupee.
C In the subdivisions the retail prices of salt per rupee are :—Contai 10 seers, Tamluk 11½ seers, and Garhbeta (Ghatal) 10 seers 11 chitaks.
D In the subdivisions the retail prices of salt per rupee are :—Bhaddreswar 11 seers and Jahanabad 11½ seers.
E At Ulubaria the retail price of salt is 10½ seers per rupee.
F In the mufassal marts the retail prices of salt per rupee are :—Chetla Hát 11 seers 7 chitaks, Barasat 10 seers 10 chitaks, Baduria 10 seers 11 chitaks, and Magrahat 10 seers 10 chitaks.
G In the subdivisional marts the retail prices of salt per rupee are :—Bahadurkhali 10½ seers, Chuadanga 10 seers, Meherpur 10½ seers and Ranaghat 10½ seers.
H In the subdivisions the retail prices of salt per rupee are :—Bagerhat 8 seers and Satkhira 11 seers.

Head-quarters Station Bazars of the Districts of Bengal on the 31st March, 1893.

Indian-corn or Maize. (*Zea Mays.*) Present return.	Indian-corn or Maize. Next preceding return.	Indian-corn or Maize. Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus Indicus.*) Present return.	Arhar. Next preceding return.	Arhar. Corresponding return of last year.	Firewood. Present return.	Firewood. Next preceding return.	Firewood. Corresponding return of last year.	Salt. Present return.	Salt. Next preceding return.	Salt. Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt. Present return.	Wholesale Salt. Next preceding return.	Wholesale Salt. Corresponding return of last year.	Districts.	Number.	
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.	BENGAL.		
...	...	...	20 0	23 8	17 0	100 0	106 10	100 0	A 11 2½	11 2½	11 7	3 6 8	3 6 8	3 6 0	Burdwan	1	Burdwan Division.
17 0	17 0	18 8	12 0	12 0	15 0	320 0	320 0	220 0	11 0	11 0	11 0	3 10 0	3 10 0	3 10 0	Bankura.	2	Burdwan Division.
...	22 0	...	11 8	11 0	11 4	250 0	200 0	200 0	B 10 12	10 12	10 8	3 12 6	3 12 6	3 10 0	Birbhum.	3	Burdwan Division.
...	...	...	19 0	20 0	10 0	240 0	240 0	120 0	C 11 7	11 7	10 8	3 7 0	3 7 0	3 9 0	Midnapore.	4	Burdwan Division.
...	...	...	11 0	11 0	11 0	120 0	120 0	120 0	D 11 4	11 4	10 0	3 6 0	3 6 0	3 12 0	Hooghly.	5	Burdwan Division.
...	...	...	10 4	11 0	12 8	105 0	105 0	100 0	E 10 10	10 10	10 8	3 8 0	3 8 0	3 6 0	Howrah.	6	Burdwan Division.
18 4	18 4	16 0	13 1	12 5	15 12	85 0	85 0	92 8	9 8	9 8	11 0	4 0 0	4 0 0	3 6 0	Calcutta.		
...	20 0	...	19 0	18 0	17 0	100 0	100 0	100 0	F 11 0	11 0	11 0	3 4 6	3 4 6	3 5 0	24-Parganas.	7	Presidency Division.
...	...	...	23 0	22 0	18 13	128 0	128 0	...	G 10 0	10 0	10 10½	3 8 0	3 8 0	3 8 0	Nadia.	8	Presidency Division.
...	...	...	9 1½	9 1½	...	160 0	160 0	160 0	H 9 0	9 0	9 0	3 12 0	3 12 0	3 12 0	Khulna.	9	Presidency Division.
...	...	...	12 0	13 0	20 0	120 0	120 0	120 0	I 9 14	9 14	9 2	3 10 0	3 10 0	3 10 0	Jessore.	10	Presidency Division.
...	...	...	18 0	17 0	17 8	200 0	200 0	200 0	J 10 8	10 8	10 8	3 7 0	3 7 0	3 12 0	Murshidabad.	11	Presidency Division.
...	...	...	...	...	...	80 0	106 0	110 0	K 10 0	10 0	10 8	3 13 0	3 13 0	3 8 0	Chittagong.	12	Chittagong Division.
...	...	...	...	...	9 0	...	...	...	L 10 0	10 0	9 0	4 0 0	3 12 0	4 0 0	Noakhali.	13	Chittagong Division.
...	...	...	11 5	12 0	8 0	...	...	...	M 10 13½	10 13½	10 0	3 12 0	3 12 0	3 12 0	Tippera.	14	Chittagong Division.
...	...	...	...	...	...	240 0	240 0	240 0	8 0	8 0	8 0	4 8 0	4 8 0	4 8 0	Chittagong Hill Tracts.	15	Chittagong Division.
...	...	...	18 0	...	...	130 0	130 0	120 0	N 10 0	10 0	10 0	3 10 0	3 10 0	3 8 0	Dacca.	16	Dacca Division.
...	...	.	...	...	11 8	...	...	...	O 10 12	10 12	10 12	3 12 0	3 12 0	3 12 0	Faridpur.	17	Dacca Division.
...	...	..	10 8	Mug. 10 0	...	80 0	82 0	80 0	P 10 8	10 0	10 0	3 8 0	3 10 0	3 10 0	Backergunge.	18	Dacca Division.
...	...	..	13 0	13 0	11 0	120 0	120 0	...	Q 10 0	10 0	10 12	4 0 0	4 0 0	3 10 0	Mymensingh.	19	Dacca Division.
...	...	...	20 6	14 12	16 0	160 0	160 0	160	10 8	10 8	10 4	3 12 0	3 12 0	3 14 0	Dinajpur.	20	Rajshahi Division.
...	...	...	21 5	20 11	20 0	240 0	240 0	240 0	R 9 9	9 9	9 9	3 10 8	3 10 8	3 10 8	Rajshahi.	21	Rajshahi Division.
...	..	..	8 0	8 0	9 0	80 0	80 0	100 0	S 9 0	9 0	10 0	4 0 0	4 4 0	4 0 0	Rangpur.	22	Rajshahi Division.

I In the subdivisions the retail prices of salt per rupee are :—Jhenida 9 seers 9 chitaks, Magura 10 seers, Narail 9 seers 10 chitaks, and Bongaon 10 seers 11 chitaks.
J In the subdivisions the retail prices of salt per rupee are :—Kandi 10¾ seers and Jangipur 10½ seers.
K At Cox's Bazar the retail price of salt is 8 seers per rupee.
L At Fenny hát the retail price of salt is 9 seers per rupee.
M In the subdivisions the retail prices of salt per rupee are :—Brahmanbaria 9 seers 2 chitaks and Chandpur 9 seers.
N In the mufassal marts the retail prices of salt per rupee are :—Manikganj 9 seers 13 chitaks, Mirkadim 10 seers, Munshirhat 10 seers.
O At Madaripur and Goalundo the retail price of salt is 10 seers per rupee.
P In the subdivisions the retail prices of salt per rupee are :—Pirojpur 10¼ seers, Patuakhali 9 seers, and Bhola 9 seers.
Q The retail price of salt at Kagmari, Netrakona, Jamalpur, and Kishorganj is 10 seers per rupee.
R In the subdivisions the retail prices of salt per rupee are :—Nator 9 seers and Naugaon 9 seers 9 chitaks.
S In the subdivisions the retail prices of salt per rupee are :—Kurigram 8 seers, Gaibanda 10 seers, and Nilphamari 10 seers.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the Head-quarters

QUANTITIES PER RUPEE IN

Division	Number.	DISTRICTS.	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum (*Sorghum Vulgare.*) Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
BENGAL—*continued.*																	
Rajshahi Division—*concld.*	23	Bogra ...	10 0	12 0	8 7	...	...	...	9 12	9 12	9 12	13 8	12 12	13 2	...	...	...
	24	Pabna .	14 4	13 8	13 8	22 8	18 12	...	6 4	6 4	7 8	12 8	12 2	13 8	...	..	...
	25	Darjeeling .	8 0	8 0	8 0	10 0	10 0	8 0	5 0	5 0	5 0	10 0	11 0	10 0	...	...	...
	26	Jalpaiguri	11 0	10 0	10 0	13 0	13 0	15 0	10 0	9 0	7 0	14 0	13 0	11 8	...	...	...
BIHAR.																	
Bhagalpur Division.	27	Monghyr* ...		10 8 to 13 10½	13 14		15 12 to 16 13	18 14		7 14 to 9 0	8 14		14 3	10 8		18 6	15 12
	28	Bhágalpur ...	12 10	12 10	13 4	15 2	12 10	18 15	12 10	12 10	10 1	15 2	15 2	11 6	...	...	...
	29	Purnea (Kasba)	8 0	8 0	11 0	...	...	18 0	12 0	13 0	10 0	14 0	14 0	11 0	...	...	...
	30	Malda (English Bazar).	12 8	12 8	13 8	...	...	...	11 0	11 0	10 0	14 0	13 0	11 0	...	...	...
	31	Sonthal Parganas.	9 12	9 8	11 0	...	...	...	11 8	11 8	11 0	14 0	14 0	12 8	...	...	...
Patna Division.	32	Patna ...	13 8 / 12 8	Red. 14 0 / White 13 0	15 0 / 13 8	24 0	20 0	22 0	9 8	9 8	10 8	16 0	16 0	14 0	28 0	20 0	22 0
	33	Gaya ...	13 0	11 8	13 0	19 8	18 8	19 0	10 0	10 0	10 4	13 8	13 8	12 0	17 4	18 12	...
	34	Shahabad ...	12 0	12 0	12 8	14 0	14 0	22 0	8 0	8 0	8 0	15 0	15 0	12 0	...	...	...
	35	Darbhanga ...	11 0	11 0	13 3	11 0	11 0	19 12	10 0	11 0	9 14	13 3	14 5	12 1	...	...	...
	36	Muzaffarpur	12 8	11 0	12 0	22 0	20 0	22 0	8 0	8 0	11 0	14 0	14 0	12 0	...	...	...
	37	Saran ...	12 4	12 0	13 0	18 8	22 0	20 0	10 8	10 0	8 8	14 4	14 8	11 8	...	...	...
	38	Champaran ...	10 4	10 8	Old 10 8 / New 12 8	17 8	...	Old 20 0 / New 21 0	8 12	8 8	9 0	15 4	15 0	13 0	...	...	...
ORISSA.																	
Orissa Division.	39	Cuttack ...	10 8	10 8	10 8	...	...	...	10 8	10 8	9 3	14 7	14 7	14 0	...	...	...
	40	Puri ...	9 3	9 3	10 8	...	...	...	9 3	9 3	11 13	14 7	11 7	13 7	...	...	...
	41	Balasore ...	11 0	11 0	11 0	10 0	10 0	10 0	10 0	10 0	11 0	15 0	15 0	14 0	...	...	...
CHOTA NAGPUR.																	
Chota Nagpur Division.	42	Hazáribágh ..	New 12 0 / Old 8 8	New 11 0 / Old 8 8	12 0	14 8	13 12	13 0	8 0	8 0	8 0	12 8	12 12	14 0	...	...	...
	43	Lohardaga ...	11 0 / 7 0	Red. 6 0 to 7 0 / White 5 0	11 0 / 7 0	13 0	11 0	12 0	11 8	11 0	12 0	Ordinary rice. 13 0 / Coarse rice. 15 0	Ordinary rice. 12 0 / Coarse rice. 14 0	Ordinary rice. 14 0 / Coarse rice. 15 0	...	...	...
	44	Palámau ...	15 12	10 2	14 10	27 0	...	20 4	10 2	10 11	12 6	12 15	14 1	14 1	...	...	...
	45	Singhbhum ...	12 0	12 0	15 0	...	...	10 0	10 0	10 0	14 0	14 0	14 0	16 0	...	...	...
	46	Manbhum*		11 8	11 0		...	24 0		9 0 to 9 8	12 8		11 0 to 12 0	17 8	...	...	...

* Present return not received.
T At Sirajganj the retail price of salt is 11¼ seers per rupee.
U At Alipur the retail price of salt is 8 seers per rupee.
V The retail price of salt at Banka, Madhipura, and Supaul is 10 seers per rupee.
W In the subdivisions the retail prices of salt per rupee are—Kishanganj 10½ seers and Araria 10 seers.
X In the subdivisions the retail prices of salt per rupee are :—Deoghur 9½ seers, Godda 9 seers, Jamtara 9 seers, Pakur 10½ seers, and Rajmahal 10 seers.
Y At Barh the retail price of salt is 11 seers 6 chitaks per rupee.

CALCUTTA,
The 4th April, 1893.

Station Bazars of the Districts of Bengal on the 31*st March*, 1893—(concluded).

Indian-corn or Maize. (*Zea Mays.*)			Arhar or Thur, Cadjan Pea. (*Cajanus indicus.*)			Firewood.			Salt.			Wholesale prices per maund of 40 seers. Salt.			Districts.	Number.	
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.			
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
															BENGAL—*continued.*		
...	...	...	..	...	...	90 0	90 0	90 0	9 10	9 10	9 12	3 13 4	3 13 4	3 13 4	Bogra.	23	Rajshahi Division—*concld.*
...	...	...	22 8	22 8	17 4	200 0	200 0	200 0	T 10 8	10 8	9 12	3 10 0	3 10 0	3 12 0	Pabna.	24	
11 0	12 0	12 0	8 0	8 0	8 0	120 0	120 0	120 0	8 0	8 0	8 0	4 10 0	4 10 0	5 0 0	Darjeeling	25	
...	...	...	9 0	9 0	8 8	200 0	120 0	200 0	U 10 0	10 0	10 0	4 0 0	4 0 0	4 0 0	Jalpaiguri	26	
															BIHAR.		
...	19 8 to 21 0	18 6		15 11½ to 16 4	18 6		126 0 to 168 0	168 0		10 12	10 12		3 7 6	3 8 0	Monghyr.	27	Bhagalpur Division.
21 7	20 3	17 10	15 12	15 12	15 12	151 8	151	164 0	V 10 11	10 11	10 11	3 12 0	3 12 0	3 12 0	Bhagalpur.	28	
..	...	16 0	12 0	18 0	13 0	320 0	320 0	...	W 10 0	10 0	10 0	3 10 2	3 10 2	4 0 0	Purnea.	29	
...	...	...	12 0	12 0	...	160 0	160 0	120 0	10 0	10 0	10 0	4 0 0	4 0 0	3 10 0	Malda	30	
22 8	23 0	16 0	22 8	22 8	16 0	200 0	200	200 0	X 10 8	10 8	9 0	3 10 3	3 10 3	4 0 0	Sonthal Pargana.	31	
23 0	21 0	22 0	22 0	20 0	21 0	130 0	130 0	120 0	Y 11 8	11 8	11 8	3 8 0	3 8 0	3 8 0	Patna.	32	Patna Division.
19 0	18 0	...	19 0	19 0	18 0	120 0	120 0	160 0	Z 10 0	10 0	10 0	3 12 0	3 12 0	3 14 0	Gaya.	33	
20 0	20 0	...	21 0	20 0	16 0	160 0	160 0	160 0	a 11 0	11 0	10 8	3 10 0	3 10 0	...	Shahabad.	34	
24 0	21 0	19 12	16 0	15 5	17 9	176 0	176 0	160 0	b 10 4	10 5	11 0	3 12 0	3 12 0	3 6 0	Darbhanga.	35	
22 0	21 0	21 0	17 0	17 0	16 0	160 0	160 0	160 0	c 11 0	11 0	11 0	3 10 0	3 10 0	3 10 0	Muzaffarpur.	36	
21 8	20 8	21 8	18 8	18 8	22 0	210 0	200 0	160 0	d 10 8	10 12	10 8	3 10 6	3 10 6	3 12 0	Saran.	37	
21 12	21 8	20 4	16 0	15 4	Old 14 8, New 21 0	160 0	160 0	160 0	10 8	10 8	10 12	3 12 0	3 12 0	3 11 6	Champaran.	38	
															ORISSA.		
...	.	...	19 1	19 1	17 1	80 0	80 0	80 0	e 10 12	10 12	11 0	3 6 0	3 6 0	3 12 0	Cuttack.	39	Orissa Division.
...	...	...	15 12	15 12	14 0	80 0	80 0	80 0	11 8	11 8	12 0	3 5 0	3 5 0	3 4 0	Puri.	40	
...	..	..	10 12	10 12	...	160 0	160 0	140 0	f 11 0	11 0	10 8	3 10 0	3 10 0	3 14 0	Balasore.	41	
															CHOTA NAGPUR.		
17 0	17 0	18 0	15 0	15 0	16 0	240 0	210	210 0	g 9 0	9 0	9 0	3 15 0	3 15 0	4 0 0	Hazáribágh.	42	Chota Nagpur Division.
18 0	18 0	20 0	Big. 13 12, Small. 16 0	Big. 14 0, Small. 17 0	Big. 14 0, Small. 16 0	140 0	140 0	140 0 to 160 0	9 4	9 8	9 8	4 2 0	4 0 0	4 0 0	Lohardaga.	43	
22 8	24 8	...	...	19 2	...	...	...	...	...	8 4½	9 0	...	...	...	Palámau.	44	
...	...	...	14 0	14 0	16 0	100 0	100 0	160 0	9 0	9 0	9 0	4 6 0	4 6 0	4 3 0	Singbhum.	45	
...	18 0	...		18 0	18 0		.	200 0		10 10	10 10		3 10 0	3 12 0	Manbhum.	46	

Z In the subdivisions the retail prices of salt per rupee are :—Jahanabad 10 seers, Aurangabad 10¼ seers, and Nawada 9 seers.
a In the subdivisions the retail prices of salt per rupee are :—Buxar 11 seers, Sasaram 10¼ seers, and Bhabhua 10 seers.
b At Samastipur the retail price of salt is 10 seers per rupee.
c In the subdivisions the retail prices of salt per rupee are :—Hajipur 10½ seers and Sitamarhi 11 seers.
d In the Gopalganj subdivision (at Mirganj) the retail price of salt is 11 seers 13 chitaks per rupee.
e In the subdivisions the retail prices of salt per rupee are :—Jajpur 9 seers, Kendrapara 9 seers, and Banki 11½ seers.
f At Bhadrak the retail price of salt is 9 seers per rupee.
g At Giridih the retail price of salt is 11 seers per rupee.

Published for general information.

H. H RISLEY,
Secretary to the Govt. of Bengal.

PRICES-CURRENT (wholesale) of Food-grains, Firewood, and Salt

Number.	MARTS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE COMMON.		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R A P	R. A. P	R. A. P.	R A. P.
1	Calcutta ...	3 4 0	3 7 0	3 4 4	2 5 0	2 5 0	2 5 4	5 9 0	5 9 0	4 9 4	4 0 0	4 0 0	3 4 1
2	Sirajganj ...	3 0 0	2 14 0	3 0 0	...	...	...	6 0 0	6 0 0	5 4 0	3 8 0	3 6 0	3 0 0
3	Dacca ...	3 10 0	...	3 10 0	1 8 0	...	...	3 11 0	3 10 0	3 10 0	3 7 0	3 6 0	2 12 0
4	Narayanganj*	...	...	...	...	...	...	...	4 0 0	3 0 0	...	3 6 0	2 10 0
5	Chittagong	4 8 0	4 8 0	4 2 0	...	...	...	3 6 0	3 6 0	4 4 0	2 15 0	3 1 0	3 3 0
6	Patna ...	2 15 6 3 5 6	Red. 2 13 6 White. 3 0 0	2 10 0 2 15 3	1 10 6	2 0 0	1 13 0	4 3 10	4 3 10	3 13 0	2 8 0	2 8 0	2 13 8
7	Balasore ...	3 8 0	3 8 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 8 0	2 10 0	2 10 0	2 14 0
	Puri ...	4 4 0	4 4 0	3 12 9	...	...	...	4 4 0	4 4 0	3 6 0	2 11 0	2 11 0	2 15 0
	Cuttack ...	10 0	3 10 0	3 10 0	...	...	...	3 10 0	3 10 0	4 4 0	2 12 0	2 12 0	2 14 0

* Present return not received.

CALCUTTA,
The 21st Macrh, 1893.

in the undermentioned Marts of Bengal on the 31*st March* 1893.

Gram, Chana, Chhola, Kadalay or Sunaga. (*Cicer Arietinum.*)			Indian-corn or Maize. (*Zea Mays.*)			Arhar or thur, Cadjan Pea. (*Cajanus indicus.*)			Firewood.			Salt.			Marts.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
2 12 0	2 11 6	2 5 6	2 0 0	2 0 0	2 4 0	3 0 0	3 3 0	2 4 7	0 7 0	0 7 0	0 5 10	4 0 0	4 0 0	3 6 0	Calcutta.
3 4 0	2 14 0	2 6 0	...	...	...	...	...	...	0 6 6	0 6 6	0 7 0	3 8 0	3 8 0	3 8 0	Sirajganj.
3 0 0	...	2 10 0	...	...	...	2 4 0	...	...	0 5 0	0 5 0	0 5 0	3 10 0	3 10 0	3 8 0	Dacca.
...	...	3 8 0	...	...	...	...	...	3 8 0	...	0 5 0	0 8 0	...	3 10 0	3 8 0	Narayanganj.
3 8 0	3 8 0	3 8 0	...	...	...	...	...	...	0 8 0	0 6 0	0 5 0	3 13 0	3 13 0	3 8 0	Chittagong.
1 13 0	2 3 6	1 13 6	1 11 6	1 14 6	1 13 0	1 13 0	2 0 0	1 14 5	0 5 0	0 5 0	0 5 4	3 8 0	3 8 0	3 8 0	Patna.
2 14 0	2 14 0	2 12 0	...	...	...	3 10 0	3 10 0	...	...	...	...	3 10 0	3 10 0	3 14 0	Balasore.
2 5 0	2 2 0	2 13 0	...	...	...	2 8 0	2 8 0	2 13 6	0 8 0	0 8 0	0 8 0	3 5 0	3 5 0	3 4 0	Puri.
2 0 0	(Kalai.) 2 0 0	2 5 0	...	...	...	2 0 0	2 0 0	2 2 0	0 8 0	0 8 0	0 8 0	3 6 0	3 6 0	3 12 0	Cuttack.

Published for general information.

H. H. RISLEY,
Secretary to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS. Air pressure. Mean barometric height, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. Prevailing direction.	Mean wind velocity.	Temperature. Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa	Puri	Puri	29·892	29·841	—	WSW	288	86·7	30th Mar.	73·6	26th Mar.	85·2	76·3	80·8
		Gopalpore	29·904	29·865	+·043	Wly	326	87·7	30th ,,	70·4	26th ,, & 1st Apl.	85·6	72·7	79·1
		False Point	29·890	29·863	+·080	SW	315	87·9	29 & 30 ,,	69·1	26th Mar.	85·7	74·2	80·0
	Cuttack	Cuttack	29·829	29·853	+·026	Calm & SWly		100·6	1st Apl.	69·8	26 & 27 ,,	96·0	72·2	84·1
	Balasore	Balasore	29·841	29·844	+·021	SWly	144	96·4	29th Mar.	65·8	30th ,,	92·0	69·6	80·8
South-West Bengal	Midnapore	Midnapore	29·752	29·849	+·028	S	235	99·3	1st Apl.	64·2	26th ,,	94·6	68·0	81·8
	24-Parganas	Calcutta	29·877	29·844	+·027	Calm	86	92·6	29th Mar. & 1st Apl.	64·2	26th ,,	89·8	69·6	79·7
		Saugor Island	29·876	29·846	+·024	SSW	357	90·2	30th Mar.	61·9	30th ,,	86·7	74·1	80·4
	Howrah													
	Hooghly													
	Nadia	Krishnagar	29·841	29·837	+·042	SEly	118	96·1	29th ,,	57·5	26th ,,	91·4	65·3	78·4
	Khulna													
	Jessore	Jessore	29·861	29·842	+·019	Variable	66	96·0	29th ,,	60·5	26th ,,	91·6	68·2	80·0
	Burdwan	Burdwan	·29·797	29·844	+·031?	S & Calm	23	96·7	29th ,,	60·1	26th ,,	91·9	67·3	79·6
		Raniganj	29·544	29·846	+·016	Wly	69	99·7	29th ,,	60·1	26th ,,	94·6	65·0	79·8
	Bankura	Bankura	29·566	29·821	+·021	Wly	74	98·1	29th ,, & 1st Apl.	61·7	26th ,,	94·2	66·3	80·3
	Birbhum													
	Murshidabad	Berhampore	29·815	29·832	+·024	S	87	92·7	1st ,,	6[illegible]·2	26th ,,	90·4	65·4	77·9
North Bengal	Pabna	Sirajganj	29·846	29·813	+·023	Sly	68	90·1	30th Mar.	58·5	26th ,,	88·1	63·9	76·0
	Bogra	Bogra	29·818	29·833	+·045	E	64	90·2	28th ,, & 1st Apl.	57·2	26th ,,	88·2	61·8	75·0
	Rajshahi	Rampur Boalia.	29·805	29·826	+·032	Variable	86	90·6	1st ,,	59·7	30 & 31 ,,	88·9	63·2	76·1
	Malda	Malda	29·8[illegible]2	29·835	—	NE	89	92·0	28th Mar.	55·7	26th ,,	89·5	60·1	74·8
	Dinajpur	Dinajpur	29·775	29·850	+·020	NE	100	91·6	28th ,,	53·9	26th ,,	89·0	61·2	75·2
	Rangpur	Rangpur	29·786	29·886	+·059	NE	29	88·6	1st Apl.	54·6	26th ,,	86·2	60·8	73·5
	Jalpaiguri	Jalpaiguri	29·641	29·887	+·077	SEly	79	86·4	1st ,,	57·0	26th ,,	83·5	61·2	72·3
	Kuch Bihar													
	Darjeeling	Darjeeling	29·957	—	—·006	Variable	223	58·1	1st ,,	37·7	26th ,,	53·0	40·8	46·9
	Sikkim	Gnatong	19·157	—	—	Variable	93	43·6	31st Mar.	7·1	29th ,,	35·3	15·0	25·1
East Bengal	Chittagong	Chittagong	29·852	29·889	+·010	ENE	95	86·2	1st Apl.	61·1	26th ,,	84·8	67·0	75·9
	Chittagong Hill Tracts	Demagiri						Observations not received.						
	Backergunge	Barisal	29·868	29·857	+·013	Calm	108	91·8	30th Mar.	62·1	26th ,,	89·2	70·4	79·8
	Noakhali	Noakhali	29·891	29·881	+·024	SEly	136	86·5	1st Apl.	60·0	26th ,,	84·6	68·3	76·5
	Faridpur	Faridpur	29·868	29·862	+·029	SW	60	90·5	30th Mar.	58·0	26th ,,	88·1	65·4	76·8
	Dacca	Dacca	29·880	29·850	+·017	S	131	92·1	29th ,,	62·3	26th ,,	88·9	69·7	79·3
	Tippera	Comilla	29·887	29·871	+·030	SEly	151	89·4	31st ,, & 1st Apl.	59·9	26th ,,	87·8	68·4	78·1
	Mymensingh	Mymensingh	29·849	29·865	+·021	ESE	120	88·2	30th Mar.	58·9	26th ,,	85·1	65·0	75·1
North Bihar	Purnea	Purnea	29·775	29·836	+·051	E & NEly	60	92·2	1st Apl.	53·3	26th ,,	89·8	60·4	75·1
	Bhagalpur	Bhagalpur	29·713	29·830	+·038	Calm	24	93·7	28th Mar.	56·0	26th ,,	91·1	61·6	76·4
	Darbhanga	Darbhanga	29·731	29·855	+·050	ENE	91	90·7	28th ,,	55·2	26th ,,	88·2	59·3	73·8
	Muzaffarpur	Muzaffarpur	29·699	29·837	—	ESE	105	90·7	28th ,,	55·3	26 & 30 ,,	88·6	60·4	74·5
	Champaran	Motihari	29·647	29·854	+·048	ESE	140	90·6	28th ,,	52·9	26th ,,	88·7	58·0	73·4
	Saran	Chapra	29·6[illegible]5	29·834	+·062	WSW	136	94·3	28th ,,	58·1	26th ,,	91·3*	62·2	76·8
South Bihar	Shahabad	Dehri	29·509	29·822	+·019	SW	65?	96·9	28th ,,	62·0	26th ,,	93·6	65·0	79·4
		Buxar	29·632	29·831	+·031	WSW	112	96·5	28th ,,	59·9	29 & 30 ,,	91·6	62·9	77·3
		Arrah	29·684	29·83[illegible]	+·056	Variable	94	96·1	28th ,,	57·8	26th ,,	92·8	62·6	77·6
	Gaya	Gaya	29·501	29·836	+·028	E	128	97·3	28th ,,	59·9	27th ,,	94·0	63·5	78·8
	Patna	Bankipore	29·697	29·837	+·036	Variable	125	93·6	28th ,,	57·7	26th ,,	91·3	62·7	77·1
	Monghyr													
	Sonthal Parganas	Naya Dumka	29·376	29·832	+·035	WNW	23	94·6	29th ,,	59·5	26th ,,	91·8	63·5	77·6
Chota Nagpur	Hazaribagh	Hazaribagh	27·864	29·821	+·011	Wly	241	91·8	1st Apl.	69·3	26th ,,	88·5	62·9	75·8
	Lohardaga	Ranchi	27·7[illegible]1	29·829	+0·21	Calm	161	91·5	1st ,,	56·9	26th ,,	87·3	63·0	75·2
	Palamau													
	Singhbhum	Chaibassa	29·131	29·853	+·041	Wly	49	96·7	1st ,,	58·8	26th ,,	92·4	64·9	78·7
	Manbhum													

* Mean of 6 days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period

The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01

rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station

district, etc., from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one of

for the week ending Saturday, the 1st of April 1893.

					DISTRICT OBSERVATIONS.										
					Of week.				Rainfall.						
									Since 1st of month.			Since 1st April 1893.*			
Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.	District.
—	79·0	88	1·9	Nil	0·07	0·23	0·25	0·33	Nil	0·02	—0·02	Nil	0·02	—0·02	Puri.
—1·1	77·6	81	0·7	Nil											
—2·4	78·3	84	5·7	Nil											
—3·6	77·5	72	1·7	Nil	0·01	0·21	0·00	0·37	Nil	0·01	—0·01	Nil	0·01	—0·01	Cuttack.
—1·9	76·9	80	0·3	Nil	Nil	0·41	0·00	0·61	Nil	0·04	—0·04	Nil	0·04	—0·04	Balasore.
—2·4	76·9	69	0·9	Nil	Nil	0·37	0·00	0·62	Nil	0·04	—0·04	Nil	0·04	—0·04	Midnapore.
—3·5	75·8	83	2·1	Nil	Nil	0·56	0·00	0·60	Nil	0·02	—0·02	Nil	0·02	—0·02	24-Parganas.
—2·8	79·0	84	3·9	Nil											
					Nil	0·40	0·00	0·63	Nil	0·02	—0·02	Nil	0·02	—0·02	Howrah.
					0·01	0·44	0·00	0·47	Nil	0·03	—0·03	Nil	0·03	—0·03	Hooghly.
—3·1	75·7	71	1·3	Nil	Nil	0·72	0·00	0·79	Nil	0·04	—0·04	Nil	0·04	—0·04	Nadia.
					Nil	0·86	0·00	0·92	Nil	0·03	—0·03	Nil	0·03	—0·03	Khulna.
—3·8	76·1	85	2·6	Nil	Nil	0·81	0·00	1·02	Nil	0·06	—0·06	Nil	0·06	—0·06	Jessore.
—5·6	74·9	66	1·4	Nil	Nil	0·46	0·00	0·62	Nil	Nil	0	Nil	Nil	0	Burdwan.
—5·0	72·7	56	0·0	Nil											
?	73·6	59	0·6	Nil	Nil	0·34	0·00	0·55	Nil	Nil	0	Nil	Nil	0	Bankura.
					Nil	0·25	0·00	0·37	Nil	Nil	0	Nil	Nil	0	Birbhum.
—6·0	70·2	82	1·4	Nil	Nil	0·49	0·00	0·54	Nil	Nil	0	Nil	Nil	0	Murshidabad.
—4·2	70·8	92	5·6	Nil	Nil	0·50	0·00	0·87	Nil	0·02	—0·02	Nil	0·02	—0·02	Pabna.
—5·0	69·7	85	0	Nil	Nil	0·45	0·00	0·82	Nil	0·01	—0·01	Nil	0·01	—0·01	Bogra.
—4·9	73·7	74	2·3	Nil	Nil	0·39	0·00	0·58	Nil	Nil	0	Nil	Nil	0	Rajshahi.
—	71·5	66	1·4	Nil	Nil	0·19	0·00	0·34	Nil	Nil	0	Nil	Nil	0	Malda.
—4·3	69·0	68	0·4	Nil	Nil	0·30	0·01	0·41	Nil	0·01	—0·01	Nil	0·01	—0·01	Dinajpur.
—3·9	69·1	74	0·6	Nil	Nil	0·49	0·00	0·57	Nil	0·01	—0·01	Nil	0·01	—0·01	Rungpur.
—2·4	69·7	66	3·1	Nil	Nil	0·54	0·00	0·79	Nil	0·02	—0·02	Nil	0·02	—0·02	Jalpaiguri.
					Nil	0·85	0·00	1·00	Nil	0·03	—0·03	Nil	0·03	—0·03	Kuch Bihar.
—4·7	47·5	75	4·7	0·05	0·24	0·83	0·25	1·28	Nil	0·08	—0·08	Nil	0·08	—0·08	Darjeeling.
—	[illegible]	[illegible]	4·0	0·57											Sikkim.
—2·8	73·6	84	3·0	Nil	Nil	0·67	0·00	0·90	Nil	0·02	—0·02	Nil	0·02	—0·02	Chittagong.
					Nil	0·99	0·00	1·20	Nil	0·04	—0·04	Nil	0·04	—0·04	Chittagong Hill Tracts.
+0·4	75·8	88	6·0	Nil	Nil	0·75	0·00	1·03	Nil	0·05	—0·05	Nil	0·05	—0·05	Backergunge.
—1·6	76·4	85	3·9	0·61	0·41	1·33	0·50	1·32	Nil	0·06	—0·06	Nil	0·06	—0·06	Noakhali.
—3·1	73·6	86	2·6	Nil	Nil	0·74	0·00	1·12	Nil	0·03	—0·03	Nil	0·03	—0·03	Faridpur.
—2·6	75·4	84	7·0	Nil	0·25	1·22	0·50	1·37	0·08	0·03	+0·05	0·08	0·03	+0·05	Dacca.
—1·2	74·5	87	6·3	0·02	0·61	1·13	0·50	1·34	Nil	0·07	—0·07	Nil	0·07	—0·07	Tippera.
—2·5	70·2	86	5·3	0·46	0·17	0·79	0·80	1·17	0·07	0·06	+0·01	0·07	0·06	+0·01	Mymensingh.
—5·1	70·5	68	0·7	Nil	Nil	0·18	0·00	0·26	Nil	0·02	—0·02	Nil	0·02	—0·02	Purnea.
—4·8	72·5	60	0	Nil	Nil	0·09	0·00	0·16	Nil	Nil	0	Nil	Nil	0	Bhagalpur.
—6·4	70·5	56	0	Nil	Nil	0·04	0·00	0·13	Nil	Nil	0	Nil	Nil	0	Darbhanga.
—	69·9	61	0	Nil	Nil	0·12	0·00	0·19	Nil	0·01	—0·01	Nil	0·01	—0·01	Muzaffarpur.
—5·2	69·4	55	0·6	Nil	Nil	0·05	0·00	0·20	Nil	0·01	—0·01	Nil	0·01	—0·01	Champaran.
—4·2	72·4	49	0·1	Nil	Nil	0·06	0·00	0·19	Nil	0·01	—0·01	Nil	0·01	—0·01	Saran.
—3·3	72·6	42	0	Nil											
—4·6	72·8	45	0·1	Nil	Nil	0·04	0·00	0·17	Nil	0·01	—0·01	Nil	0·01	—0·01	Shahabad.
—4·5	73·6	43	0	Nil											
—6·8	73·7	59	0	Nil	Nil	0·08	0·00	0·17	Nil	0·01	—0·01	Nil	0·01	—0·01	Gaya.
—6·0	73·8	46	0	Nil	Nil	0·07	0·00	0·12	Nil	0·01	—0·01	Nil	0·01	—0·01	Patna.
					Nil	0·10	0·00	0·16	Nil	Nil	0	Nil	Nil	0	Monghyr.
—5·6	74·3	50	0	Nil	Nil	0·12	0·00	0·21	Nil	Nil	0	Nil	Nil	0	Sonthal Parganas.
—5·4	75·8	3	0	Nil	Nil	0·06	0·00	0·16	Nil	Nil	0	Nil	Nil	0	Hazaribagh.
—5·0	74·1	44	0	Nil	Nil	0·06	0·00	0·16	Nil	0·01	—0·01	Nil	0·01	—0·01	Lohardaga.
					Nil	0·19	0·00	0·21	Nil	0·06	—0·06	Nil	0·06	—0·06	Palamau.
—7·4	72·9	56	0·4	Nil	Nil	0·25	0·00	0·45	Nil	0·11	—0·11	Nil	0·11	—0·11	Singhbhum.
					Nil	0·12	0·00	0·30	Nil	0·01	—0·01	Nil	0·01	—0·01	Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 1st of April 1893.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 26th March.	Monday, 27th March.	Tuesday, 28th March.	Wednesday, 29th March.	Thursday, 30th March.	Friday, 31st March.	Saturday, 1st.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April to date.
ORISSA	Puri	Puri	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·03	Nil	0·0
		Khurda	...	...	...	...	...	...	...	Nil	Nil	0·21	Nil	Nil	Nil	Nil
		Banpur	...	...	...	0·29	...	...	...	1	0·29	0·26	Nil	Nil	Nil	Nil
		False Point	...	...	...	...	...	...	...	Nil	Nil	0·30	Nil	0·05	Nil	0·0
		Gop	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Satpara	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pipli	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Cuttack	Jagatsingpore	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·01	Nil	0·0
		Banki	...	...	...	0·04	...	...	...	Nil	0·04	0·38	Nil	0·01	Nil	0·0
		Cuttack	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	Nil	Nil	Nil
		Kendrapara	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·01	Nil	0·0
		Jajpur	...	...	...	...	...	...	...	Nil	Nil	0·23	Nil	0·02	Nil	0·0
		Dharmsala	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Salipore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pal Lahara	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Balasore	*Akhyapada*	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Chandbali	...	...	...	...	...	...	...	Nil	Nil	0·21	Nil	Nil	Nil	Nil
		Bhadrak	...	...	...	...	...	...	...	Nil	Nil	0·53	Nil	0·04	Nil	0·0
		Soro	...	...	...	...	...	...	...	Nil	Nil	0·45	Nil	Nil	Nil	Nil
		Balasore	...	...	...	...	...	...	...	Nil	Nil	0·39	Nil	0·02	Nil	0·0
		Jellasore	...	...	...	...	...	...	...	Nil	Nil	0·24	Nil	Nil	Nil	Nil
		Baripodah	...	...	...	...	...	...	...	Nil	Nil	0·64	Nil	0·18	Nil	0·1
SOUTH-WEST BENGAL.	Midnapore	Contai	...	...	...	...	...	...	...	Nil	Nil	0·48	Nil	0·05	Nil	0·0
		Tamluk	...	...	...	...	...	...	...	Nil	Nil	0·36	Nil	0·04	Nil	0·0
		Midnapore	...	...	...	...	...	...	...	Nil	Nil	0·29	Nil	0·07	Nil	0·0
		Ghatal	...	...	...	...	...	...	...	Nil	Nil	0·37	Nil	Nil	Nil	Nil
		Kukrahaty	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Garhbeta	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Panskura	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	24-Parganas	Saugor Island	...	...	...	...	...	...	...	Nil	Nil	0·68	Nil	0·01	Nil	0·0
		Diamond Harbour	...	...	...	...	...	...	...	Nil	Nil	0·44	Nil	0·01	Nil	0·0
		Canning Town	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Alipore (Observatory.)	...	...	...	...	...	...	...	Nil	Nil	0·3?	Nil	0·02	Nil	0·0
		Barrackpore	...	...	...	...	...	...	...	Nil	Nil	0·56	Nil	0·05	Nil	0·0
		Dum-Dum	...	...	...	...	...	...	...	Nil	Nil	0·46	Nil	0·02	Nil	0·0
		Barasat	...	...	...	...	...	...	...	Nil	Nil	0·57	Nil	0·04	Nil	0·0
		Basirhat	...	...	...	...	...	...	...	Nil	Nil	0·82	Nil	0·02	Nil	0·0
	Howrah	Howrah	...	...	...	...	...	...	...	Nil	Nil	0·3?	Nil	0·02	Nil	0·0
		Mohesreka	...	...	...	...	...	...	...	Nil	Nil	0·41	Nil	0·01	Nil	0·0
		Uluberia	...	...	...	...	...	...	...	Nil	Nil	?	Nil		Nil	?
	Hooghly	Serampore	...	...	...	...	...	...	...	Nil	Nil	0·57	Nil	0·05	Nil	0·0
		Hooghly	...	...	...	0·04	...	...	...	Nil	0·04	0·41	Nil	Nil	Nil	Nil
		Jahanabad	...	...	...	...	...	...	...	Nil	Nil	0·34	Nil	Nil	Nil	Nil
	Nadia	Ranaghat	...	...	...	...	...	...	...	Nil	Nil	0·56	Nil	0·02	Nil	0·0
		Krishnagar	...	...	...	...	...	...	...	Nil	Nil	0·69	Nil	0·01	Nil	0·0
		Chuadanga	...	...	...	...	...	...	...	Nil	Nil	0·81	Nil	0·0?	Nil	0·0
		Meherpore	...	...	...	...	...	...	...	Nil	Nil	0·94	Nil	0·06	Nil	0·0
		Kushtia	...	...	...	...	...	...	...	Nil	Nil	0·59	Nil	0·03	Nil	0·0
	Khulna	Satkhira	...	...	...	...	...	...	...	Nil	Nil	1·11	Nil	0·06	Nil	0·0
		Bagerhat	...	...	...	...	...	...	...	Nil	Nil	0·69	Nil	0·01	Nil	0·0
		Khulna	...	...	...	...	...	...	...	Nil	Nil	0·79	Nil	0·03	Nil	0·0
		Nakipur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Rampal	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Jessore	Narail	...	...	...	...	...	...	...	Nil	Nil	0·56	Nil	0·04	Nil	0·0
		Jessore	...	...	...	...	...	...	...	Nil	Nil	0·93	Nil	0·03	Nil	0·0
		Jhenidah	...	...	...	...	...	...	...	Nil	Nil	0·82	Nil	0·13	Nil	0·1
		Magura	...	...	...	...	...	...	...	Nil	Nil	1·07	Nil	0·12	Nil	0·1
		Bangaon	...	...	...	...	...	...	...	Nil	Nil	0·68	Nil	Nil	Nil	Nil
	Burdwan	Kalna	...	...	...	...	...	...	...	Nil	Nil	0·47	Nil	Nil	Nil	Nil
		Burdwan	...	...	...	...	...	...	...	Nil	Nil	0·60	Nil	Nil	Nil	Nil
		Katwa	...	...	...	...	...	...	...	Nil	Nil	0·62	Nil	0·01	Nil	0·01
		Raniganj	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	Nil	Nil	Nil
		Mankur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Bankura	Bankura	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	Nil	Nil	Nil
		Vishnupur	...	...	...	...	...	...	...	Nil	Nil	0·42	Nil	Nil	Nil	Nil
		Maliara	...	...	...	...	...	...	...	Nil	Nil	0·23	Nil	Nil	Nil	Nil
		Khatra	...	...	...	...	...	...	...	Nil	Nil	0·3?	Nil	Nil	Nil	Nil
		Indas	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Kotalpur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Onda	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Gangajalghati	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Raipur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sonamukhi	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Birbhum	Suri	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	Nil	Nil	Nil
		Hetampore	...	...	...	...	...	...	...	Nil	Nil	0·27	Nil	Nil	Nil	Nil
		Rampur Hat	...	...	...	...	...	...	...	Nil	Nil	0·28	Nil	Nil	Nil	Nil
		Bolpur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Murari	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Murshidabad	Kandi	...	...	...	...	...	...	...	Nil	Nil	0·50	Nil	Nil	Nil	Nil
		Berhampore	...	...	...	...	...	...	...	Nil	Nil	0·38	Nil	Nil	Nil	Nil
		Lalbagh	...	...	...	...	...	...	...	Nil	Nil	0·47	Nil	Nil	Nil	Nil
		Azimganj	...	...	...	...	...	...	...	Nil	Nil	0·41	Nil	Nil	Nil	Nil
		Jangipur	...	...	...	...	...	...	...	Nil	Nil	0·24	Nil	Nil	Nil	Nil
		Lalgola	...	...	...	...	...	...	...	Nil	Nil	0·38	Nil	Nil	Nil	Nil
		Akhriganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Patkabari	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
NORTH BENGAL	Pabna	Pabna	...	...	...	...	...	...	...	Nil	Nil	0·54	Nil	0·03	Nil	0·03
		Sirajganj	...	...	...	...	...	...	...	Nil	Nil	0·47	Nil	Nil	Nil	Nil
	Bogra	Sherepore	...	...	...	...	...	...	...	Nil	Nil	0·51	Nil	Nil	Nil	Nil
		Nowkhilla	...	...	...	...	...	...	...	Nil	Nil	0·59	Nil	0·02	Nil	0·02
		Bogra	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	0·01	Nil	0·01
		Panchbibi	...	...	...	...	...	...	...	Nil	Nil	0·40	Nil	Nil	Nil	Nil
	Rajshahi	Boalia	...	...	...	...	...	...	...	Nil	Nil	0·32	Nil	Nil	Nil	Nil
		Nator	...	...	...	...	...	...	...	Nil	Nil	0·43	Nil	Nil	Nil	Nil
		Naugaon	...	...	...	...	...	...	...	Nil	Nil	0·41	Nil	Nil	Nil	Nil
		Lalpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Manda	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 1st of April 1893—contd.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 26th March.	Monday, 27th March.	Tuesday, 28th March.	Wednesday, 29th March.	Thursday, 30th March.	Friday, 31st March.	Saturday, 1st.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BENGAL—concld.	Malda ...	Malda ...														
		Chanchal ...	...	...	...	...	...	...	...	Nil	Nil	0·21	Nil	Nil	Nil	Nil
		Gajol ...	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	Nil	Nil	Nil
		Sibganj ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Dinajpur ...	Mohadebpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	
		Churaman ...	...	...	...	...	...	...	...	Nil	Nil	0·49	Nil	Nil	Nil	Nil
		Raiganj ...	...	...	...	...	...	...	...	Nil	Nil	0·24	Nil	Nil	Nil	Nil
		Dinajpur ...	...	...	...	...	...	...	...	Nil	Nil	0·25	Nil	0·01	Nil	0·06
		Balurghat ...	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	Nil	Nil	Nil
		Thakurgaon ...	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	Nil	Nil	Nil
	Rangpur ...	Bhawanigunge (*Gyabanda*)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Rangpur ...	...	...	...	...	...	...	...	Nil	Nil	0·47	Nil	0·01	Nil	0·01
		Kurigaon ...	...	...	...	...	...	...	...	Nil	Nil	0·28	Nil	0·02	Nil	0·02
		Bagdogra (*Nilphamari*)	...	...	...	...	...	...	...	Nil	Nil	0·83	Nil	0·01	Nil	0·01
		Ulipore ...	...	...	...	...	...	...	...	Nil	Nil	0·36	Nil	Nil	Nil	Nil
	Jalpaiguri ...	Jalpaiguri	...	...	...	...	...	...	...	Nil	Nil	?	Nil		Nil	?
		Alipore Duar	...	...	...	0·46	...	...	...	Nil	Nil	0·54	Nil	0·02	Nil	0·02
		Fallacotta ...	...	...	...	...	...	...	...	1	0·46	?	Nil	?	Nil	?
		Debiganj ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Bhagatpore (Nagrakatta)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Kuch Bihar	Dinhatta ...	...	...	...	...	0·07	...	...	Nil	0·07	?	Nil	?	Nil	?
		Kuch Bihar ...	...	...	...	...	...	...	...	Nil	Nil	0·67	Nil	0·01	Nil	0·01
		Mickliganj ...	...	...	...	...	...	...	...	Nil	Nil	0·86	Nil	0·10	Nil	0·10
		Mathabhanga	...	...	...	...	...	...	...	Nil	Nil	0·76	Nil	Nil	Nil	Nil
	Darjeeling ...	Buxa ...	...	...	...	0·84	...	...	...	Nil	Nil	1·09	Nil	Nil	Nil	Nil
		Siliguri ...	...	...	...	...	...	...	...	1	0·84	1·27	Nil	0·17	Nil	0·17
		Darjeeling ...	...	...	0·02	0·03	...	...	...	Nil	Nil	0·69	Nil	Nil	Nil	Nil
		Kalimpong ...	...	...	0·05	...	...	...	...	Nil	0·05	0·81	Nil	0·14	Nil	0·14
		Kurseong ...	...	...	0·04	...	...	...	...	Nil	0·05	0·65	Nil	0·02	Nil	0·02
EAST BENGAL	Chittagong ..	Cox's Bazar ..	...	...	...	...	...	...	...	Nil	0·04	?	Nil	?	Nil	?
		Chittagong ..	...	...	...	...	...	...	...	Nil	Nil	0·51	Nil	0·01	Nil	0·01
		Kutubdia ..	...	...	...	...	...	...	...	Nil	Nil	0·83	Nil	0·03	Nil	0·03
		Satkanya ...	...	...	...	...	...	...	...				Nil			?
		Kodala ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Fenoa ...	...	...	...	...	...	...	...			?	Nil	?	Nil	?
		Mirsarai ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Mil	?
		Chandpur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Chittagong Hill Tracts.	Rangamati ...	...	...	...	0·34	...	...	...			?	Nil	?	Nil	?
		Bundarban ...	...	...	...	2·01	...	...	...	1	0·34	0 99	Nil	0·04	Nil	0·04
	Backergunge	Patuakhali ...	...	...	...	...	...	...	...	1	2·01	?	Nil	?	Nil	?
		Pirojpur ...	...	...	...	...	...	...	...	Nil	Nil	0·85	Nil	0·01	Nil	0·01
		Barisal ...	...	...	...	...	...	...	...	Nil	Nil	0·44	Nil	0·06	Nil	0·06
		Gournaddi ...	...	...	...	...	...	...	...	Nil	Nil	0·83	Nil	0·14	Nil	0·14
		Bhola ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Daulatkhan ...	...	...	...	...	...	...	...	Nil	Nil	0 90	Nil	0·01	Nil	0·01
		Bauphal ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Noakhali ..	Noakhali ...	...	...	...	0·81	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Fenny ...	...	...	...	...	...	...	...	1	0·81	1·10	Nil	0·01	Nil	0·01
		Harishpore ...	...	...	...	0·34	...	...	...	Nil	Nil	1·56	Nil	0·11	Nil	0·11
		Ramganj ...	...	...	...	2·01	...	...	...	1	0·34	?	Nil	?	Nil	?
	Faridpur ...	Madaripur ...	...	...	...	...	...	...	...	1	2·01	?	Nil	?	Nil	?
		Faridpur ...	...	...	...	...	...	...	...	Nil	Nil	0·76	Nil	0·01	Nil	0·01
		Goalundo ...	...	...	...	...	...	...	...	Nil	Nil	0·75	Nil	0 07	Nil	0 07
	Dacca ...	Munshiganj ..	...	...	...	...	...	...	...	Nil	Nil	0·72	Nil	0·02	Nil	0 02
		Dacca ...	...	...	...	0·67	...	...	...	1	0·67	1·07	Nil	0·06	Nil	0·06
		Narayanganj ...	...	...	...	...	...	...	...	Nil	Nil	0·96	Nil	0·04	Nil	0·04
		Manikganj ...	...	...	...	0·02	...	...	...	Nil	0·02	1·77	Nil	Nil	Nil	Nil
		Joydebpore ...	...	...	...	...	...	...	0·32	1	0·32	1 09	0·32	Nil	0·32	Nil
	Hill Tippera	Agartola ...	...	...	...	...	...	...	0·4.	1	0·42	?	0·42	?	0·42	?
	Tippera	Comilla ...	...	...	...	0·19	...	...	...							
		Chandpore ...	...	...	...	0·03	...	...	...	1	0·19	1·14	Nil	0·13	Nil	0 13
		Brahmanbaria	...	...	...	1·80	...	...	...	Nil	0·03	1·16	Nil	0·08	Nil	0·08
		Ramchandrapore	...	...	...	...	...	...	...	1	1·80	1·07	Nil	Nil	Nil	Nil
										Nil	Nil	1·13	Nil	0 07	Nil	0 07
		Nasirnagar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Daudkandi ...	...	...	...	0·50	...	...	...							
		Kasba ...	...	...	...	0·50	...	...	...	1	0·50	?	Nil	?	Nil	?
		Laksham ...	...	...	...	...	...	...	...	1	0·50	?	Nil	?	Nil	?
			...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Mymensingh	Kishorganj ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Atia (*Tangail*)	...	...	...	0·19	...	...	...							
		Mymensingh ..	...	...	...	...	...	...	...	1	0·19	1 00	Nil	0·13	Nil	0·13
		Jamalpur ...	...	...	0·13	...	...	...	0·33	Nil	Nil	0 40	Nil	Nil	Nil	Nil
		Netrakona ...	...	...	...	...	...	...	...	2	0·46	0·73	0·33	0·12	0·33	0 12
		Subornakhally	...	...	0·21	...	...	...	...	Nil	Nil	0·49	Nil	0·05	Nil	0·05
		Durgapore ...	...	...	...	...	...	...	...	1	0·21	1·32	Nil	Nil	Nil	Nil
		Sherepore Town	...	...	...	...	...	...	...	Nil	Nil		Nil	?	Nil	?
		Dewanganj ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
			...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
NORTH BIHAR	Purnea ...	Kishanganj ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Araria ...	...	...	...	...	...	...	...	Nil	Nil	0·26	Nil	0·05	Nil	0·05
		Purnea ...	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0 01	Nil	0·01
		Gondwara (Korah)	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	Nil	Nil	Nil
			...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	
		Barsoe ...	...	...	...	...	...	...	...							
		Forbesganj	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Kataya	...	...	...	...	...	...	...	Nil	Nil		Nil	?	Nil	?
			...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Bhagalpur ...	Madhipura ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	Nil	Nil	N
		Bongaon (Sujabad)	...	...	...	...	...	...	...	Nil	Nil	?	Nil		Nil	?
		Supaul ...	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	Nil	Nil	Ni
		Protabganj	...	...	...	...	...	...	...	Nil	Nil		Nil		Nil	?
		Bhagalpur	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	Nil	Nil	Nil
		Banka ...	...	...	...	...	...	...	...	Nil	Nil	0 05	Nil	Nil	Nil	Nil
		Colgong ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Darbhanga ...	Tajpur ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·01	Nil	0·01
		Darbhanga ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	Nil	Nil	...
		Madhubani ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	Nil	Nil	Nil
		Bahera ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	
		Roshera ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 1st of April 1893—*concld.*

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 26th March.	Monday, 27th March.	Tuesday, 28th March.	Wednesday, 29th March.	Thursday, 30th March.	Friday, 31st March.	Saturday, 1st.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th Oct. 1892.	Average rainfall from 16th Oct. to date.
NORTH BIHAR—*concluded.*	Muzaffarpur...	Sitamarhi ...	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	Nil	Nil	Nil
		Muzaffarpur	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·02	Nil	0·02
		Hajipur ...	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·02	Nil	0·02
		Paru	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Mahwa (Chitwarra.)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Suhar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pupri ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Champaran ...	Motihari ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	Nil	Nil	Nil
		Bettiah ..	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·01	Nil	0·01
		Bagaha ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Burhurwa ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Saran ..	Gopalganj ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	Nil	Nil	Nil
		Siwan ...	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	Nil	Nil	Nil
		Chapra ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·02	Nil	0·02
SOUTH BIHAR	Shahabad ...	Buxar ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·03	Nil	0·03
		Dehri ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	Nil	Nil	Nil
		Bhabhua ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	Nil	Nil	Nil
		Sasaram ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·01	Nil	0·01
		Arrah ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·03	Nil	0·03
		Mohanea ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Khiri ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Ageaon ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Ramagar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Koath ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sikroul ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Bassowan ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Monaharpur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Gaya ...	Aurangabad ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	Nil	Nil	Nil
		Gaya ...	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·02	Nil	0·02
		Nawadah ...	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·02	Nil	0·02
		Jahanabad ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	Nil	Nil	Nil
		Arwal .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Daudnagar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sherghati .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Rajauli ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pakri Barawan	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Patna ...	Patna ...	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·02	Nil	0·02
		Dinapore ...	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	Nil	Nil	Nil
		Bihar ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	Nil	Nil	Nil
		Barh ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	Nil	Nil	Nil
		Bickram ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Hilsa ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Monghyr ..	Begusarai ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·01	Nil	0·01
		Monghyr ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	Nil	Nil	Nil
		Jamui ...	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	Nil	Nil	Nil
		Gouri ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Shaikpura ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Chahai Bamda	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Sonthal Parganas.	Rajmahal ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	Nil	Nil	Nil
		Godda ..	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	Nil	Nil	Nil
		Pakour ...	...	...	...	...	...	...	...	Nil	Nil	0·21	Nil	Nil	Nil	Nil
		Naya Dumka	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	Nil	Nil	Nil
		Deoghur .	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·01	Nil	0·01
		Jamtara ...	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	Nil	Nil	Nil
		Belbodda ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Nanihat ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
CHOTA NAGPUR	Hazaribagh ...	Pachamba (*Giridih*). ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	Nil	Nil	Nil
		Hazaribagh ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·02	Nil	0·02
		Semtaguran ..	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	Nil	Nil	Nil
		Mahudi Hills	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	Nil	Nil	Nil
		Jhumra Hill	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	Nil	Nil	Nil
		Barhi ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Chatra ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Keragdeha ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Ramgar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Lohardaga	Lohardaga ...	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	Nil	Nil	Nil
		Ranchi ...	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·01	Nil	0·01
		Silli ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Palamau ...	Palamau (Daltonganj).	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·06	Nil	
		Balumath ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Husainabad	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Garhwa ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Singhbhum ..	Chaibassa ...	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·11	Nil	0·11
		Chakardharpur.	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Ghatsila .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Baharagura	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Manbhum ...	Purulia ...	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·01	Nil	0·01
		Gobindpur	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	Nil	Nil	Nil
		Raghunathpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Barabhum	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Jhalda ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Chas	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pandra ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the 4th April* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 1st OF APRIL 1893.

At the close of the previous week fine settled weather with an entire absence of rainfall obtained over the whole province; the distribution of pressure was also fairly normal for the hot season, though winds were more strongly westerly than usual, while temperature was still decidedly below the normal for the period. Practically also throughout the present week ordinary and fairly settled hot weather conditions have obtained, and the meteorological changes generally have been of comparatively little importance except that the unusual defect in the temperature, which has been so prominent a feature for a considerable period, has been slowly but fairly steadily decreasing in amount. On the 26th of March a moderately rapid but fairly equal fall of pressure had taken place over the whole province, and the distribution of pressure became nearly normal for the day. On the 27th pressure was almost unaltered, but temperature had risen by about one or two degrees, while winds were becoming more southerly, and generally south-westerly winds were reported. On the 28th a further moderate fall of pressure had occurred, and slight defects from the normal were generally reported, while temperature had again risen by about 2° and winds were still south-westerly except in the north and north-east of the province, where a large number of stations reported north-easterly winds There was hence a small amount of interaction in the north and east of the province between these two opposing wind systems, and this resulted in the formation of a few local storms with rain over these areas, and thus on the morning of both the 28th and 29th of March a few rain showers were reported from some of the districts in East Bengal and in those of North Bengal near the hills These falls were generally not heavy, but amounts of half an inch and upwards were reported from Buxa, Noakhali, Ramganj, Munshiganj, Chandpur, Nasirnagar, and Daudkandi. The rapid fall of pressure on the 28th appears to have been connected with the advance of a feeble barometric depression from North-West India over Bengal, but on the 29th a rapid increase of pressure took place, the increase equalling from 0·05″ to 0·10″ at the western and central stations, and the depression entirely filled up, though it still left a slight tendency to a wind circulation over parts of East and South-East Bengal. A dry westerly and north-westerly wind had, however, set in over the greater part of the province, and from this day again fine settled weather set in. In connection with the advance of this feeble depression on the 28th and 29th, temperature changed rather considerably, and the mean temperature over South-East and parts of Central Bengal became in excess of the normal, while a moderate fall of temperature was taking place at the western stations, and the mean temperature became in defect of the normal by more than 5° over the western half of the province. On the 30th the increase of pressure continued at some of the northern stations, while a fall had set in over the remainder of the province, and the effects of the depression having passed away, the mean temperature became in defect of the normal over practically the whole province. On the 31st pressure was falling at the western and south-western stations and an increase was reported elsewhere, and the whole province showed a pressure in excess of the normal by amounts ranging up to a tenth of an inch in North-East Bengal, while temperature remained from about 2° to 6° below the normal. Finally on the 1st of April a moderate increase of pressure had taken place over the whole province, and an excess above the normal of about 0·03″ to 0·06″ was recorded, but a slight comparative defect was registered at Saugor Island and Calcutta. Temperature had also risen very rapidly, and the defect of the mean temperature over the province had been reduced to about 2°. Winds were a little abnormal and showed a slight tendency to circulate round the north-west angle of the Bay in connection with the low pressure, and generally over the north of the province winds were rather strongly easterly. For the greater part of the week, therefore, weather has been fine and settled, though conditions were very slightly abnormal in South Bengal at its close.

Pressure.—The mean pressure for the week has been in excess of the normal in all districts. The usual excess has equalled from 0·03″ to 0·05,″ but the variations at neighbouring stations have been a little irregular.

Temperature.—The mean temperature for the week for the whole province has again been in defect of the normal by 4°. The smallest defects, equal to about 2°, have been recorded in Orissa and East Bengal while, on the other hand, in Bihar and Chota Nagpur defects of about 5° to 6° have been registered: The mean temperature of the week under review, though still in defect of the normal, is about 3° higher than the mean temperature of the previous week. Notwithstanding also this considerable defect, there has been a steady increase of pressure almost throughout the week, and thus while on the first day of the week the mean temperature was from 7° to 9° in defect, on the last day the defect was only equal to about 2°.

The distribution of temperature for the week and its variation from the normal value are best seen in the table below, where the average maximum, minimum and mean temperatures for the week at nine typical stations in different districts of the province are compared with the normal values for the period. It will be seen that both day and night temperatures have been considerably in defect of the normal.

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 1*st April* 1893.

	Normal mean maximum temperature for the week ending 1st April.	Actual mean maximum temperature for the week ending 1st April 1893.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 1st April.	Actual mean minimum temperature for the week ending 1st April 1893.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 1st April.	Actual mean daily temperature for the week ending 1st April 1893.	Variation of actual mean from the normal.
Cuttack	99.2	96.0	—3.2	76.0	72.2	—3.8	87.6	84.1	—3.5
Calcutta	92.8	89.8	—3.0	73.5	69.6	—3.9	83.2	79.7	—3.5
Dacca	91.3	88.9	—2.4	72.5	69.7	—2.8	81.9	79.3	—2.6
Burdwan	97.2	91.9	—5.3	73.1	67.3	—5.8	85.2	79.6	—5.6
Patna	96.5	91.3	—5.2	69.5	62.7	—6.8	83.0	77.1	—5.9
Gaya	98.9	94.0	—4.9	72.0	63.5	—8.5	85.5	78.8	—6.7
Purnea	94.2	89.9	—4.3	66.1	60.4	—5.7	80.2	75.2	—5.0
Hazaribagh	93.6	88.5	—5.1	68.6	62.9	—5.7	81.1	75.8	—5.3
Darjeeling	57.9	53.0	—4.9	45.2	40.8	—4.4	51.6	46.9	—4.7

Rainfal.—The only districts of the province in which any rainfall of importance has been received during the week have been Darjeeling, Noakhali, Dacca, and Tippera, which have generally received from about a quarter to half an inch of rain.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 1st of April 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 1st April 1893.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	100.6	65.8	88.9	73.0	81.0	—2.3	0.02	0.30	—0.28	0.07	0.45	—0.38	Nil	0.02	Nil	0.02
South-West Bengal ...	99.7	57.5	91.7	67.8	79.8	—4.0	Nil	0.52	—0.52	0.00	0.66	—0.66	Nil	0.02	Nil	0.02
North Bengal	92.0	53.9	87.6	61.4	74.5	—4.1	Nil	0.47	—0.47	0.00	0.66	—0.66	Nil	0.02	Nil	0.02
East Bengal	92.1	58.0	86.9	67.7	77.3	—1.9	0.19	0.92	—0.73	0.36	1.19	—0.83	0.03	0.05	0.03	0.05
North Bihar	94.3	53.3	89.6	60.3	75.0	—5.1	Nil	0.09	—0.09	Nil	0.19	—0.19	Nil	0.01	Nil	0.01
South Bihar	96.9	57.7	92.5	63.4	78.0	—5.1	Nil	0.08	—0.08	Nil	0.17	—0.17	Nil	0.01	Ni	0.01
Chota Nagpur	96.7	58.8	89.4	63.6	76.6	—5.8	Nil	0.09	—0.09	Nil	0.22	—0.22	Nil	0.02	Nil	0.02

METEOROLOGICAL OFFICE, BENGAL,
The 4*th April* 1893.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 26th March to 1st April 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Maximum.	Range.	Minimum.	Hygrometry. Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Wind. Prevailing direction.	Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
March	26th	143·7	10·8	29·828	75·5	87·0	23·0	64·0	67·9	0·583	63·3	70	WSW, SW and SSW.	90	Nil	Chiefly c ⌓.
"	27th	144·8	10·2	·839	78·9	88·9	18·3	70·6	73·2	·743	70·3	77	SW and S by W...	164	"	Chiefly clear, ⌓.
"	28th	146·3	9·3	·790	81·6	92 8	19·3	73·5	76·1	·831	73·7	78	SSW, SW and S...	177	"	Chiefly clear, ⌓.
,	29th	144·4	9·5	·820	80·2	90·4	21·0	69·4	69·8	·594	63·8	61	Calm and variable	36	"	Clear, ⌓.
"	30th	146·5	9·4	·806	79·1	91·1	24·0	67·1	68·4	·559	62·1	60	W, calm and variable.	39	"	Clear, ⌓.
"	31st	147·1	9·2	·814	80·1	92·7	25·2	67·5	73·2	·730	69·8	73	SSW and calm ...	67	"	Chiefly clear, ⌓, ≡.
April	1st	148 5	6·8	·848	82·7	91·5	16·8	74·7	74·8	·757	70·9	67	SSE and variable	35	"	Partially cloudy, c.

	Inches.
The mean pressure of the seven days	29·821
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	29·779
	Hours.
The total number of hours of bright sunshine	65·2
The maximum possible number of hours of sunshine	85·8
	°
The mean temperature of the seven days	79·7
The average temperature of the corresponding period for 24 years, S.-G.'s Office	83·6
The extreme variation of temperature	28·8
The maximum temperature	92·8
	Miles.
The highest velocity of the wind in one hour	16
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	69
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	66
	Inches.
The total fall of rain from 26th March to 1st April 1893	Nil
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·11
The total fall from 1st January to 1st April 1893	6·85
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	2·80

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

⌓, dew; ≡, fog.

C. Little,

For Meteorological Reporter to the Govt. of India.

Meteorological Office, Govt. of India;

Calcutta, the 3rd April 1893.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 26th March to 1st April 1893.

Month.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature.				Hygrometry.					Rainfall at 10 A.M. for past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
March ...	26th ...	29·898	77·0	89·0	24·1	64·9	80·6	73·1	·714	69·1	68	...
,, ...	27th ...	·910	80·9	91·0	20·2	70·8	82·6	75·5	·788	72·1	71	...
,, ...	28th .	·856	83·8	94·5	21·4	73·1	85·6	76·5	·790	72·1	65	...
,, ...	29th ...	·914	81·2	93·0	23·7	69·3	86·1	69·6	·503	59·1	49	...
,, ...	30th ...	·884	80·5	93·0	25·1	67·9	84·6	71·1	·582	63·2	49	...
,, ...	31st ...	·879	82·0	95·0	26·1	68·9	85·1	75·5	·755	70·8	63	...
April ...	1st ...	·913	83·9	92·0	16·2	75·8	83·6	76·5	·817	73·1	72	...

	Inches.
The mean 10 A.M. pressure of the seven days	29·893
	°
The mean temperature of the seven days	81·3
The extreme variation of temperature	30·1
The maximum temperature	95·0
	%
The mean 10 A.M. relative humidity of the seven days ...	61
The total fall of rain from 26th March to 1st April 1893	Nil

The daily mean temperatures are the crude means of maximum and minimum temperatures.

C. LITTLE,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 3rd April 1893.

Vital statistics of the Districts of Bengal for the month of February 1893.

Divisions.	Districts.	Population under registration.	Births.		Deaths. Cholera.		Deaths. Small-pox.		Deaths. Fever.		Deaths. Dysentery and Diarrhœa.		Deaths. Injury.		Deaths. Other causes.		Deaths. Total of all causes.		Average of corresponding month of previous five years.		Remarks.
			Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Burdwan ...	Burdwan	1,391,880	3,268	*28·08*	24	*·12*	40	*·24*	1,850	*15·84*	61	*·48*	3	*·02*	492	*4·20*	2,470	*21·24*	2,980	*25·68*	
	Bankura	1,069,668	1,916	*21·48*	2	*·01*	6	*·06*	926	*10·02*	21	*·12*	3	*·02*	298	*3·24*	1,256	*14·04*	1,702	*19·08*	
	Birbhum	797,833	2,496	*37·56*	43	*·60*	...	...	1,099	*16·44*	12	*·12*	9	*·12*	324	*4·80*	1,487	*22·32*	1,901	*28·56*	
	Midnapore	2,631,516	6,269	*28·56*	109	*·48*	92	*·36*	3,791	*17·28*	137	*·60*	6	*·02*	996	*4·44*	5,131	*23·28*	6,723	*30·60*	
	Hooghly including Serampore	1,076,710	3,063	*34·08*	36	*·36*	1	*·01*	1,614	*17·88*	170	*1·80*	24	*·24*	415	*4·56*	2,260	*25·08*	2,637	*29·28*	
	Howrah	721,211	1,845	*30·60*	44	*·72*	1	*·01*	623	*10·32*	229	*3·72*	13	*·12*	300	*4·92*	1,210	*20·04*	1,562	*25·92*	
Presidency ...	24-Parganas	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*Return not received up to date.*
	Nadia	1,644,108	6,118	*44·64*	1	*·007*	2	*·01*	1,846	*13·44*	3	*·01*	18	*·12*	465	*3·36*	2,335	*17·04*	3,509	*25·56*	
	Jessore	1,888,827	7,046	*44·76*	65	*·36*	...	...	3,347	*21·24*	4	*·02*	14	*·08*	366	*2·28*	3,798	*24·00*	5,005	*31·68*	
	Murshidabad	1,250,946	4,542	*43·56*	8	*·07*	1	*·008*	2,057	*19·68*	4	*·03*	17	*·12*	316	*3·00*	2,403	*23·04*	2,445	*23·50*	
	Khulna	1,177,652	3,284	*33·36*	45	*·36*	...	...	1,530	*15·48*	8	*·07*	16	*·12*	381	*3·84*	1,980	*20·16*	2,176	*22·08*	
Rajshahi ...	Dinajpur	1,555,835	6,394	*49·20*	1	*·007*	...	...	3,217	*24·72*	9	*·06*	14	*·09*	333	*2·52*	3,574	*27·48*	4,143	*31·92*	
	Rajshahi	1,313,336	5,899	*53·88*	58	*·48*	28	*·24*	2,839	*25·92*	1	*·008*	18	*·12*	260	*2·28*	3,204	*29·16*	3,456	*31·56*	
	Rangpur	2,065,464	7,466	*43·32*	3	*·01*	4	*·01*	4,290	*24·84*	5	*·02*	13	*·07*	242	*1·32*	4,557	*26·40*	5,392	*31·80*	
	Bogra	817,494	2,893	*42·36*	5	*·07*	11	*·12*	1,273	*18·96*	6	*·08*	38	*·48*	374	*5·40*	1,707	*24·96*	1,646	*24·12*	
	Pabna	1,362,392	4,421	*38·88*	7	*·06*	17	*·12*	1,989	*17·40*	1	*·008*	16	*·12*	99	*·84*	2,129	*18·72*	2,522	*22·20*	
	Darjeeling	223,314	325	*17·40*	...	...	...	...	393	*21·00*	43	*2·28*	3	*·12*	118	*6·24*	557	*29·88*	489	*23·04*	
	Jalpaiguri	681,352	1,933	*33·96*	...	...	...	...	1,237	*21·72*	...	...	5	*·08*	9	*·12*	1,251	*21·96*	1,672	*22·40*	
Dacca ...	Dacca	2,420,656	8,792	*43·56*	170	*·84*	121	*·48*	2,794	*13·80*	80	*·36*	39	*·12*	905	*4·44*	4,109	*20·28*	3,922	*19·44*	
	Faridpur	1,797,320	6,588	*43·92*	47	*·24*	22	*·12*	2,337	*15·60*	14	*·08*	12	*·07*	452	*3·00*	2,884	*19·20*	2,803	*18·60*	
	Backergunge	2,153,965	7,824	*43·56*	106	*·48*	3	*·01*	3,568	*19·80*	42	*·12*	39	*·12*	1,488	*3·28*	5,246	*29·16*	5,078	*28·20*	
	Mymensingh	3,472,186	9,449	*32·64*	715	*2·40*	28	*·09*	4,068	*14·04*	31	*·09*	9	*·02*	628	*2·16*	5,479	*18·84*	4,929	*16·92*	
Chittagong	Chittagong	1,290,167	3,830	*35·52*	25	*·12*	5	*·03*	2,127	*19·68*	45	*·36*	34	*·24*	220	*2·04*	2,456	*22·80*	2,393	*22·20*	
	Noakhali	1,009,693	4,293	*51·00*	15	*·12*	1	*·01*	1,984	*23·52*	7	*·07*	22	*·24*	361	*4·20*	2,390	*28·32*	2,235	*26·52*	
	Tippera	1,782,936	6,562	*44·16*	118	*·72*	19	*·12*	2,105	*14·16*	16	*·09*	22	*·12*	521	*3·48*	2,801	*18·84*	3,193	*21·48*	
Patna ...	Patna	1,769,004	3,370	*22·80*	3	*·01*	47	*·24*	1,482	*9·96*	68	*·36*	38	*·24*	488	*3·24*	2,126	*14·40*	2,169	*14·64*	
	Gaya	2,138,331	4,151	*23·28*	...	...	161	*·84*	2,391	*13·32*	17	*·09*	71	*·36*	331	*1·80*	2,971	*16·68*	2,822	*15·72*	
	Shahabad	2,063,337	4,714	*27·36*	...	...	23	*·12*	2,785	*16·08*	13	*07*	36	*·12*	546	*3·12*	3,403	*19·68*	2,663	*15·48*	
	Muzaffarpur	2,711,445	6,170	*27·24*	...	...	...	...	3,640	*16·08*	43	*·12*	34	*·12*	653	*2·40*	4,270	*18·84*	3,121	*13·80*	
	Darbhanga	2,301,955	4,280	*18·24*	3	*·01*	3	*·01*	3,060	*13·08*	110	*·36*	19	*·07*	380	*1·56*	3,575	*15·24*	3,355	*14·48*	
	Saran	2,467,477	7,313	*35·52*	4	*·01*	3	*·01*	1,642	*7·92*	102	*·48*	44	*·12*	1,924	*9·24*	3,719	*18·00*	3,111	*15·12*	
	Champaran	1,859,465	3,344	*21·48*	...	...	3	*·01*	2,124	*13·68*	2	*·01*	29	*·12*	498	*3·12*	2,656	*17·04*	2,697	*17·40*	
Bhagalpur ...	Monghyr	2,036,021	4,335	*25·44*	...	...	26	*·12*	2,216	*12·96*	14	*·07*	31	*·12*	324	*1·80*	2,611	*15·36*	3,320	*19·56*	
	Bhagalpur	2,032,696	4,001	*23·52*	1	*·004*	68	*·36*	2,833	*16·68*	18	*·09*	23	*·12*	301	*1·68*	3,243	*19·08*	3,290	*19·32*	
	Purnea	1,944,658	4,937	*30·36*	...	...	17	*·09*	3,327	*20·52*	4	*·09*	13	*·07*	50	*·24*	3,411	*21·00*	4,456	*27·48*	
	Malda	814,919	2,890	*42·48*	...	...	...	...	1,324	*19·44*	10	*·12*	4	*·04*	103	*1·44*	1,441	*21·12*	1,493	*21·96*	
	Sonthal Parganas	1,754,196	2,238	*15·24*	11	*·07*	8	*·04*	1,465	*9·96*	14	*·08*	14	*·08*	133	*·84*	1,645	*11·16*	1,699	*11·64*	
Orissa ...	Cuttack	1,937,671	2,883	*17·76*	127	*·72*	240	*1·44*	1,685	*10·32*	225	*1·32*	44	*·24*	957	*5·88*	3,278	*20·28*	4,497	*27·84*	
	Puri	944,998	1,378	*17·40*	103	*1·20*	313	*3·96*	372	*4·68*	197	*2·40*	43	*·48*	906	*11·40*	1,934	*24·48*	2,292	*27·72*	
	Balasore	994,625	2,039	*24·60*	113	*1·32*	9	*·10*	778	*9·36*	321	*3·84*	24	*·24*	638	*7·68*	1,882	*22·68*	2,345	*28·20*	
Chota Nagpur.	Hazaribagh	1,164,321	2,557	*26·28*	...	...	37	*·36*	1,483	*15·24*	8	*·07*	27	*·24*	265	*2·64*	1,820	*18·72*	1,958	*20·16*	
	Lohardaga	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	*Ditto.*
	Palamau	596,770	1,401	*28·08*	...	...	27	*·48*	828	*16·56*	3	*·06*	17	*·24*	153	*3·00*	1,028	*20·64*	1,139	*22·80*	
	Singhbhum	545,488	1,097	*24·12*	3	*·06*	3	*·06*	481	*10·56*	31	*·60*	13	*·24*	96	*2·04*	627	*13·68*	832	*18·24*	
	Manbhum	1,193,328	1,767	*17·76*	2	*·12*	26	*·24*	1,006	*10·08*	26	*·24*	11	*·10*	245	*2·40*	1,316	*13·20*	1,626	*16·32*	
	Total ...	67,367,165	181,383	*32·28*	2,016	*·24*	1,416	*·24*	87,826	*15·60*	2,175	*·36*	941	*·12*	19,254	*3·36*	113,628	*20·16*	123,327	*21·96*	
Average of the corresponding month of previous five years			Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		7,965	*1·32*	1,322	*·12*	90,993	*16·20*	3,462	*·60*	924	*·12*	18,661	*3·24*	123,327	*21·96*	...	...	
Difference + or −			....		−5,949	*−1·08*	+94	*+·12*	−3,167	*−·60*	−1,287	*−·24*	+17	*equal*	+593	*+·12*	−9,699	*−1·80*	...	...	

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,
The 3rd April 1893.

W. H. GREGG, *Surgeon-Lieut.-Col.,*
Dip. Publ. Health, Camb., Sanitary Commr. for Bengal.

Vital Statistics of Towns in Bengal with a population of 20,000 and over during the month of February 1893.

DISTRICTS.		TOWNS.	Population under registration.	BIRTHS.		DEATHS.																Average of corresponding month of previous five years.		REMARKS.
						Cholera.		Small-pox.		Fever.		Dysentery and Diarrhœa.		Injury.		Other causes.		Total of all causes.						
				Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.			Number registered.	Ratio per 1,000 of population per annum.	
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19			20	21	22
Burdwan ...	1	Burdwan	34,477	78	27·12	...	...	...	.	64	22·20	10	3·36	...	...	11	3·72	85	29·52			104	36·12	
Midnapore ...	2	Midnapore ...	32,264	68	25·20	...		...	..	36	13·32	9	3·24	...	...	19	6·96	64	23·76			95	35·28	
Hooghly ...	3	Hooghly and Chinsura	33,060	75	27·12	3	1·08	...	.	41	14·88	15	5·40	1	·36	16	5·76	76	27·48			102	36·96	
	4	Serampore	35,952	81	27·00	7	2·28	...		46	15·24	30	9·96	1	·24	11	3·60	95	31·68			89	29·64	
Howrah ...	5	Howrah	116,606	189	19·44	11	1·08	1	·09	76	7·80	29	2·88	1	·09	39	3·96	157	16·08			193	19·68	
24-Parganas ...	6	Cossipore-Chitpur ...	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	.			...	...	Return not received up to date.
	7	Maniktala	......	...	..	...	..	...	...	...	...	...	...	...	...	...	..	..	..			...	...	
	8	Barnagore	......	...	...	...	..	...	...	...	...	...	...	...	..	...	...	...	..			..	...	
	9	South Suburban ...	......	...	...	...	...	...	...	...	..	...	...	...	...	...	...	..	...			...	...	
	10	Khorda or South Barrackpore.	......	...	...	.	...	...	...	...	...	...	...	...	...	...	...	...	...			...	...	
	11	Naihati	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			...	...	
	12	Nawabganj or North Barrackpore.	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...			..	...	
Nadia ...	13	Krishnagar	25,500	120	56·40	...	.	...	.	28	13·08	..	...	2	·84	13	6·00	43	20·16			55	25·80	
	14	Sartipur	30,437	87	34·20	...	...	..	...	47	18·48	.	.	...	..	1	·36	48	18·84			41	16·08	
Murshidabad	15	Murshidabad City ...	35,576	70	23·52	.	...	...	...	59	19·80	3	·96	..	..	4	1·32	66	22·20			102	34·32	
	16	Berhampore	23,515	53	27·00	...	...	...	...	45	22·92	...	...	..	...	1	·48	46	23·40			61	31·08	
Rajshahi ...	17	Rampur Boalia ...	21,407	66	36·96	...	...	...	...	33	18·48	...	...	1	·48	3	1·68	37	20·64			59	33·00	
Pabna ...	18	Sirajganj	23,267	60	30·84	...	...	...	..	32	16·44	...	...	..	..	...	..	32	16·44			23	11·64	
Dacca ...	19	Dacca	83,633	198	28·32	1	·12	...	...	69	9·84	11	1·56	6	·84	32	4·56	119	17·04			152	21·72	
Chittagong ...	20	Chittagong	24,069	27	13·44	10	4·92	...	.	25	12·36	3	1·44	...	...	...	.	38	18·84			18	23·88	
Patna	21	Patna City	165,192	247	17·88	...	...	11	·72	107	7·68	28	1·92	8	·48	87	6·24	241	17·40			207	15·00	
	22	Bihar	47,723	114	28·56	...	...	2	·48	42	10·56	1	·24	1	·24	25	6·24	71	17·76			65	16·32	
	23	Dinapore	44,419	73	19·68	...	...	...	...	17	4·56	3	·72	2	·48	13	3·48	35	9·36			41	11·04	
Gaya ...	24	Gaya	80,383	154	22·92	...	...	..	...	94	13·92	10	1·44	4	·48	38	5·64	146	21·72			221	32·88	
Shahabad ...	25	Arrah	46,905	118	30·12	...	...	...	...	47	12·00	3	·72	1	·24	9	2·28	60	15·24			58	14·76	
	26	Sasaram	22,713	56	29·52	...	...	...	...	29	15·24	1	·48	...	..	6	3·12	36	18·96			32	16·80	
Muzaffarpur	27	Muzaffarpur	49,192	90	21·84	...	...	...	...	49	11·88	2	·48	2	·48	17	4·08	70	17·04			61	14·88	
	28	Hajipur	21,487	70	39·00	..	...	...	...	25	13·92	7	3·84	...	...	13	7·20	45	25·08			33	18·36	
Darbhanga ...	29	Darbhanga	78,561	159	25·92	1	·12	...	...	66	10·68	30	4·80	...	..	55	8·88	152	24·72			127	20·64	
Saran	30	Chapra	57,352	99	20·64	...	...	...	...	19	3·96	14	2·88	2	·36	19	3·96	54	11·28			56	11·64	
Champaran ...	31	Bettiah	22,780	30	15·72	...	...	...	...	25	13·08	...	..	...	...	8	4·20	33	17·28			46	24·12	
Monghyr ...	32	Monghyr	57,077	140	29·40	..	...	1	·12	73	15·24	10	2·04	1	·12	24	5·04	109	22·80			104	21·84	
Bhagalpur ...	33	Bhagalpur	69,106	132	22·92	1	·12	26	4·44	78	13·44	10	1·68	...	...	38	6·48	153	26·52			109	18·84	
Cuttack ...	34	Cuttack	47,186	54	13·68	...	...	1	·24	25	6·24	6	1·44	1	·24	21	5·28	54	13·68			72	18·24	
Puri ..	35	Puri	28,794	35	14·52	12	4·92	9	3·72	15	6·24	11	4·56	1	·36	38	15·72	86	35·76			113	47·04	
Balasore ...	36	Balasore	20,775	41	23·64	5	2·88	...	...	10	5·76	13	7·44	1	·48	15	8·64	44	25·32			36	20·76	
Lohardaga ...	37	Ranchi	......	...	...	...	...	..	...	...	...	...	...	...	...	...	..	...				...	...	Ditto.
		Total ...	1,374,406	2,784	24·24	51	·36	51	·36	1,322	1·52	259	2·16	36	·24	576	4·92	2,295	19·92			2,504	21·84	
		Average of the corresponding month of previous five years.	...	Complete average figures of past five years cannot be available.		245	2·04	98	·84	1,153	2·96	300	2·52	42	·36	666	5·75	2,504	21·84			...	...	
		Difference + or − ...	...	...	...	−194	−1·68	−47	−·48	+169	+1·56	−41	−·36	−6	−·12	−90	−·84	−209	−1·92			...	...	

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,
The 3rd April 1893.

W. H. GREGG, *Surgeon-Lieut.-Col.,*
Dip. Publ. Health, Camb., Sanitary Commissioner for Bengal.

Supplementary Vital Statistics of Districts for January 1893 received too late for publication with the figures of that month on the 25th February 1893.

Divisions.	Districts.	Population under registration.	BIRTHS.		DEATHS.														Average of corresponding month of previous five years.	
					Cholera.		Small-pox.		Fever.		Dysentery and Diarrhœa.		Injury.		Other causes.		Total of all causes.			
			Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Presidency ...	24-Parganas	1,992,033	4,531	*27·36*	249	*1·56*	15	*·08*	2,610	*16·44*	122	*·72*	44	*·24*	333	*2·04*	3,373	*21·36*	4,283	*27·00*
	Nadia	1,644,168	6,119	*44·64*	70	*·48*	4	*·02*	2,551	*18·60*	20	*·12*	33	*·24*	472	*3·36*	3,150	*22·92*	4,356	*31·68*
	Jessore	1,888,827	5,823	*36·96*	175	*1·08*	1	*·006*	4,198	*26·64*	11	*·06*	27	*·12*	337	*2·04*	4,749	*30·12*	6,584	*41·52*
Rajshahi	Rajshahi	1,313,336	5,948	*54·29*	147	*1·32*	8	*·07*	4,330	*39·48*	8	*·07*	21	*·19*	326	*2·88*	4,840	*44·16*	4,346	*39·60*
Dacca	Mymensingh	3,472,186	10,926	*37·68*	899	*3·00*	49	*·12*	5,897	*20·28*	68	*·12*	27	*·08*	859	*3·24*	7,799	*26·88*	6,667	*23·04*
Chittagong	Tippera	1,782,835	7,957	*53·52*	279	*1·80*	20	*·12*	2,912	*19·56*	34	*·12*	32	*·12*	652	*4·32*	3,929	*26·40*	3,786	*25·44*
Patna	Patna	1,769,004	4,573	*30·96*	5	*·02*	69	*·36*	2,075	*14·04*	75	*·48*	47	*·24*	618	*4·08*	2,889	*19·56*	2,418	*15·39*
	Shahabad	2,063,337	6,565	*38·16*	2	*·01*	21	*·12*	4,202	*24·36*	26	*·12*	45	*·24*	676	*3·84*	4,972	*28·80*	3,197	*18·48*
	Saran	2,467,477	9,534	*46·39*	2	*·009*	13	*·06*	2,151	*10·44*	145	*·60*	56	*·24*	2,490	*12·00*	4,857	*23·52*	3,219	*15·60*
Bhagalpur	Sonthal Parganas	1,754,196	3,451	*23·52*	6	*·03*	...	..	2,067	*14·04*	7	*·03*	19	*·12*	178	*1·20*	2,277	*15·48*	1,690	*11·52*
Orissa	Cuttack	1,937,671	4,689	*28·92*	256	*1·56*	245	*1·44*	2,672	*15·84*	288	*1·68*	71	*·36*	1,588	*9·36*	4,950	*30·60*	4,357	*26·88*
	Balasore	994,625	2,620	*31·56*	63	*·72*	5	*·06*	1,197	*14·40*	390	*4·68*	23	*·24*	682	*8·16*	2,361	*28·44*	2,510	*30·24*
Chota Nagpur ...	Hazaribagh	1,164,321	3,388	*34·80*	...	...	32	*·24*	1,965	*20·16*	16	*·12*	28	*·24*	322	*3·24*	2,363	*24·24*	2,050	*21·12*
	Lohardaga	1,128,865	2,912	*30·84*	...	...	27	*·24*	1,121	*11·88*	108	*1·08*	2	*·01*	772	*8·16*	2,030	*21·48*	1,330	*16·20*
	Palamau	596,770	1,671	*33·60*	...	...	43	*·84*	1,130	*22·68*	3	*·06*	9	*·12*	195	*3·84*	1,380	*27·79*	1,032	*20·64*
	Total ...	25,869,711	80,705	*37·32*	2,153	*·96*	552	*·24*	40,978	*18·96*	1,321	*·60*	484	*·12*	10,430	*4·80*	55,918	*25·92*	51,955	*24·00*
	Average of corresponding month of previous five years.	......	Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		4,575	*2·04*	484	*·12*	35,786	*16·56*	1,868	*·84*	411	*·12*	8,831	*4·08*	51,955	*24·00*	......	......
	Difference + or −	......	......	......	−2,422	*−1·08*	+68	*+·12*	−5,192	*+2·40*	−547	*−·24*	+73	Equal	+1,599	*+·72*	+3,963	*+1·92*	......	......
	Total for the Province ...	70,388,083	230,082	*37·44*	4,870	*·72*	1,521	*·24*	124,857	*21·24*	3,354	*·48*	1,152	*·12*	26,101	*4·44*	161,855	*27·48*	144,178	*24·48*
	Average of corresponding month of previous five years.	......	Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		9,740	*1·56*	995	*·12*	106,057	*18·00*	4,264	*·72*	964	*·12*	22,158	*3·72*	144,178	*24·48*	......	......
	Difference + or −	......	......	......	−4,870	*−·84*	+526	*+·12*	+18,800	*+3·24*	−910	*−·24*	+188	Equal	+3,943	*+·72*	+17,677	*+3·00*	......	......

Office of Sanitary Commissioner, for Bengal,
The 3rd April 1893.

W. H. GREGG, *Surgn.-Lieut.-Col.,*
Dip. Publ. Health, Camb., Sanitary Commissioner for Bengal.

Supplementary Vital Statistics of towns with a population of 20,000 and over for January 1893, received too late for publication with the figures of that month on the 25th February 1893.

Districts.		Towns.	Population under registration.	Births. Number registered.	Births. Ratio per 1,000 of population per annum.	Deaths. Cholera. Number registered.	Cholera. Ratio per 1,000 of population per annum.	Small-pox. Number registered.	Small-pox. Ratio per 1,000 of population per annum.	Fever. Number registered.	Fever. Ratio per 1,000 of population per annum.	Dysentery and Diarrhœa. Number registered.	Dysentery and Diarrhœa. Ratio per 1,000 of population per annum.	Injury. Number registered.	Injury. Ratio per 1,000 of population per annum.	Other causes. Number registered.	Other causes. Ratio per 1,000 of population per annum.	Total of all causes. Number registered.	Total of all causes. Ratio per 1,000 of population per annum.	Average of corresponding month of previous five years. Number registered.	Average of corresponding month of previous five years. Ratio per 1,000 of population per annum.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
24-Pargannas ...	1	Cossipore-Chitpur	31,423	55	*21·00*	2	*·72*	......	......	35	*13·32*	4	*1·44*	1	*·36*	7	*2·64*	49	*18·60*	67	*25·56*
	2	Maniktola	32,865	39	*14·16*	4	*1·44*	......	......	23	*8·28*	8	*2·88*	1	*·36*	4	*1·44*	40	*14·52*	58	*21·12*
	3	Baranagore	34,278	50	*17·40*	2	*·60*	......	......	48	*16·80*	16	*5·52*	2	*·60*	16	*5·52*	84	*29·40*	90	*31·44*
	4	South Suburban	69,642	127	*21·84*	7	*1·20*	......	......	71	*12·12*	11	*1·80*	2	*·24*	14	*2·40*	105	*18·00*	100	*17·16*
	5	Khorda or South Barrackpore.	35,647	20	*6·72*	1	*·24*	......	......	50	*16·80*	16	*5·28*	2	*·60*	......	......	69	*23·16*	65	*21·84*
	6	Naihati	29,724	47	*18·96*	2	*·72*	......	......	36	*14·52*	6	*2·40*	1	*·36*	11	*4·44*	56	*22·56*	75	*30·24*
	7	Nawabganj or North Barrackpore.	20,980	46	*26·28*	4	*2·28*	......	......	37	*21·12*	1	*·48*	......	......	5	*2·76*	47	*26·88*	66	*37·68*
Nadia	8	Krishnagar	25,500	82	*38·52*	1	*·36*	......	......	49	*23·04*	3	*1·32*	1	*·36*	4	*1·80*	58	*27·24*	54	*25·32*
	9	Santipur	30,437	88	*34·68*	2	*·72*	......	......	42	*16·44*	......	...	......	......	4	*1·56*	48	*18·84*	39	*15·36*
Rajshahi	10	Rampur-Boalia	21,407	56	*31·32*	......	...	......	......	42	*23·52*	2	*1·08*	1	*·48*	1	*·48*	46	*25·68*	58	*32·40*
Patna	11	Patna City	165,192	385	*27·96*	2	*·12*	8	*·48*	127	*9·12*	32	*2·28*	10	*·72*	113	*8·16*	292	*21·12*	231	*16·68*
	12	Bihar	47,723	151	*37·92*	......	......	......	......	54	*13·56*	5	*1·20*	3	*·72*	29	*7·20*	91	*22·80*	68	*17·04*
	13	Dinapore	44,419	50	*13·44*	......	......	......	......	14	*3·72*	1	*·24*	......	......	3	*·72*	18	*4·80*	38	*10·20*
Shahabad... ...	14	Arrah	46,905	143	*36·24*	......	......	1	*·24*	46	*11·76*	2	*·48*	2	*·48*	23	*5·88*	74	*18·84*	79	*20·16*
	15	Sasaram	22,713	53	*27·96*	......	......	......	......	40	*21·12*	2	*·96*	......	......	3	*1·56*	45	*23·76*	41	*21·60*
Saran	16	Chapra	57,352	128	*26·76*	......	......	......	......	7	*1·44*	10	*2·04*	4	*·72*	30	*6·24*	51	*10·56*	70	*14·64*
Cuttack	17	Cuttack	47,186	69	*17·52*	2	*·48*	......	......	26	*6·48*	6	*1·92*	2	*·48*	26	*6·60*	64	*16·20*	76	*19·32*
Balasore	18	Balasore	20,775	35	*20·16*	2	*1·08*	......	......	10	*5·76*	6	*3·36*	1	*·48*	8	*4·56*	27	*15·48*	43	*24·72*
Lohardaga ...	19	Ranchi	20,306	37	*21·84*	......	......	......	......	12	*7·08*	......	......	2	*1·08*	10	*5·88*	24	*14·16*	21	*12·36*
		Total ...	804,474	1,660	*24·72*	31	*·36*	9	*·12*	769	*11·40*	133	*1·92*	35	*·48*	311	*4·56*	1,288	*19·20*	1,339	*19·92*
		Average of corresponding month of previous five years.	......	Complete figures of past five years are not available.	average	93	*1·32*	28	*·36*	703	*10·44*	174	*2·52*	25	*·36*	316	*4·68*	1,339	*19·92*	......	......
		Difference + or—	......	......	......	—62	*—·96*	—19	*—·24*	+66	*+·96*	—41	*—·60*	+10	*+·12*	—5	*—·12*	—51	*—·72*	......	......
		Total of Towns with a population of 20,000 and over.	1,649,273	3,571	*25·92*	64	*·36*	43	*·24*	1,782	*12·96*	344	*2·40*	61	*·36*	835	*6·00*	3,129	*22·68*	3,241	*23·52*
		Average of corresponding month of previous five years.	......	Complete figures of past five years are not available.	average	228	*1·56*	73	*·48*	1,578	*11·40*	459	*3·24*	52	*·36*	854	*6·12*	3,244	*23·52*	......	......
		Difference + or—	......	......	......	—164	*—1·20*	—30	*—·24*	+204	*+1·56*	—115	*—·84*	+9	Equal	—19	*—·12*	—115	*—·84*	......	......

OFFICE OF SANY. COMMR. FOR BENGAL,
The 3rd April 1893.

W. H. GREGG, *Surgn.-Lieut.-Col.,*
Dip. Publ. Health, Camb., Sanitary Commissioner for Bengal.

IRRIGATION DEPARTMENT, BENGAL.

IRRIGATION OPERATIONS FOR THE OFFICIAL YEAR 1892-93.

Areas leased for irrigation up to end of February 1893.

Circle.	District.	Canal.	Estimated full discharge.	Average discharge in month.	Discharge utilised.	Approximate area of land irrigated during the year up to the end of the month.	Approximate area of land under irrigation up to the same date last year.	Details of areas leased. Five years, all crops.	Five years, kharif.	Annual leases. Kharif.	Rabi.	Sugarcane.	Bhadoi.	Hot-weather.	Total.	Grand Total.	Rainfall, 1892-93. During month.	Up to end of month.	Rainfall, 1891-92. During month.	Up to end of month.	Remarks.
			C. ft.	C. ft.	C. ft.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Inches.	Inches.	Inches.	Inches.	
Orissa	Cuttack	Taldanda, 1st reach / Ditto, 2nd „	1,312 / 563	18 / 16	...	8,732	10,537	......	8,308	472	139	29	......	......	640	8,948	1·50	54·25	0·40	77·00	
		Machgaon	766	......	......	27,439	33,404	......	25,094	2,601	125	23	......	......	2,749	27,833	1·05 / 1·00	51·16 / 46·02	0·65 / 0·25	62·84 / 42·23	
		Kendrapara	1,067	162·35	71	50,222	47,831	......	51,713	37	1,746	38	......	......	1,821	53,534	1·00	41·25	0·05	48·08	
		Gobri	372·82	42	22	2,610	3,063	......	3,287	......	50	......	......	......	50	3,337	1·24	49·30	......	73·33	
		Do. Extension	648	34	7	3,574	3,033	......	3,216	......	13	......	......	......	13	3,229	No rain gauge.		......	....	
		Pattamundi	885	85	51	12,627	13,541	......	11,802	......	199	......	......	......	199	12,001	0·80	*13·42	No gauge.		*From September 1892.
		High Level, Range I	608	125·12	......	21,759	21,410	......	21,9?5	114	276	......	......	......	390	22,315	2·97	56·77	......	42·84	
		Ditto, ditto II	727·16	......	......	2,?84	2,732	......	2,329	114	45	......	......	......	159	2,188	......	......	......	......	
		Jajpur Canal	700	......	......	781	1,369	......	404	......	......	......	......	......	....	404	......	......	......	......	
	Balasore	High Level, Range III	727·16	......	......	32,740	37,201	......	34,318	......	1	168	......	......	169	34,487	1·41	55·01	......	62·00	
		Total	......	......	......	162,884	174,718	......	162,416	3,338	2,594	258	......	......	6,190	168,606	...	......	......	......	
		Total of the corresponding period of last year	......	......	......	......	......	......	179,044	2,444	3,584	293	......	......	6,621	185,665	......	..	......	...	
South-Western.	Midnapore	Midnapore	1,411	114	......	81,501	76,673	......	82,336	13	......	......	......	......	13	82,349	4·35	42·16	0·17	55·09	26 days discharging.
		Panchkura	522	7	......	7,206	5,?58	......	7,592	40	......	......	......	......	40	7,6?2	4·93	38·74	0·00	41·60	5 days discharging.
	Howrah	Tidal Reaches, Ranges I & II	......	......	......	835	375	......	642	......	......	......	......	......	......	612	......	......	......	......	
		Total	......	......	......	8?,602	82,306	......	90,570	53	......	......	..	......	53	90,623	......	......			
		Total of the corresponding period of last year	......	......	......	......	......	......	82,909	......	......	......	......	......	......	82,909	......	......	......	......	
Sone	Shahabad	Western Main	4,242	1,298	58	3?,589	54,111	16,237	......	3,506	11,044	......	......	807	15,357	31,594					
		Buxar	1,226	244	184	1?2,?81	1?6,319	6?,951	......	7,5?1	?8,013	......	54	4,09?	39,781	10?,732	1·56	42·42	1·21	20·19	
		Arrah	2,0?0	1,142	457	161,724	167,443	115,541	......	9,7?7	21,449	......	......	4,076	35,?22	150,8?3	2·30	37·33	1·25	25·33	
	Patna and Gaya.	Eastern Main	1,466	353	213	3,0??	2,536	2,?99	......	402	4?0	......	3	......	895	2,974	1·77	50·78	1·75	35·79	
		Patna				71,78?	83,?3?	60,137	......	6,481	4,?02	......	29	......	11,312	71,449					
		Total	......	......	......	369,999	433,845	2?4,963	......	27,777	65,824	......	86	8,976	102,667	357,632	....	....	....	......	
		Total of the corresponding period of last year	......	......	......	......	......	234,787	......	37,326	128,449	1,113	520	9,973	177,351	412,168	......	....	......	......	
		Grand Total	......	......	......	622,476	640,969	254,963	252,486	31,168	68,422	258	86	8,976	108,919	61?,861	......	....	......	......	
		Grand Total of the corresponding period of last year	......	......	......	......	......	234,787	262,043	39,770	132,333	1,406	520	9,973	184,002	680,832	......	......	......	......	

CALCUTTA,
The 4th April 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 1st April 1893, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 1st April 1893.			Week ending Saturday, the 2nd April 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs
Rice and paddy	795	2,30,707	3,759	249	67,980	1,065
Jute	39	17,175	293	1	475	9
Firewood	155	1,06,160	1,608	65	32,375	494
Other articles	880	2,08,655	3,244	678	1,37,800	1,958
Total ...	1,869	5,6[illegible],587	8,904	893	2,38,630	3.526

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 25th March 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*276,169	*3,05,077 8 0	31,62,071 10	7,48,805 3 0	19,282 15 0	10,73,145 10 0	82,490	114,173½	196,663½
Or per mile of railway	......	189 6 10	......	464 15 3	11 15 7	666 5 8	......	......	......
For previous 11 weeks of half-year	3,365,735	38,16,127 15 0	3,12,26,390 30	70,90,439 6 0	1,98,689 10 0	1,11,05,256 15 0	859,531½	1,195,698	2,055,229½
Total for 12 weeks ...	3,641,904	41,21,205 7 0	3,43,88,462 0	78,39,244 9 0	2,17,972 9 0	1,21,78,422 9 0	912,021½	1,309,871½	2,251,892½
Comparison.									
Total for corresponding week of previous year	384,483½	4,16,610 2 7	29,09,181 30	7,26,462 15 0	21,697 5 0	11,63,770 6 7	88,168	110,366	198,534
Per mile of railway corresponding week of previous year .	......	259 6 9	......	458 15 7	16 13 10	735 4 2	......	......	......
Total for corresponding 12⅔ weeks of previous year	3,593,375½	39,79,105 14 3	3,42,97,259 30	79,10,934 1 2	2,26,507 2 9	1,21,16,547 2 2	952,891	1,285,923	2,238,814

* The heavy decrease is evidently due to figures for the corresponding period 1892 having included exceptional pilgrim traffic on account of "Moha Moha Barooni."

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 25th March 1893, on 22¾ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*20,915	*5,370 5 0	10,596 0	393 4 0	11 0 0	5,774 9 0	872	96	968
Or per mile of railway	......	241 5 10	......	17 10 9	0 7 11	259 8 6	......	......	.....
For previous 11 weeks of half-year	†240,044	†62,172 4 0	‡1,40,495 20	‡4,722 8 0	§121 0 0	67,015 12 0	9,690	1,206	10,896
Total for 12 weeks ..	260,959	67,542 9 0	1,51,091 20	5,115 12 0	132 0 0	72,790 5 0	10,562	1,302	11,864
Comparison.									
Total for corresponding week of previous year	24,685	6,203 5 11	15,659 0	664 11 0	4 10 0	6,872 10 11	834	134	968
Per mile of railway corresponding week of previous year	......	278 12 10	......	29 14 0	0 3 4	308 14 2	......	......	.....
Total for corresponding 12⅔ weeks of previous year ...	276,128½	70,063 4 5	2,52,401 30	8,278 4 9	135 2 0	78,467 11 2	10,778	1,461	12,239

* The heavy decrease is evidently due to figures for the corresponding period of 1892 having included exceptional pilgrim traffic on account of "Moha Moha Barooni."
† Deducted number of passengers 1,931 and Rs. 823 }
‡ Added Mds. 28,942 and " 354 } on account of difference between the approximate and audited figures for the week ended 18th February 1893.
§ Deducted " 4 }

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 25th March 1893, on 161⅗ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*21,782	*13,616 15 0	61,792 20	9,573 15 0	43 0 0	23,233 14 0	5,036½	3,035½	8,072
Or per mile of railway	......	84 5 11	......	59 5 1	0 4 3	143 15 3	......	......	......
For previous 11 weeks of half-year	†201,954	†1,33,023 5 0	‡5,81,373 20	‡86,811 12 0	§422 0 0	2,20,257 1 0	57,146	36,480	93,626
Total for 12 weeks ...	223,736	1,46,640 4 0	6,43,166 0	89,385 11 0	465 0 0	2,43,490 15 0	62,182½	40,115½	102,298
Comparison.									
Total for corresponding week of previous year	31,775½	25,422 13 0	44,012 20	12,417 2 0	103 13 3	37,943 12 3	7,195	2,345	9,540
Per mile of railway corresponding week of previous year ..	......	157 8 3	......	76 14 11	0 10 4	235 1 6	......	......	......
Total for corresponding 12⅔ weeks of previous year	197,794½	1,44,615 8 10	5,46,311 30	1,02,774 6 0	851 6 0	2,48,241 4 10	72,816	26,467	99,283

* The heavy decrease is evidently due to figures for the corresponding period of 1892 having included exceptional pilgrim traffic on account of "Moha Moha Barooni."
† Added number of passengers 822 and Rs. 77 }
‡ Deducted Mds. 6,807 and " 374 } on account of difference between the approximate and audited figures for the week ended 18th February 1893.
§ Added " 20 }

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for the week ended 25th March 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	177,317	90,680 0 0	9,07,882 0	1,09,460 0 0	19,310 0 0	2,19,450 0 0	27,230	28,291	55,521
Or per mile of railway	228	117 0 0	1,168 0	141 0 0	†13 0 0	271 0 0	......	......	......
For previous 11 weeks of half-year*	2,073,104	9,97,071 0 0	79,61,002 0	10,79,594 0 0	1,66,561 0 0	22,43,226 0 0	310,434	309,840	620,274
Total for 12 weeks ...	2,250,431	10,87,751 0 0	88,68,884 0	11,89,054 0 0	1,85,871 0 0	24,62,676 0 0	337,664	338,131	675,795
Comparison.									
Total for corresponding week of previous year	156,765	a1,07,913 0 0	8,21,514 0	92,560 0 0	37,013 0 0	2,37,486 0 0	27,343	29,208	56,551
Per mile of railway corresponding period of previous year ...	202	139 0 0	1,057 0	119 0 0	†27 0 0	285 0 0	......	......	......
Total to corresponding date of previous year	2,095,743	10,58,470 0 0	74,46,830 0	9,95,802 0 0	1,90,253 0 0	22,44,525 0 0	333,904	358,832	694,736

* Audited up to week ending 28th January 1893.
† Excluding steamer earnings.
a. The decrease due to Baruni bathing festival which took place on the 30th March last year.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 25th March 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	29,168	10,660 0 0	86,389 0	4,890 0 0	30 0 0	15,580 0 0	3,600	2,090	5,690
Or per mile of railway . ..	233	86 0 0	691 0	39 0 0	......	125 0 0	.. ..	......	......
For previous 11 weeks of half-year*	330,874	1,24,591 0 0	7,27,989 0	45,120 0 0	1,755 0 0	1,71,466 0 0	40,590	21,874	62,464
Total for 12 weeks ...	360,042	1,35,251 0 0	8,14,358 0	50,010 0 0	1,785 0 0	1,87,046 0 0	44,190	23,964	68,154
Comparison.									
Total for corresponding week of previous year	31,038	12,223 0 0	56,435 0	3,190 0 0	63 0 0	15,546 0 0	3,678	1,994	5,672
Per mile of railway corresponding week of previous year ...	248	98 0 0	451 0	25 0 0	1 0 0	124 0 0	.....	......	......
Total to corresponding date of previous year	367,847	1,35,520 0 0	7,51,684 0	46,006 0 0	1,122 0 0	1,82,648 0 0	44,966	24,753	64,719

* Audited up to week ending 28th January 1893.

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 25th March 1893, on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	29,335	7,560 0 0	14,453 0	1,890 0 0	110 0 0	9,550 0 0	2,587	737	3,324
Or per mile of railway	341	88 0 0	168 0	22 0 0	1 0 0	111 0 0	......	......	......
For previous 11 weeks of half-year*	210,987	65,544 0 0	1,86,915 0	19,199 0 0	1,909 0 0	86,652 0 0	27,408	8,056	35,464
Total for 12 weeks ...	240,322	73,104 0 0	2,01,368 0	21,079 0 0	2,019 0 0	96,202 0 0	29,995	8,793	38,788
Comparison.									
Total for corresponding week of previous year	17,857	5,898 0 0	25,682 0	1,280 0 0	491 0 0	7,669 0 0	2,502	722	3,224
Per mile of railway corresponding week of previous year ...	208	68 0 0	299 0	15 0 0	6 0 0	89 0 0	......	......	......
Total to corresponding date of previous year	211,244	70,269 0 0	1,79,129 0	13,322 0 0	2,055 0 0	86,146 0 0	30,688	8,862	39,550

* Audited up to week ending 28th January 1893.

BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

Approximate return of traffic for the week ending 25th March 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	131,500	*56,290	4,85,310	*74,610	11,850	1,42,750	14,513	19,852	34,365
Or per mile of railway	173·94	74·46	641·94	98·69	15·67	188·82	.....	...	....
For previous 11 weeks of half-year†	1,012,815	4,35,605	46,78,748	6,89,112	1,27,625	12,52,342	139,985	195,709	335,694
Total for 12 weeks ...	1,144,315	4,91,895	51,64,058	7,63,722	1,39,475	13,95,092	154,498	215,561	370,059
COMPARISON.									
Total for corresponding period of previous year on 755 miles open	180,751	95,121	3,07,1[illegible]	47,971	12,112	162,204	51,673	19,149	31,822
Per mile of corresponding week of previous year	239·41	125·99	406·83	63·54	25·31	214·84	......	......	.....
Total to corresponding date of previous year	1,078,246	4,79,821	40,52,590	5,75,507	1,29,654	11,84,982	146,640	211,931	358,571

* Decrease in coaching traffic is due to Baruni bathing mela which took place in this week last year, and increase in goods traffic to general development of traffic this year.

† Includes audited figures up to 28th January 1893.

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 18th March 1893	11,388	0	0
Corresponding period of 1892	11,853	0	0
Decrease	465	0	0
Receipts per mile for the week ending 18th March 1893...	223	4	8
Corresponding period of 1892	232	6	7
Decrease	9	1	11
Receipts from 1st January to 18th March 1893	1,12,237	0	0
Corresponding period of 1892	1,05,549	0	0
Increase	6,688	0	0

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 25th March 1893	10,701	0	0
Corresponding period of 1892	11,963	0	0
Decrease	1,262	0	0
Receipts per mile for the week ending 25th March 1893	209	13	2
Corresponding period of 1892	234	9	3
Decrease	24	12	1
Receipts from 1st January to 25th March 1893	1,22,938	0	0
Corresponding period of 1892	1,17,512	0	0
Increase	5,426	0	0

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CONTENTS.

[Second Publication.]

FINANCIAL REVIEW FOR BENGAL.

Published for general information.

PART I.

The origin of Provincial Finance, and the Budget for 1893-94.

IN laying before the Council the first Provincial Financial Review, I propose, with the permission of the President, to explain as briefly as possible how the system of Provincial Finance came to be introduced, and the main differences which distinguish it from the centralised financial system which it displaced. An attempt will then be made to compare Provincial Finance as understood in India with the cognate systems of Federal Finance as practised in the German Empire and the American Commonwealth. Finally I shall explain the most prominent and characteristic features of the Budget of the year 1893-94. In order to save the time of the Council, which has other business to transact, the full account of the working and results of the Provincial system has been included in the second part of this Review, which I do not propose to read to you now, though it will be published in the Gazette for the information of the public.

2. A high authority has stated that it was not until after the Mutiny in 1857 that anything deserving the name of systematic finance was introduced into India. The era of administrative development and opening up of the country which then set in gave rise to heavy expenditure in all directions, and a system of strict financial control became indispensable. In the first instance this control was necessarily vested in the Government of India, and was, as Sir John Strachey points out, of a severely repressive character. From the time of the Mutiny to the year 1871-72, when the system of Provincial Finance was brought into working, the Local Governments possessed no powers of financial control, and had no financial responsibility. The Supreme Government administered the minutest details of the public expenditure. Without its authority no official, however small his salary, could be employed at the cost of public funds, and even district roads and buildings and local works of improvement were hampered by the same onerous conditions.

3. The evils of applying this highly centralised system to an area so heterogeneous in respect of its physical conditions and the character of its inhabitants as the continent of India, became more and more apparent as time went on. As long ago as 1861-62 Mr. Laing laid stress in his Financial Statement on the defects of the then existing system:—

'If this great empire is ever to have the roads, the schools, the local police, and other instruments of civilisation which a flourishing country ought to possess, it is simply impossible that the Imperial Government can find either the money or the management. The mere repair of the roads, where anything like a sufficiency of good roads has been made, is a matter altogether beyond the reach of any central bureau. It is of the first importance to break through the habit of keeping everything in dependence on Calcutta, and to teach people not to look to the Government for things which they can do far better for themselves. . . .

It is most desirable to break through the system of barren uniformity and pedantic centralisation, which has tended in times past to reduce all India to dependence on the bureaus of Calcutta, and to give to Local Governments the power and the responsibility of managing their own local affairs. The great branches of the expenditure, such as the army and national debt, are imperial; and while this is the case, the great branches of revenue must remain imperial also. But there is a wide field, both of revenue and expenditure, which is properly local, which in England is met by local rates, and which, in fact, must be met locally, or not at all.'

4. At about the same time the late Sir Henry Maine wrote with reference to the same subject:—'I do not think that anybody can have observed the recent workings of our system of financial control without coming to the conclusion that, if it be not on the point of an inevitable collapse, it is at all events in great danger of going to pieces unless the strain be lightened somewhere.'

5. Nor were the evils complained of by any means confined to the purely financial branches of the administration. It was bad enough of course that insufficient funds were available for local purposes, and that the utmost uncertainty prevailed as to the amounts likely to be sanctioned for Provincial expenditure. But the worst consequences were those which took effect on the administration itself, and on the relations between the Provincial and Supreme Governments. The constant scramble for the largest share of the public revenues—a scramble in which the least scrupulous were apt to come off best—brought with it serious differences of opinion as to petty details of expenditure and led to constant interference on the part of the Supreme Government in matters of which it was necessarily very ill informed. This was resented by the Local Governments, who were in touch with the facts and knew their own wants, and in this way a state of tension and conflict was brought about which added greatly to the difficulties of Indian administration.

6. In the Resolution of the 14th December 1870, the Supreme Government reviewed the entire question. They observed that, under the existing system, the division of responsibility was ill-defined, and that this led to conflict of opinion injurious to the public service. In order to avoid these conflicts, the obligation to find the funds necessary for administrative improvements ought to rest upon the authority whose immediate duty it is to devise such measures. They went on to say that the Supreme Government was not in a position to understand fully local requirements, nor did it possess the knowledge necessary for the successful development of local resources. Each province had special wants of its own, and might have means for

supplying them which could not be properly diverted to Imperial purposes. A tax applicable to the circumstances of one part of the country might be distasteful or unsuitable elsewhere, and everywhere rates might be proper for provincial or local purposes, which could not be taken for the Imperial revenue.

7. In order to give effect to these principles, the Government of India accordingly made over to the Bengal Government for the year 1871-72 the financial control of the following services:—Jails, Registration, Police, Education, Medical Services (except Medical establishments), Printing, Roads and Miscellaneous Public Improvements, Civil Buildings, a certain proportion of Public Works establishments, and a certain proportion of tools and plant. The allotment given to meet these services amounted to Rs. 1,16,85,920 which was arrived at by adding up the actual charges of the year 1870-71, and taking this as the Provincial assignment, less a deduction of a rateable proportion of Rs. 3,50,000 which was resumed by the Imperial Government. By a subsequent Resolution of the 20th March 1871 a special allotment of Rs. 5,32,870 was made in order to enable the scheme to be inaugurated successfully. This sum was treated as the opening balance of the year 1871-72.

8. The Government of India undertook to maintain for the future the assignments for Provincial services at the amounts thus fixed, unless some fiscal misfortune, such as a heavy loss in the opium revenue, or some national disaster, such as war or severe famine, should occur; and pledged itself in any case not to reduce them without previous consultation with the Governments concerned. It was left to the discretion of the Governments to distribute the total grant among the several departments for which they had become responsible, and it was laid down that any portion of the assignment made to any province that might be unspent at the end of the year would not lapse to the Imperial revenue, but would remain at the disposal of the Local Government. It was further provided that each Local Government should publish its own yearly estimates and accounts in the local gazette, together with a financial exposition (which should, where possible, be made before the local Legislative Council) analogous to that annually made in the Legislative Council of the Governor-General.

9. The financial control thus entrusted to the Local Government was to be exercised subject to the conditions that without the previous sanction of the Government of India no appointment on more than Rs. 250 a month should be created; that no class or grade of officers should be created or abolished; and that no addition should be made to the pay or allowances of any individual or class of officers that would lead to increase in the emoluments of any public servants doing duty in the same province whose pay and allowances are charged to Imperial revenues. No public money might be invested, and no services rendered to other departments by the transferred departments were to be diminished, nor might the latter claim increased services from other departments. The rules of the Supreme Government as to leave of absentee and absentee deputation and superannuation allowances were to be observed, and returns, accounts and estimates were to be submitted to the Supreme Government in such form and at such times as might be prescribed.

10. In addition to these conditions, which were based in the main on financial considerations, the Local Government was reminded that increased powers of financial control would be accompanied by a corresponding increase of administrative responsibility, and that in respect of general principles it must follow the main lines of policy laid down by the Imperial Government. It was added that the procedure of the departments of Registration, Jails and Police was to a large extent governed by law; and that, although no law existed on the subject of education, the policy of the Government had been declared and prescribed in despatches from the Secretary of State, the authority of which and of the rules sanctioned by the Government of India regarding grants-in-aid and other matters of general principle was not affected by the policy of decentralisation.

11. In introducing this far-reaching administrative reform, the Government of India expressed the belief that it would produce greater care and economy; that it would import an element of certainty into the fiscal system which had before been absent, and that it would lead to more harmony in action and feeling between the Supreme and the Provincial Governments than had

formerly prevailed. Beyond all this there was a greater and wider object in view. It was felt that local interest, supervision and care were necessary to success in the management of funds devoted to education, sanitation, medical, charity and local public works. And it was hoped that the operation of the new scheme would afford opportunities for the development of self-government, for strengthening municipal institutions, and for the association of Natives and Europeans to a greater extent than before in the administration of affairs.

12. On looking at the system thus introduced it is impossible not to be struck by its resemblance to the systems of federal finance which prevail in the German Empire and in the American Commonwealth. In these countries the functions of the Imperial and the Local Governments are divided in much the same way as they are in India. Thus in Germany the revenues derived from Customs, the indirect taxes upon salt, tobacco, brandy, and sugar, the revenues from stamps, bills of exchange, securities and playing cards are set apart for the Imperial Budget, the expenditure side of which includes the cost of the Federal Government—the Army, Navy, Post Office, Telegraph, State Railway, Supreme Court, Imperial Bank, Pension and Invalid Funds, Currency and Debt. Any deficit which remains after the sources of revenue reserved for the Empire have been exhausted is met by contributions raised from the individual States according to their population. The actual demands under this arrangement varied in the Budget of 1892-93 from £9,405,191 levied on Prussia to £12,392 paid by the little State of Schaumburg-Lippe. In America the Federal Government raises its revenue by indirect taxation and chiefly by duties of customs and excise. Direct taxes were levied during the war, and stamp duties were also resorted to, but no stamp revenue is now collected by the National Government. The individual States on the other hand derive almost the whole of their revenue from direct taxation, as the levying of import or export duties by a State is forbidden by the Federal Constitution.

13. Close as these resemblances are, there is no reason to suppose that the Indian system was modelled or has been materially influenced by these Federal systems of finance. Provincial finance is a plant of natural growth, developed under the pressure of administrative necessity, and owing nothing to the example of other countries. It was in fact devised, if not actually introduced, before the German system, which it most closely resembles, had come into existence; and it was developed on lines which, though leading to substantially the same result, started from diametrically opposite directions. Both in Germany and America the individual States came first, and they were the sole repositories of sovereign power. The Federal system was created by the States stripping themselves of certain attributes of sovereignty and making them over to the Central Government. In India this order of things was reversed. All power resided in the group of departments forming the Government of India, and for a long time this central bureaucracy absorbed and exercised all the functions of Government and itself transacted all financial business from the negotiation of a State loan down to sanctioning of a chaukidar's pay. At length the burden became too heavy and the complication too great, and the Central Government transferred some of its powers to the Local Governments to be exercised subject to the conditions stated above. Thus they arrived by an independent process of development at substantially the same results as the German Imperial Government. The main differences are, first, that in Germany the division of taxation between the Empire and the individual States is effected by reserving all indirect taxation for the former, and leaving to the States direct taxes which the Empire does not levy, and secondly; that the contributions of the States to the Empire are regulated with reference to the population concerned. In India, on the other hand, no attempt is made to set apart certain kinds of taxation as exclusively Imperial, and the division is effected by assigning arbitrary fractional shares to the Provincial Governments. Similarly the amount of the contributions levied from time to time by the Imperial Government is not regulated by any intelligible principle, but varies like the medieval benevolences according to the necessities of the moment. The Indian system, though less precise and logical than the German, is probably a good deal more elastic, and admits of being modified at intervals of five years, or even oftener, in accordance with the requirements of Imperial Finance.

14. I now turn to the current contract, which began to take effect on the 1st April 1892. After a lengthy correspondence with the Government of India, the terms and conditions of this contract were finally settled on the 17th March 1892. It was then arranged that the revenue and expenditure shown in the schedule attached to the Government of India's letter of that date should be Provincial in certain specified proportions, and that, from the revenues thus assigned, a deduction of Rs. 14,39,000 should be made through the Land Revenue head. The Bengal Government has no means of knowing on what basis, or by what method of calculation, the sum of Rs. 14,39,000 was arrived at. On the receipt side of the account, the Provincial Government gets the whole of the following items:—Twelve per cent. on the Land Revenue collected from Government estates; rents of Salt Warehouses; fines and other minor receipts; Provincial rates; minor customs receipts; interest on local loans; receipts from Courts of Law, Jails, Police, Marine, Education, Medical, Botanic Gardens, Cinchona, Fairs, and Emigration and receipts in aid of superannuation; also Stationery and Printing, except the value of supplies to Railways and local bodies. and all receipts from Irrigation, Navigation, and Civil Works. It receives one-half of Assessed Taxes, Forest receipts, and Registration receipts, and of the traffic earnings on the Eastern Bengal Railway System; one-fourth of Excise and of minor Land Revenue heads, and three-fourths of the important head of Stamps. The revenue from these sources for 1893-94, excluding the opening balance, is estimated at Rs. 4,22,30,000.

15. On the expenditure side the Government of Bengal is required to meet all charges under the head of Land Revenue, except Survey and Settlement; all expenditure for Provincial rates, and the transferred heads of Customs and Salt and Interest; also charges arising under the heads Courts of Law, Jails, Police, Marine, Education, Medical, and, with certain exceptions, Political; the whole of Scientific and Minor Departments, except Census, Ancient Manuscripts and certain Veterinary charges; the whole of Stationery and Printing; working expenses of Irrigation and Navigation and Civil Works, with the exception of Imperial Buildings. It is also responsible for one-half of the expenditure under Assessed Taxes, Forest, and Registration, and for half of the working expenses of the Eastern Bengal Railway System; for three-fourths of Stamp expenditure and a quarter of Excise.

16. Concurrently with the settlement of this contract, the general rules regulating Provincial finance were republished with the modifications they had undergone up to date, and it was also laid down that, if any considerable charge of an exceptional nature, which ought ordinarily to be borne by one Province were paid in another Province, the question of a corresponding adjustment between the two would be specially dealt with. This latter provision was rendered necessary by the decision to stop inter-provincial adjustments. It was further arranged that, on the score of the technical character of the work and the necessary uniformity in the working of all State Railways, the Provincial Government should not exercise any administrative or financial powers in regard to the Eastern Bengal Railway; but in order to maintain the Local Government interests in the constructing feeder roads and in the general development of communition in the tract served by the Railway, half the net earnings should be Provincial; that the capital expenditure required to complete the Higili Canal should be advanced on certain terms from Imperial funds; that the expenditure on Survey and Settlement operations during the term of the contract, being in its nature liable to great variations, and difficult to reduce to a uniform yearly average, should be met by Imperial revenues; and lastly, that if the recoveries on account of the Survey and Settlement operations in Bihar should fall short of the expenditure which is recoverable from the zamindars and raiyats, the difference should be charged to Provincial revenues.

17. With reference to doubts which had arisen concerning the interpretation of former contracts, the Government of India took the opportunity of declaring the contract to be a consolidated one, and not a collection of separate contracts for each Provincial head. They also stated that the representations made by the Government of Bengal, regarding each separate head, had received careful consideration, and that the adjusting figure of Rs. 14,39,000 had been fixed, so as to place the revenue and expenditure in equilibrium on the basis

generally of the existing stage of growth. The Local Government, it was said, would be expected to maintain all the Provincial services in a state of administrative efficiency, providing any increased expenditure necessary for that purpose either by reductions of expenditure or from increased revenue. It was added that the Bengal Government would not be entitled to assistance from Imperial revenues to meet future increases of expenditure or decreases of revenue, of whatever nature, classified under Provincial heads.

18. I pass on to notice in somewhat fuller detail those heads of the Budget for 1893-94 which seem to stand in need of comment or explanation.

RECEIPTS.

19. *Land Revenue.*—The Government of India have accepted the estimate of total collections under this head, as passed by the Local Government for 1893-94, amounting to Rs. 3,84,33,000. The estimate provides Rs. 5,07,000 for "12 per cent. on collections from Government estates." Including this amount, the Provincial share of land revenue comes to one-fourth of (Rs. 3,84,33,000—5,07,000) + 5,07,000=Rs. 99,88,000.

The debit of Rs. 13,50,000 to Provincial shown under Land Revenue adjustment is made up as follows:—

	Rs.	Rs.
For fixed contribution to Imperial revenues ...	......	14,39,000
For interest on the capital advanced from Imperial revenues for remodelling the Hidgelee Tidal Canal	......	21,000
Total deduction ...	......	14,60,000
Add—		
For capital outlay on Hidgelee Tidal Canal ...	1,00,000	
For Imperial buildings transferred to District Boards	10,000	1,10,000
Net deduction ...	......	13,50,000

It may be here mentioned that for reasons of account all transfers as between Imperial and Provincial revenues are effected through the head of Land Revenue under the sub-head of adjustments.

20. *Stamps.*—The estimate of total revenue from stamps for 1893-94 amounts to Rs. 1,57,00,000. The growth of this most important and expansive branch of Provincial revenue during the past four years has been as follows:—

	Rs.	Increase. Rs.
1887-88	1,38,16,000	......
1888-89	1,38,39,000	23,000
1889-90	1,42,38,000	3,99,000
1890-91	1,42,47,000	9,000
1891-92	1,51,00,000	8,53,000
Total ...	.....	12,84,000

The increase amounts to Rs. 12,84,000, or an average of more than three lakhs a year. The smallness of the increase in 1890-91 was due to the reduction in the rate of copying fees from 4 annas to 3 annas per folio, with effect from 1st April 1890. The revised estimate for 1892-93 amounts to Rs. 1,55,50,000, and the estimate for 1893 94 has been placed at Rs. 1,57,00,000. As the stamp duty is fixed by substantive law at rates which cannot be altered, the revenue under

this head cannot be materially affected by administrative measures. All that can be done is to watch the working of the law carefully, to look out for evasions, and to see that adequate penalties are levied for breaches of the law and rules.

21. *Excise.*—The Accountant-General estimated the total revenue for the year 1893-94 at Rs. 1,12,00,000, against Rs. 1,10,64,413 estimated by the Board of Revenue. In Government order No. 654T.-F., dated the 24th October 1892, sanction was given to the enhancement of duty on wholesale licenses for the vend of imported liquor in the town of Calcutta from the nominal sum of Rs. 50 a year to Rs. 50 a month, or Rs. 600 a year, from 1st April 1893. Some changes have also been made in the duties on retail licenses. The effect of these orders will be to increase the revenue to a considerable extent. A substantial increase is also anticipated next year under the head "Farm of drugs," owing to the present rates of duty on all kinds of ganja being raised by one rupee per seer with effect from 1st April 1893, under the orders of the Government of India, in the Finance and Commerce Department, No. 784, dated the 23rd February 1891. It was calculated that the total increase on this and other accounts would not be less than three lakhs, and accordingly the Accountant-General's estimate was raised from Rs. 1,12,00,000 to Rs. 1,15,00,000, and this has been accepted by the Government of India.

22. *Provincial Rates.*—The head *Provincial Rates* represents principally the proceeds of the Public Works Cess, but it includes also the recoveries from District Funds of the proportionate cost of collecting Road Cess and the Rates for the general management of Wards' and Attached Estates. The receipts have been as follows:—

	1887-88.	1868-89.	1889-90.	1890-91.	1891-92.	Revised estimate, 1892-93.	Estimate, 1893-94.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
(*a*) Public works cess	38,19,860	37,97,870	39,11,693	38,93,461	40,79,753		41,50,000
(*b*) Proportionate cost of collecting road cess.	3,13,524	2,68,084	3,12,096	3,55,052	3,64,355		3,31,000
(*c*) General management of wards' and attached estates.	1,03,154	90,369	82,235	71,420	80,419		80,000
Total ...	42,36,538	41,56,323	43,06,024	43,19,933	45,24,527	45,40,000	45,61,000

The variations under (*a*) were due to progress in valuation and revaluation of districts. The gross rental assessed on the introduction of the road cess was Rs. 13,11,68,432, and on the same basis the statistics furnished by the Board of Revenue show that it amounted to Rs. 14,60,45,236 in 1890-91, and Rs. 14,78,83,221 in 1891-92. Large recoveries of the arrears of rate on wards' estates were effected from the Burdwan Raj in 1887-88, and this accounts for the larger receipts under (*c*) in the first year of the contract. The comparatively smaller receipts under (*c*) in 1890-91 and 1891-92 were due to the release from Government management of a large number of estates during the course of the former year.

Head (*b*) is a new head of account which appeared in the Provincial Account in consequence of the introduction of the Local Self-Government Act. Prior to the extension of the Act, the charges for the collection of both the Road and Public Works Cesses were shown in the District Road accounts, the cost of collecting the Public Works Cess being paid to the District Road Committees through the adjusting head of Contribution, an assignment of Rs. 47,000 being made in the Provincial Contract under that head. The arrangement has now been reversed. The collection of the cess in the districts, where the Local Self-Government Act has been introduced is shown as a Provincial charge, and is recovered from the District Funds before the net collections of the Road Cess are made over to the District Boards.

23. *Assessed Taxes.*—The Accountant-General placed the estimates of total receipts for 1893-94 at Rs. 43,50,000. Looking to the steady growth of revenue under this head, the estimate was raised by this Government to Rs. 44,00,000, but this has been reduced by the Government of India to Rs. 43,30,000, with reference to the actuals of 12 months ending January 1893, which amounted to Rs. 43,28,000.

24. *Forests.*—The following table shows the estimates of receipts and expenditure for the year 1893-94, compared with the actuals of 1891-92 and the sanctioned and revised estimates of 1892-93:—

Budget heads.	Actuals, 1891-92.	Sanctioned estimates, 1892-93.	Revised Estimates, 1892-93.	Budget estimates, 1893-94.
Receipts.	Rs.	Rs.	Rs.	Rs.
I.—Timber and other produce removed from the forests by Government agency ...	41,503	59,400		25,100
II.—Timber and other produce removed from the forests by consumers or purchasers ...	6,95,062	7,21,000		7,07,250
III.—Confiscated, drift and waif wood ...	8,210	17,000		12,180
IV.—Revenue from forests not managed by Government ...	......	......		......
V.—Miscellaneous ...	44,778	34,600		29,470
Total ...	7,89,553	8,32,000	7,50,000	7,74,000
Expenditure.				
A.—Conservancy and Works.				
I.—Timber and other produce removed from the forests by Government agency ...	25,004	41,040		
II.—Timber and other produce removed from the forests by consumers or purchasers ...	49,156	48,744		
III.—Confiscated, drift and waif wood ...	4,112	5,000		
IV.—Revenue from forests not managed by Government ...	......	.....		
V.—Rent of leased forests and payments to share-holders in forest managed by Government ...	......	.....		
VI.—Live-stock, stores, tools and plant ...	35,945	26,600		
VII.—Communications and buildings ...	19,841	46,400		
VIII.—Demarcation, improvement and extension of forests ...	29,435	37,056		
IX.—Miscellaneous ...	5,645	5,560		
Total A—Conservancy and Works ...	1,69,198	2,11,000		
B.—Establishments.				
I.—Salaries ...	1,98,631	2,30,240		
II.—Travelling allowances ...	30,886	33,360		
III.—Contingencies ...	9,804	6,400		
Total B—Establishments ...	2,39,321	2,70,000		
Grand Total of Expenditure ...	4,08,519	4,81,000	4,45,000	4,81,000
Surplus ...	3,81,034	3,51,000	3,05,000	2,93,000

The estimates provide for a surplus of Rs. 2,93,000 at the end of 1893-94, against Rs. 3,05,000, the latest estimate for 1892-93.

25. *Registration.*—The Accountant-General placed the revised estimate for 1892-93 at the same figure as the original estimate for the year, which was Rs. 13,60,000. This amount was also proposed as the estimate for 1893-94. The actuals for the twelve months ending January 1893, were Rs. 14,08,000, and the revised estimate for 1892-93 has been placed at Rs. 14,10,000, and the estimate for next year at Rs. 14,20,000. Half the receipts only are Provincial.

26. *Jails.*—The total receipts for 1893-94 were estimated by the Inspector-General at Rs. 9,72,000, while the Accountant-General placed them at Rs. 9,09,000, reducing the estimate under the head Jail Manufactures by Rs. 63,000. The Lieutenant-Governor considered that the probable receipts under this head had been under-estimated by the Accountant-General, and thought they might safely be placed at Rs. 9,50,000. The total estimate of receipts was accordingly placed at Rs. 9,59,000.

27. *Police.*—The Accountant-General estimated the total receipts for 1893-94 at Rs. 2,46,000, against Rs. 4,60,000, the sanctioned estimate for 1892-93, and Rs. 4,48,634, the actuals of 1891-92. The decrease is due to the exclusion of receipts on account of village police in the Chota Nagpur Division, which have been transferred from Provincial to Local. The estimate has been further reduced by Rs. 27,000 on account of the transfer of fees for the inspection of steam-boilers from the Provincial account.

28. *Marine.*—The Accountant-General estimated the total receipts for 1893-94 at Rs. 9,28,000, against Rs. 9,68,000, the sanctioned grant for 1892-93, and Rs. 9,65,408, the actuals of 1891-92. The actual receipts, during the twelve months ending January 1893, were Rs. 9,04,000. The revised estimate for 1892-93 has accordingly been placed at Rs. 9,05,000, and the estimate for 1893-94 at Rs. 9,12,000.

29. *Education.*—The total receipts of the Education Department for 1893-94 are estimated at Rs. 5,71,000, against Rs. 6,10,000, the sanctioned estimate for

1892-93. The actuals of 1891-92 amounted to Rs. 5,95,123, and those of the twelve months ending the 30th September 1892 to Rs. 5,70,758.

30. *Medical.*—The estimate of receipts for the year 1893-94 was placed by the Accountant-General at Rs. 1,49,000, against Rs. 1,50,000, the sanctioned estimate for 1892-93. The estimate has been raised by Rs. 2,000 as some receipts are anticipated in consequence of the circular what the Sanitary Board have issued to all municipalities laying down the rate of fees to be levied from them for the preparation of plans and estimates for drainage and water-works schemes.

31. *Scientific and other Minor Departments.*—The principal items of receipts under this head are from Cinchona manufacture and Emigration fees. The total receipts are estimated at Rs. 1,62,000.

32. *Civil works by Civil Officers.*—The Provincial receipts from ferries for the year 1893-94 are estimated at Rs. 2,27,500, and the receipts from cemeteries at Rs. 2,500, against Rs. 2,23,500 and 2,500, respectively, the amounts sanctioned for 1892-93.

EXPENDITURE.

33. *Land Revenue.*—The Accountant-General's estimates for 1893-94 under all the Provincial heads and sub-heads of expenditure amount to Rs. 34,19,000, as follows:—

	Rs.
Charges of district administration	29,43,000
Management of Government estates	4,01,000
Land Records and Agriculture	75,000
Total Provincial ...	34,19,000

The estimate was raised by this Government by Rs. 4,000 in order to provide for revision of office establishment in the Deputy Commissioner's office, Sonthal Parganas. The increased provision, however, does not appear in the estimate of the Government of India.

34. *Salt.*—The Accountant-General estimated Rs. 31,000 for expenditure of the Salt Department during 1893-94, which is the ordinary normal expenditure of the Department. A provision of Rs. 10,000 has, however, been kept in reserve to meet any further improvements that may possibly be made in order to provide increased facilities for the trade at Sulkea, Chittagong, or Narainganj, and the estimate has therefore been raised to Rs. 41,000. The revised estimate for 1892-93 amounts to Rs. 1,25,000, which includes a special provision of Rs. 75,000, the amount payable to Mr. Kilby as an honorarium for his patent salt weighing machine.

35. *Stamps.*—The total expenditure for 1893-94, of the Stamp Department, is estimated at Rs. 6,14,000, against Rs. 5,68,000, the sanctioned grant for 1892-93, and Rs. 4,51,779, the actuals of 1891-92. The actuals of 1891-92 did not include the cost of plain paper for use with Court-fee Stamps, which, under the terms of the new Provincial Contract, is charged to this head with effect from 1892-93, instead of to "Stationery and Printing." The Provincial share amounts to Rs. 4,61,000.

36. *Excise.*—The chief variations in this budget are due to the reduction of the salary of Excise Commissioner from Rs. 2,900 to Rs. 1,800, as under the orders of the Secretary of State, the Excise Commissioner will now ordinarily be a Magistrate of the second grade. Larger provision has, however, been made for the construction and completion of distillery buildings, and the total grant now stands at Rs. 7,16,000, of which the Provincial share is only one quarter, or Rs. 1,79,000.

37. *Assessed taxes.*—The total expenditure of the Income-Tax Department during 1892-93 was originally estimated at Rs. 1,90,000, and this amount was reproduced by the Accountant-General as the revised estimate for the year, while he placed the estimate for 1893-94 at Rs. 1,89,000. It has

been taken by the Government at Rs. 1,93,000, of which the Provincial share is one-half. The Accountant-General's estimates for 1893-94 include a provision of Rs. 3,600 for the local allowance of Rs. 300 per month drawn by the Superintendent of Preventive Service for performing the duties of the Collector of Income-Tax, Calcutta. As Mr. Kilby, the permanent Superintendent, has retired from the service, and a whole-time Collector of Income-Tax on Rs. 700—1,000 per mensem has been appointed, a provision of Rs. 8,400 as salary, and Rs. 1,200 as house allowance, has accordingly been made under this head.

38. *Judicial Courts.*—The following table compares the estimates of expenditure for 1893-94 with the sanctioned grants for 1892-93 and the actuals of 1891-92:—

	Actuals, 1891-92.	Sanctioned estimates, 1892-93.	Estimate, 1893-94.
	Rs.	Rs.	Rs.
High Court	11,41,299	11,35,000	11,40,000
Law Officers	3,14,862	2,82,000	2,90,000
Coroner's Court	14,358	13,000	13,000
Presidency Magistrate ...	70,430	63,000	63,000
Civil and Sessions Courts ...	43,59,269	43,90,000	44,50,000
Courts of Small Causes ...	2,01,489	1,82,000	1,78,000
Criminal Courts	22,44,523	22,45,000	22,56,000
Pleadership Examination charges	7,822	8,000	8,000
Refunds	1,28,755	1,15,000	1,30,000
Total ...	84,82,807	84,33,000	85,28,000

The increased provision of nearly a lakh of rupees under Civil and Session Courts on the actuals of 1891-92 represents the financial effect of the increase which has been found necessary in the number of Subordinate Judges, and Munsifs and Judicial establishments generally. There has also been sanctioned an addition to the ministerial establishment of the Civil Courts in consequence of the recommendations made in the reports of Messrs. Toynbee and Stevens, who were appointed to enquire into the subject.

39. *Jails.*—The grants for 1893-94 for the Jail Department are as follows:—

Jails.	Sanctioned grant.
	Rs.
Superintendence	52,836
Presidency Jail	98,826
Central Jails	4,93,894
District „	5,81,958
Lock-ups	1,20,457
Reformatary Schools	35,975
	13,83,946
Add for rounding	54
Total ...	13,84,000
Jail manufactures	7,95,000
GRAND TOTAL ...	21,79,000

The total grant amounts to Rs. 21,79,000 against Rs. 20,22,000 the actuals of 1891-92 and Rs. 20,90,000 the revised estimate for 1892-93.

The increase in expenditure, which is partly counterbalanced by an increase in receipts, is necessitated by the increase of jail population, and adequate provision has to be made for the high prices of food-grains for ration expected to prevail during the year.

40. *Police.*—The total expenditure of the Police Department for 1893-94 was originally estimated at Rs. 56,80,000, from which were deducted Rs. 21,000, the charges connected with steam-boiler inspection, and Rs. 75,000 under the head of temporary transport for the South Lushai Hills. The Government of India have accepted the deduction only of the first item, so that the grant now stands at Rs. 56,59,000. The estimate under Special Police, amounting to Rs. 4,98,000, includes a lump provision of Rs. 4,46,000 for expenditure during the ensuing year under the head South Lushai Hill Force. The estimate has been accepted provisionally, subject to any modifications which Government may hereafter find it necessary to make in view of the approaching transfer of the South Lushai territory to Assam.

41. *Marine.*—The difference of Rs. 10,000 under this head between the estimate of the Government of India and that of the Local Government represents the provision made by this Government for compensation payable to Captain Petley, the Port Officer, on account of his enforced retirement, which is payable by the Provincial revenues, but which does not appear to have been included in the budget passed by the Government of India. A sum of a lakh and a half required to meet the balance of the cost of the new pilot vessel to replace the *Coleroon*, which is now being built at the Government Dockyard at Bombay, has been provided under the head of Purchase and hire of ships and vessels.

42. *Education.*—The estimate provides for a total expenditure of Rs. 25,73,000 against Rs. 25,30,000, the revised estimate for 1892-93. The increase is chiefly for grants-in-aid for primary education, and for additional staff sanctioned for the Sibpur Engineering College. This heavy expenditure includes the cost of Government Colleges which accounts for Rs. 5,20,000, Government schools Rs. 5,45,000, and grants-in-aid Rs. 5,89,000. These are institutions for general education, but special or technical education is also fairly well supported—Government Professional Colleges costing Rs. 1,21,000 and Special Government schools Rs. 1,45,000.

43. *Medical.*—The grant for the Medical Department for 1893-94 stands—

	Rs.
Medical Establishment	5,86,000
Hospitals and Dispensaries	3,83,000
Sanitation and Vaccination	1,92,000
Grants for medical purposes	3,500
Medical Schools and Colleges	2,68,000
Lunatic Asylum	1,10,000
Lock Hospitals	16,000
Chemical Examiner	26,000
Refunds	500
Total ...	15,85,000

The total grants amount to Rs. 15,85,000 against Rs. 15,67,000 the actuals of 1891-92—Rs, 15,80,000 the revised estimate for 1892-93 proposed by this Government. and Rs. 16,00,000 the revised estimate of the Government of India. The incease on the actuals of 1891-92 is due to the normal growth of the administrative charges.

The estimate of the Local Government includes an additional provision of Rs. 4,000 for remuneration to Civil Surgeon's clerks for doing vaccination work. The provision does not appear in the estimate of the Government of India. This additional duty forms a portion of a large scheme of reorganization which has been recently carried out, and which is expected to bring about a great extension of vaccination, and materially to enhance its efficiency in rural areas.

44. *Scientific and other Minor Departments.*—The following table shows the details of the grants under this head:—

	Rs.
Provincial Museums	16,140
Donation to Scientific Societies	14,000
Experimental cultivation	19,500
Cinchona Plantations	1,03,552
Public Exhibitions and Fairs	12,350
Imperial Institute	500
Veterinary charges	19,000
Botanic and other public gardens	1,10,009
Emigration	22,754
Census	1,700
Registration of Railway Traffic	2,320
Registration of River and Road-borne Traffic	18,108
Provincial statistics	2,500
Examinations	3,000
Refunds	713
Charges in connection with the Indian Factories Act ...	18,400
Total Provincial ...	3,64,546

The estimate for 1893-94 is Rs. 3,64,000 against Rs. 3,13,000 the actuals of 1891-92 and Rs. 3,25,000 the revised estimate for 1892-93. The increase is chiefly for the provision of two new items, veterinary charges (19,000) and charges of Indian Factories Act (18,400), which were not in existence in 1891-92.

45. *Stationery and Printing.*—The estimate under this head amounts to Rs. 13,05,000, but it is hoped there will be some reduction of expenditure under this head in consequence of the recent orders issued to revise each form, whenever necessary, only once in a year, and not to introduce new forms, except under special orders, till the old stock is exhausted.

46. *Civil works by Civil officers.*—The difference of Rs. 32,000 under this head between the estimate of this Government and that of the Government of India is due to the provision struck out by the Local Government for the construction of bridges in the South Lushai Hills.

47. The closing balance, as now estimated by the Government of India, is Rs. 20,72,000, *i.e.*, Rs. 72,000 in excess of the minimum balance, which the Provincial Government is required to maintain under the orders of the Government of India.

48. The foregoing paragraphs explain, in as full detail as is appropriate to the occasion, the figures of the Provincial Budget estimate of 1893-94. For the results of the system of Provincial Finance from its first introduction in 1871-72 to the close of the financial year 1891-92, a period of twenty years marked by great financial vicissitudes, I must refer the Council to the second part of this Review, which, as I have already stated, will be published in next Gazette for the information of the public. It is sufficient to say here that the Bengal of the present day owes to Provincial Finance most of the facilities and conveniences which distinguish it from the Bengal of 20 years ago: its railways, its irrigation and navigation canals, many of its most important roads, and a host of administrative improvements which it would be tedious to enumerate, amongst them the Council Chamber in which we are now assembled. The period of 20 years which we have to look back upon was one, as I have already said, of many vicissitudes and public calamities. At its opening the province had hardly recovered from the shock of one famine and was soon to suffer from another. Cyclones, floods, wars and rumours of wars, a falling exchange, grave alternations of agricultural depression and prosperity, serious changes of policy affecting the revenues of the State, all these things form a series of events beyond the control of the Provincial Government, which are liable to recur at any moment, and which constantly threaten the security of the Provincial finances.

Statement showing the Bengal Provincial Services Estimate for 1893-94 and the Revised Estimate for 1892-93.

RECEIPTS.	Revised estimate for 1892-93 as reported to the Government of India, Finance and Commerce Department, in letter No. 1344F., dated 9th March 1893.	Revised estimate for 1892-93 as passed by the Government of India.	Estimate for 1893-94 as submitted by the Government of Bengal to the Government of India.	Estimate for 1893-94 as passed by the Government of India.
1	2	3	4	5
	Rs.	Rs.	Rs.	Rs.
Opening balance	23,53	23,53	23,02	22,46
Principal heads of Revenue—				
I.—Land Revenue { Proper	1,00,05	1,00,05	99,83	99,83
I.—Land Revenue { Adjustments ...	—13,26	—13,26	—13,50	—13,50
III.—Salt	90	90	90	90
IV.—Stamps	1,16,25	1,16,63	1,17,75	1,17,75
V.—Excise	28,52	28,54	28,75	28,75
VI.—Provincial rates	45,40	45,40	45,61	45,61
VII.—Customs	50	50	56	56
VIII.—Assessed Taxes	21,75	21,55	22,00	21,65
IX.—Forests	4,00	3,75	3,87	3,87
X.—Registration	7,05	7,05	7,10	7,10
Total ...	3,11,16	3,11,09	3,12,92	3,12,57
XII.—Interest	1,32	1,32	1,82	1,82
Receipts by Civil Department—				
XVI.—Law and Justice { Courts of Law	8,70	8,70	8,76	8,76
XVI.—Law and Justice { Jails	9,20	9,20	9,59	9,59
XVII.—Police	2,26	2,26	2,19	2,19
XVIII.—Marine	9,05	9,05	9,12	9,12
XIX.—Education	5,70	5,70	5,71	5,71
XX.—Medical	1,50	1,50	1,51	1,51
XXI.—Scientific and other Minor Departments.	1,89	1,69	1,62	1,62
Total ...	38,30	38,30	38,50	38,50
Miscellaneous—				
XXII.—Receipts in aid of superannuation.	72	72	56	56
XXIII.—Stationery and Printing ...	1,15	1,15	1,07	1,07
XXV.—Miscellaneous	8,03	8,23	7,96	7,96
Total ...	9,90	10,10	9,59	9,59
Railways—				
Eastern Bengal State Railway system ...	33,00	32,12	33,50	32,00
Irrigation—				
XXIX.—Major works (direct receipts) ...	16,35	16,50	14,50	14,50
XXX.—Minor works and navigation—				
By Public Works Department...	7,85	7,85	8,15	8,15
,, Civil Department	1,18	1,18	1,17	1,17
Total ...	25,38	25,53	23,82	23,82
Buildings and Roads—				
XXXII.—Civil works—				
By Public Works Department...	2,10	2,10	1,70	1,70
,, Civil Department	2,26	2,26	2,30	2,30
Total ...	4,36	4,36	4,00	4,00
Contributions	......	......	......	......
Total ...	4,23,42	4,22,82	4,24,15	4,22,30
GRAND TOTAL .	4,46,95	4,46,35	4,47,17	4,44,76

EXPENDITURE.	Revised estimate for 1892-93 as reported to the Government of India, Finance and Commerce Department, in letter No. 1344F., dated 9th March 1893.	Revised estimate for 1892-93 as passed by the Government of India.	Estimate for 1893-94 as submitted by the Government of Bengal to the Government of India.	Estimate for 1893-94 as passed by the Government of India.
1	2.	3	4	5.
	Rs.	Rs.	Rs.	Rs.
Direct demand on the Revenues—				
1. Refunds and drawbacks	1,53	1,53	1,53	1,53
2. Assignments and compensations ...	1,80	1,80	1,61	1,61
3. Land Revenue	33,98	33,88	34,23	34,19
5. Salt	1,25	1,25	41	41
6. Stamps	4,37	4,37	4,61	4,61
7. Excise	1,67	1,67	1,79	1,79
8. Provincial Rates	4,40	4,40	3,86	3,86
9. Customs	5,30	5,30	5,52	5,52
10. Assesed Taxes	92	92	96	96
11. Forests	2,23	2,23	2,41	2,41
12. Registration	3,57	3,57	3,67	3,67
Total ...	60,92	60,92	60,60	60,56
13. Interest on ordinary debt	1,20	1,20	1,38	1,38
Post Office, Telegraph and Mint—				
16. Telegraphs	4	4	3	3
Salaries and expenses of Civil Department—				
18. General Administration	16,25	16,25	15,92	15,92
19. Law and Justice { Courts of Law ...	85,35	85,35	85,28	85,28
19. Law and Justice { Jails	20,90	20,90	21,79	21,70
20. Police	57,84	57,84	55,84	56,50
21. Marine	8,61	8,61	10,47	10,37
22. Education	25,30	25,30	25,73	25,73
24. Medical	15,60	16,00	15,89	15,85
25. Political	37	37	29	29
26. Scientific and other Minor Department	3,25	3,25	3,64	3,64
Total ...	2,33,67	2,33,87	2,34,85	2,35,46
Miscellaneous—				
29. Superannuation, &c.	16,90	16,90	17,50	17,50
30. Stationery and Printing	12,48	13,08	13,05	13,05
32. Miscellaneous	1,98	1,98	2,29	2,29
Total ...	31,36	31,96	32,84	32,84
Famine Relief and Insurance—				
33. Famine relief	3	3	... ..	.
Railways (Revenue account—				
40. Subsidized Companies—Land, &c., ...	26	26	1	1
Total ...	26	26	1	1
Irrigation—				
42. Major Works—				
Working expenses	14,00	14,00	13,98	13,98
Interest on debt	24,26	24,26	24,49	24,48
43. Minor Works and Navigation—				
By Public Works Department ...	15,51	} 15,50	{ 15,58	15,58
,, Civil Department	4		4	4
Total ...	53,81	53,76	54,09	54,08
Buildings and Roads—				
45. Civil Works—				
By Public Works Department ..	28,44	} 29,35	{ 27,43	27,43
,, Civil Department	1,70		1,93	2,25
Total ...	30,14	29,35	29,36	29,68
Contributions	12,50	12,50	11,50	10,00
Total ...	4,23,93	4,23,89	4,24,66	4,24,04
Closing balance	23,02	22,46	22,51	20,72
GRAND TOTAL ...	4,46,95	4,46,35	4,47,17	4,44,76
Provincial surplus (+) or deficit (—) ..	(—)51	(—)23	(—)51	(—)1,74

The figures are in thousands.

PART II.

The Working of Provincial Finance.

The contract of 1871—77.

In attempting to gauge the results of the process of decentralisation which commenced in 1871-72, and to indicate the direct and tangible benefits which Bengal has derived from it, it will be convenient to follow in the main the periods at the close of which the arrangement, of late years called a contract between the Imperial and Local Governments, has been revised. The first of these periods embraced the six years, 1871-72 to 1876-77. Since then the contract has been revised at intervals of five years.

Accounts of Provincial Services from 1871-72 *to* 1876-77.

Major Heads.	Receipts.					
	1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Allotment from the Government of India.	1,23,09,990	1,32,03,836	1,23,43,066	1,10,41,600	1,10,60,337	1,11,11,574
II. Provincial rates and taxes.	......	......	......	......	......	......
III. Jails	5,45,300	7,77,702	9,67,971	8,71,980	7,91,296	7,22,837
IV. Registration ...	3,66,978	4,34,657	4,71,861	5,65,734	5,80,467	6,31,053
V. Police	4,58,246	27,918	49,486	41,895	38,356	65,802
VI. Education ...	3,90,360	3,80,007	4,78,540	5,02,363	4,95,287	4,75,229
VII. Medical	47,753	76,490	1,12,253	1,53,879	1,30,912	1,49,246
VIII. Printing	24,602	53,878	53,921	55,192	57,851	64,131
IX. Marine	......	......	......	409	300	300
X. Miscellaneous	98,460	1,30,624	{ 33,70,092 *2,797	} 77,29,059	1,00,80,806	1,04,305
XI. Public Works ...	95,633	1,45,268	2,94,120	1,32,860	1,34,350	3,00,033
Debt heads ...	3,06,813	4,59,098	2,79,351	4,26,688	3,67,532	2,90,746
Total ...	1,46,44,135	1,56,89,478	1,84,23,459	2,15,21,659	2,37,39,404	1,39,15,236
Opening balance ...	5,32,870	22,23,126	35,58,298	—19,037	23,64,287	5,01,180
GRAND TOTAL ...	1,51,77,005	1,79,12,604	2,19,81,757	2,15,02,622	2,61,03,781	1,44,16,416

Major heads.	Expenditure.					
	1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Refunds ...	16	27,248	28,413	22,505	67,031	41,879
II. Provincial rates and taxes.	......	......	......	......	......	......
III. Jails	14,84,100	16,82,453	19,23,105	17,90,083	17,83,414	16,42,198
IV. Registration ...	2,86,732	3,05,191	3,25,434	3,98,824	4,31,286	4,80,381
V. Police	50,30,304	45,89,047	46,41,393	39,77,918	41,64,767	39,96,762
VI. Education ...	19,58,190	20,31,719	24,65,405	25,11,658	26,32,444	24,47,958
VII. Medical ...	9,00,359	11,36,289	13,78,747	13,14,280	14,86,053	13,62,662
VIII. Printing ...	1,16,439	1,60,436	3,09,542	2,73,928	2,97,586	2,95,243
IX. Marine ...	......	......	......	485	897	1,083
X. Contributions...	......	......	47,30,763	29,30,665	97,36,646	1,81,449
XI. Miscellaneous...	2,512	1,49,058	} 4,19,904	{ 1,36,984	6,51,395	5,20,773
XII. Minor Establishment.	19,489	42,517		{ 2,84,192	3,97,279	3,90,133
XIII. Public Works ..	} 27,42,733	36,07,314	52,31,770	48,89,762	34,77,407	25,75,727
XIV. Petty construction and repairs.						
XV. Rents, rates, and taxes.	71,087	1,60,545	1,81,065	1,70,942	1,87,398	......
Debt heads ...	3,41,918	5,12,489	3,65,163	4,30,099	2,88,938	1,91,604
Total ...	1,29,53,879	1,43,54,306	2,20,00,794	1,91,38,335	2,56,02,601	1,41,27,952
Closing balance ...	22,23,126	35,58,298	—19,037	23,64,287	5,01,180	2,88,464
GRAND TOTAL ...	1,51,77,005	1,79,12,604	2,19,81,757	2,15,02,622	2,61,03,781	1,44,16,416

* Adjustment of old error.

2. Before proceeding to comment in detail on the figures of this statement, it will be convenient to recapitulate briefly the various classes of estimates and accounts with which the Provincial Government then had to deal. There were, *first*, the estimates and accounts of *Imperial Services*, that is to say, of those branches of revenue and expenditure which had not been made over to provincial control and management. In its relation to these services, the Local Government was in the same position that it held before the introduction of the Provincial Services scheme in 1871-72. *Secondly*, there were the estimates and accounts of *Provincial Services*, or of those branches of revenue and expenditure, originally Imperial, made over to the management of the Local

Government under the system of provincial contracts. *Thirdly*, there were the estimates and accounts of the funds constituting the *Provincial Reserve*, that is, of those Local Funds, the balances of which were at the disposal of the Local Government for provincial purposes. *Fourthly*, there were the estimate and accounts of those *Local Funds* (properly so called) which are by law or by their constitution devoted to particular local and limited objects. The amount of control which could be exercised over these by Government varies considerably, and might be said to be at a minimum in the case of the District Road Fund, and at a maximum in the case of the Port Funds. Both these strictly Local Funds, and those included under the Provincial Reserve, might be divided with reference to their origin into two classes, thus—

(I)—Funds supported by compulsory rating, or by payments under sanction of law, or orders having the force of law.

(II)—Funds made up of payments of the nature of rents, tolls, or fees for services or facilities rendered or privileges conferred.

Lastly, there were the accounts and estimates of *Municipal Funds*. These, though strictly speaking local funds, were not dealt with in the Local Funds Budget of this Government, under which only the funds of the *fourth* class were treated together.

3. By its Resolution No. 1886, dated the 28th March 1877, the Government of India directed that the transactions of the Local Government, under the heading of 'Provincial Services,' should be re-incorporated in the general estimates and accounts. The effect of this order was to amalgamate, for the purposes of the Imperial Budget, the *first* and *second* classes of accounts and estimates described in the preceding paragraph. A later Resolution, No. 1072 of the 20th February 1878, re-incorporated with the estimates and accounts of Provincial Services "those resources recorded under 'Local Funds' which were at the free disposal of the Local Government for expenditure in any part of its jurisdiction without legal let or hindrance." The effect of this was to incorporate with the estimates of Provincial Services, and therefore with the Imperial estimates, the transactions of the funds treated in Bengal as Provincial Reserve (*i.e.* the *third* class above described).

4. Turning now to the statement, it must be observed first of all that the figures for the years 1871-72, 1872-73, 1873-74 include the receipts and charges of Assam, while those for the last three years of the period include the accounts for Bengal only. Secondly, it must be remembered that the Imperial assignments, originally fixed at Rs. 1,16,85,920, underwent a number of modifications, according as certain services were transferred to the management of the Government of Bengal or withdrawn from its control. The most important of these, and the only one which need be mentioned in a historical review, is the reduction of Rs. 13,30,000 on the separation of Assam. This sum was arrived at by allotting to Assam the actual average expenditure on provincial services within its limits during the last three years of its connexion with Bengal, the Bengal estimate being reduced by that sum. The average expenditure was ascertained to be Rs. 5,30,000 on provincial public works and Rs. 8,00,000 on other provincial services, and by deducting this sum the Bengal assignment was reduced in 1874-75 to Rs. 1,10,41,000, as shown in the statement. It may be added that the large increase in the allotment which appears in the year 1872-73 was due to a special grant from the Supreme Government of Rs. 8,66,677 for the price of the old Sadar Court building, and of one lakh for expenditure on the relief of the so-called Burdwan fever, which caused heavy mortality in that year.

5. Turning now to the detailed heads, we find under *Jails* an increase of nearly two lakhs in charges, against which we must set an increase of rather less than the same amount in receipts. Extended manufactures brought about larger sales on the one hand, and on the other involved increased purchases of raw material; establishments were to some extent increased, and in the scarcity years 1873—75, the larger jail population swelled the expenditure on diets.

6. The *Registration* receipts were nearly doubled owing to Sir George Campbell's liberal extension of rural sub-registry offices, but although there is no doubt that this department earned a profit on the whole, and was indeed the only

department of those transferred in 1870 in which the income was susceptible of much development, still the exact earnings cannot be stated, as the charges for buildings were provided for in the Public Works budget.

7. Owing doubtless to the transfer of the Assam districts, and probably also to some change in the form of the accounts, the *Police* figures show a reduction of nearly four lakhs under Receipts and ten lakhs under Charges.

8. *Education* receipts rose by nearly a lakh and the charges by nearly five lakhs, notwithstanding the transfer of territory to Assam. The increase under the head of receipts was mainly due to the large grants made to primary schools under the policy introduced by Sir George Campbell, while greater liberality in the bestowal of scholarships, larger grants to Muhammadan schools and district schools, and the strengthening of the inspecting agency which this policy involved, also contributed to the same result.

9. In the *Medical* Department the receipts rose from under half a lakh to about a lakh and a half, and the charges from nine lakhs to over thirteen and a half. This was due partly to the Burdwan epidemic fever, but mainly to the great extension of dispensaries and hospitals initiated by Sir G. Campbell, who admitted that in this he had not exercised so severe an economy as in other branches of administration.

10. The figures shown under the three heads *Miscellaneous, Contributions* and *Public Works*, are greatly complicated by transactions relating to the scarcity of 1873—75. Thus the receipts under Miscellaneous rose from Rs. 98,460 in 1871-72 to Rs. 33,70,092 in 1873-74 and to Rs. 77,29,059 in 1874-75, owing to the inclusion under this head of the special famine grants of Rs. 22,89,100 and Rs. 76,38,139 made by the Government of India for expenditure on relief works. Then the heavy charges shown under Contributions represent the special grants made by the Local Government to District Road Committees for the same purpose, while the greatly enhanced expenditure of the Public Works Department during the two years is also due to relief operations.

11. The same cause, unforeseen and uncontrollable expenditure on relief, accounts for the startling fluctuations which appear in the balances. In the first two years the strict economies of Sir George Campbell effected savings aggregating about seventeen lakhs of rupees under the Provincial Service heads, and the year 1872-73 opened with a balance under those heads of Rs. 22,23,126, while the balance under Provincial Reserve had risen to Rs. 16,12,440, making a grand provincial balance of Rs. 38,35,566. For the year 1872-73 very liberal grants were made under Education, Medical, Public Works, and other headings; but the closing balance under 'Service' rose to Rs. 35,58,298. This result is, however, partly to be explained, as has been mentioned above, by a special grant from the Supreme Government of Rs. 9,66,677 on account of the Sadar Court buildings, capitalization of Calcutta rents, and Burdwan fever relief. The greater part of this special grant was meant to be reserved for the erection of public offices for the Bengal Government. Under Reserve the balance fell to Rs. 9,80,683, making the aggregate provincial balance at the opening of 1873-74 Rs. 45,38,981. In 1873-74 the Local Government was called upon to face the enormous expenditure on relief works caused by the famine in Bengal and Bihar, and the year closed with a deficit of Rs. 19,037 under 'Services,' while the balance under Reserve had fallen to Rs. 5,14,704. The net provincial balance at the opening of 1874-75 was thus only Rs. 4,95,667. During 1874-75 the expenditure upon relief works continued to be heavy, but a special grant of Rs. 76,38,139 was received from the Supreme Government, and the year closed with a credit balance of Rs. 23,64,287 under Services, and of Rs. 8,23,465 under Reserve, the aggregate being Rs. 32,92,752. In the year 1875-76 the final adjustment of the famine account between the Supreme and Local Governments took place. It was estimated that if all charges on account of famine had been excluded from the accounts, the closing balance under 'Services' in 1873-74 would have been Rs. 19,21,069, in 1874-75 Rs. 13,87,787, and in 1875-76 Rs. 12,97,981. The balance under Provincial Reserve at the end of 1875-76 being Rs. 7,21,464, that year would, famine apart, have left the Local Government with about 20 lakhs of rupees in hand. The demand of the Imperial Government on account of that portion of the relief works chargeable to the Provincial Public Works

Budget being far in excess of this sum, it was arranged that the Bengal Government should surrender to the Imperial Government about 15 lakhs of its estimated credit balance; that all outstanding famine charges beyond that amount should be debited to the Imperial Government; and that the accounts should be so adjusted as to leave to the Government of Bengal an opening balance of Rs 5,00,000 on the 1st of April 1876. Owing to some trifling discrepancies in the accounts, the actual opening balance of the year 1876-77 was Rs. 5,01,180.

Contract of 1877—82.

12. With that year the scheme of decentralization, which was introduced in 1871, underwent a considerable development. Under the system as originally started, the Local Government was entrusted with the management chiefly of spending departments, such receipts as accompanied them being supplemented by large consolidated allotments for their maintenance. The only department in which the revenue outstripped the charges was Registration; Police, Jails, Education, and Medical were services under which the receipts could never be expected to bear more than a very small ratio to the charges. It was therefore chiefly with a view to economy in administration that the Government of Lord Mayo determined to make the Local Government responsible for the financial management of these branches of the Administration. In 1877 the system of decentralization took another step in advance. The Government of India, while handing over other great departments of expenditure to the Local Government, also entrusted to its use and responsibility on fixed terms of progressive payment all the principal revenues which could be deemed capable of steady expansion under careful local management. The success of the earlier measure had been sufficient to secure some extension of the principle; but the form which the extension took was in great measure determined by the decision to which the Secretary of State had come on the great question of famine relief. In his financial statement of March 1877, Sir John Strachey announced that it was the intention of the Government of India to meet charges for famine and unremunerative works out of revenue for the future. He proposed to place the Government in a position to do this, not by introducing any new Imperial taxation, but by extending the system of decentralization, and by making each Local Government responsible for the management and charges of the great public works which had been constructed, and for the construction and maintenance of those to be subsequently undertaken. He declared that the fundamental principle to be pursued in regard to public works was the enforcement of Provincial responsibility only. Bengal was the only Province, however, which was then considered able to bear the whole of its own burden. The charge for interest on productive Public Works was transferred to the Provincial account, and the Lieutenant-Governor was invited to raise by taxation the funds necessary to meet existing charges, as well as to provide for new works. The Public Works Cess Act of 1877 was accordingly introduced. Provincial responsibility for all productive works, existing and future, was definitely assumed, and the policy which the Secretary of State had affirmed was in regard to this Province carried into effect.

13. The decentralizing measures of 1877 were of a threefold character—(1) Certain departments of Revenue were made over to Provincial management, some for fixed payments, some for progressive contributions to the Imperial Treasury. (2) Certain departments of expenditure were made over to it with fixed allotments. (3) The Public Works which had been or were to have been constructed with borrowed money were made over to it without any assignment. The arrangements were mutually interdependent. The first and second were connected, because, although fixed allotments only were made for expenditure, it was well recognised that expenditure could not be fixed, but must be progressive, and it was intended that the necessary increase in charges should be met out of the profits which the Provincial Government might derive from the assigned revenues over and above the amount of its contribution. The first and third were connected, because it was similarly recognised that the large responsibilities assumed by the Local Government in regard to Public Works should be merged in the aggregate of its ways and means. It was only reasonable, therefore, that the progressive contributions under the heads of assigned

revenue should be so fixed as to leave the Local Government a margin for the discharge of its actual responsibilities, as well as for the improvement of the Province.

14. In addition to the Departments of Police, Jails, Registration, Medical, Printing, Roads and Civil Buildings transferred by Lord Mayo's Government in December 1870, with an assignment of Rs. 1,16,85,920, which had been reduced by March 1877 to Rs. 1,11,11,574, the Local Government was further entrusted, under the contract of March 1877, with the management of the following heads of revenue:—(1) *Excise*; (2) *Customs* (Miscellaneous receipts); (3) *Salt* (Minor items); (4) *Stamps*; (5) *Law and Justice* (Proper); (6) *Marine*, and (7) *Miscellaneous*, and of the following heads of expenditure:—(1) *Refunds* of the Assigned Revenues; (2) *Land Revenue*; (3) *Excise*; (4) *Customs*; (5) *Salt*; (6) *Stamps*; (7) *Administration*; (8) *Minor Departments*; (9) *Law and Justice*; (10) *Marine*; (11) *Miscellaneous*, and one or two smaller items. The allotment made under the heads of expenditure was Rs. 1,34,70,000, and the total, including the existing allotment under the heads previously transferred, was Rs. 2,45,29,000. From this was deducted a lump sum of Rs. 5,90,000, and the net consolidated grant was thus reduced to Rs. 2,39,39,000. The payments to be made on account of the assigned reductions in the first year amounted to Rs. 1,91,07,000, and this was to be increased every year by Rs. 3,75,000 under the heads of Excise, Stamps, Law and Justice. The balance represented the Imperial allotment to the Provincial revenues, which, subject to adjustments, was thus to be Rs. 48,32,000 in 1877-78, Rs. 44,57,000 in 1878-79; Rs. 40,82,000 in 1879-80; Rs. 37,07,000 in 1880-81, and Rs. 33,32,000 in 1881-82.

15. The following table shows the progress of the Provincial revenue and expenditure during the five years 1877—82. The Revenue side of the account includes the proceeds of the Public Works cess, and the receipts from Railways and Canals. On the expenditure side appear the charges for interest on the Capital expended and the cost of maintenance. The sum entered as a receipt under Assessed Taxes is simply the grant made to the Provincial revenues to meet the cost of collections and refunds on account of the License-tax.

Revenue.

	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.
	Rs.	Rs.	Rs.	Rs.	Rs.
Opening balance	2,88,000	*26,90,000	42,79,000	51,04,000	49,91,000
Land Revenue	1,07,000	......	... ..	......	......
Excise	68,68,000	70,28,000	72,07,000	85,53,000	93,74,000
Assessed Taxes	.. ...	2,98,000	4,74,000	3,50,000	3,50,000
Provincial Rates	21,05,000	36,40,000	36,14,000	35,15,000	35,50,000
Customs	75,000	90,000	99,000	1,30,000	86,000
Salt	2,72,000	1,24,000	1,03,000	1,35,000	1,47,000
Stamps	1,08.15,000	1,07,85,000	1,14,99,000	1,18,92,000	1,20,24,000
Registration	6,61,000	9,89,000	10,29,000	10,30.000	10,18,000
Minor Departments	... ..	1,25,000	1,51,000	1,65,000	1,97,000
Law and Justice—					
Law and Justice Proper	8,05,000	10,52,000	10,80,000 }	17,58,000	17,17,000
Jails	6,89,000	5,94,000	6,96,000 }		
Police	92,000	4,32,000	4,76,000	4,86,000	5,23,000
Marine	14,57,000	11,76,000	11,23,000	12,76,000	10,82,000
Education	5,20,000	4,80,000	4,52,000	4,88,000	5,73,000
Medical	1.59,000	1,96,000	2,66,000	1.58,000	1.36,000
Stationery and Printing...	78,000	1,10,000	98,000	1,22,000	1,22,000
Interest	......	45,000	12,000	13,000	21,000
Miscellaneous	8,83,000	7,96,000	8,48,000	7.53,000	7,01,000
Railways	7,32,000	17,53,000	25,14.000	29,59,000	32,70,000
Irrigation and Navigation	4,95,000	15,27,000	16,69,000	16,71,000	19,55,000
Other public works	98,000	8,38,000	7,56,000	6,86,000	7,76,000
Contributions	......	......	6,000	......	1,39,000
Total Revenue ...	2,69,11,000	3,20,78,000	3,41,72,000	3,56,40,000	3,77,61,000
Imperial allotment	48,55,000	47,57,000	46,66,000	40,39,000	83,69,000(a)
GRAND TOTAL ...	3,20,54,000	3,95,25,000	4,31,17,000	4,47,83,000	5,11,21,000

* Includes Rs. 14,52,000 transferred from "Provincial Reserves" and Rs. 44,000 transferred from the old "Wards Fund."

(a) Includes 20 lakhs, being the refund of the special contribution from Provincial given during the Afghan War; and 28½ lakhs being the special grant to Provincial as an incident of the contract.

Expenditure.

	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.
	Rs.	Rs.	Rs.	Rs.	Rs.
Interest	20,00,000	32,14,000	34,92,000	36,32,000	33,61,000
Refunds	6,32,000	6,51,000	9,32,000	7,39,000	2,33,000*
Land Revenue	24,37,000	25 43,000	25,09,000	27,30,000	27,58,000
Forest	1,000	......	......	......	......
Excise	3,06,000	2,83,000	2,61,000	2,62,000	2,73,000
Assessed Taxes	......	2,79,000	1,95,000	1,68,000	96,000
Provincial Rates	10,000	13,000	......	......	......
Customs	7,16,000	6,99,000	6,95,000	6,98,000	6,86,000
Salt	40,000	48,000	33,000	18,000	18,000
Opium	......	......	2,000	1,000	13,000
Stamps	2,48,000	2,51,000	3,81,000	3,99,000	4,24,000
Registration	4,56,000	5,96,000	6,04,000	6,38,000	6,29,000
Administration	13,22,000	14,77,000	14,57,000	14,70,000	14,72,000
Minor Departments	2,65,000	2,45,000	2,80,000	2,75,000	5,03,000
Law and Justice—					
Law and Justice Proper	63,77,000	64,63,000	65,57,000	} 83,76,000	87,43,000
Jails	16,51,000	18,56,000	18,41,000		
Police	41,87,000	40,24,000	40,12,000	40,18,000	40,87,000
Marine	12,72,000	12,37,000	10,68,000	10,86,000	10,55,000
Education	25,24,000	24 88,000	24,75,000	25,56,000	27,76,000
Ecclesiastical	8,000	8,000	9,000	8,000	8,000
Medical	13,85,000	12,31,000	11,70,000	11,10,000	10,75,000
Stationery and Printing	8,61,000	9,52,000	8,73,000	9,46,000	8,80,000
Superannuations	......	......	1,000	2,000	5,000
Miscellaneous	3,21,000	2,82,000	4,32,000	3,72,000	6,65,000
Railways	6,26,000	13,47,000	20,05,000	18,98,000	30,34,000
Irrigation and Navigation	7,03,000	15,20,000	18,61,000	24,34,000	36,60,000
Other public works	25,12,000	33,45,000	33,72,000	47,60,000	67,58,000
Total ...	3,08,60,000	3,50,52,000	3,65,17,000	3,85,96,000	4,32,12,000
Contributions to Local	......	1,94,000	1,81,000	1,96,000	3,66,000
Ditto to Imperial	......	......	13,15,000	10,00,000	......
	3,08,60,000	3,52,46,000	3,80,13,000	3,97,92,000	4,35,78,000
Closing balance ...	11,94,000	42,79,000	51,04,000	49,91,000	75,43,000
GRAND TOTAL ...	3,20,54,000	3,95,25,000	4,31,17,000	4,47,83,000	5,11,21,000

* Decrease owing to the miscellaneous refunds now being charged against the particular service heads to which they refer.

† This is for cost of European stores included in accounts and future estimates under contingencies of the minor heads of service for which the stores are purchased.

‡ Includes Rs. 11,31,862 on account of 42 (now 41)—Miscellaneous Railway Expenditure.

16. Owing to short collections of the Public Works Cess in 1877-78, to the absence of any receipts under assessed taxes, the license tax not having then been introduced, and to various differences in the form of the accounts, it is only from 1878-79 that accurate comparison of the condition of the finances in the different years is possible. The gross revenue was Rs. 3,20,78,000 in 1878-79; it had risen to Rs. 3,77,61,000 by 1881-82. In other words, the revenue had increased at the rate of about 15 lakhs of rupees a year during the three years, though there had been no new taxation in the interval.

17. The progress of the revenue under *Excise* during this period is remarkable. While the revenue increased from 70¼ lakhs in 1878-79 to 85⅓ in 1880-81 and 93¾ in 1881-82, the cost of collecting it declined from Rs. 2,83,000 to Rs. 2,73,000. This was the result partly of the extension of the outstill system, and partly of the great prosperity of the province during this period.

18. A succession of good harvests with high prices had provided the people with money to spend on luxuries, and among these exciseable articles, in this as in all countries, hold a high place. There was a large increase in the consumption of duty-paying liquor where the sadar distillery system had been maintained, and also in the consumption of excise opium, of piece-goods, and of everything on which prosperous peasants are disposed to spend their surplus funds. The revenue from excise opium was Rs. 12,49,000 in 1877-78, Rs. 13,35,000 in 1878-79, Rs. 13,62,000 in 1879-80, Rs. 13,95,144 in 1880-81 and Rs. 14,47,000 in 1881-82. The increased consumption of piece-goods also bore unmistakeable testimony to the increased prosperity of the country, and confirmed the view that the excise revenue had been to a great extent improved by the greater spending power of the people. The value of these goods carried to Bengal or Bihar districts by the Eastern Bengal and East Indian Railways was Rs. 6,44,31,000 in 1879-80 and Rs. 6,91,16,000 in 1880-81.

19. The excise revenue was made over to the management of the Provincial Government for a payment rising from 64 lakhs in 1877-78 to 68 lakhs in 1881-82. The gross profit made by the Bengal Government was thus roughly 4½ lakhs in the first year, 5½ lakhs in the second, 6 lakhs in the third, 18⅓ lakhs in the

fourth, and 25¾ lakhs in the fifth. The fixed grant for managing the revenue was Rs. 2,92,000. The actual cost was Rs. 3,06,000 in 1877-78. This was reduced by careful management to Rs. 2,73,000 in 1881-82. Thus in 1881-82 the excise receipts exceeded the receipts of 1877-78 by no less than twenty-five lakhs of rupees, while the expenditure for collecting the revenue and managing the department showed a reduction of Rs. 33,000.

20. Under *Stamps* the increase, though less rapid than under Excise was nevertheless very satisfactory and sustained. The actual receipts in 1876-77 were Rs. 95,48,000, and the revenue was made over to the Provincial Government for a payment rising by 2½ lakhs a year from Rs. 98,50,000 in 1877-78 to Rs. 1,08,50,000 in 1881-82. In 1877-78, however, there was a large increase in receipts owing to the operations under the Land Registration Act, and the actual revenue collected was Rs. 1,08,15,000. In 1878-79 the receipts were Rs. 1,07,85,000. In 1879-80 the receipts rose to Rs. 1,14,99,000, and in 1881-82 to Rs. 1,20,24,000. The increase in the estimated receipts, however, arose from a change introduced by the High Court in the procedure for obtaining copies of documents, and there was a corresponding decrease in fees formerly credited to Law and Justice, and an increase in the cost of establishments debitable to the same head. The steady and substantial increase in the Stamp Revenue from Rs. 95,48,000 in 1876-77 to Rs. 1,20,24,000 in 1881-82 was undoubtedly to a great extent the result of the increased circulation of wealth in the country, and of increased facilities for obtaining justice. But much of the increase was also due to the improved administration of the department and to the special measures taken to discover and check fraud in the use of stamps. The gross profit of the Provincial Government was roughly 9½ lakhs in 1877-78, 6¾ lakhs in 1878-79, 11½ lakhs in 1879-80, 8 lakhs in 1880-81, and 11¾ lakhs in 1881-82. The fixed grant for managing this department of the revenue was Rs. 2,38,000. The actual cost was Rs. 2,48,000 in 1877-78 and Rs. 2,51,000 in 1878-79. It amounted to Rs. 4,24,000 in 1881-82. The increase in the first year corresponds with the increase in the receipts. Larger sales of stamps must be attended by increased charges for discount. The increase in the later years was due to the transfer of the actual cost of the stamps from the head of "Stationery." The fixed grant under "Stationery" for both stamps and stationery was Rs. 4,98,000. The actual expenditure on both was Rs. 6,89,000 in 1878-79.

21. Under *Registration* the receipts steadily increased, though the progress was not so rapid in the later as it was in the earlier years. The figures from 1878-79 included Record-room receipts and Land Registration fees transferred from Land Revenue. The Registration receipts proper were Rs. 6,61,000 in 1877-78, Rs. 8,70,000 in 1878-79, Rs. 9,09,000 in 1879-80. They were only Rs. 3,66,978 in 1871-72, the first year that the revenue was under Provincial management. With increased receipts there was naturally an advance in the charges for commission on fees, by which most of the Sub-Registrars are remunerated.

22. *Law and Justice* was the third of the branches of revenue surrendered in 1877 for a progressive payment. The actual receipts in 1876-77 were Rs 7,30,000. The revenue was surrendered to the Provincial Government for a payment rising by ¼ lakh a year from Rs. 7,25,000 in 1877-78 to Rs. 8,25,000 in 1881-82. The actual receipts were Rs. 8,05,000 in 1877-78, Rs. 10,52,000 in 1878-79, and Rs. 10,80,000 in 1879-80, while they rose to Rs. 17,17,000 in 1881-82. The increase in the revenue was chiefly under the head of Fees, and corresponded in some measure with the increase under Stamps. The falling off in the later years is explained by the new procedure already alluded to in connection with stamps. The expenditure under Law and Justice showed a large increase from Rs. 63,77,000 in 1877-78 to Rs. 87,43,000 in 1881-82. The fixed grant for this service under the five years' settlement between the Imperial and Local Government is Rs. 62,97,000. There was thus a heavy charge on Provincial Funds. It was, however, precisely in order that the Local Government might have the means of providing for improved administration, involving increased expense, that improveable revenue was made over to it. The Lieutenant-Governor was able to strengthen the Subordinate Executive Service, and to increase the number of munsifs to meet the growing wants of the country in the administration of Civil Justice.

23. Under *Jails* the receipts were Rs. 6,89,000 in 1877-78. They amounted to Rs. 6,96,000 in 1879-80. The charges, on the other hand, rose from Rs. 16,51,000 in 1877-78 to Rs. 18,41,000 in 1879-80. For 1880-81 they are estimated at Rs. 17,00,000, and for 1881-82 at Rs. 22,52,000.

24. The fixed grant for the charges on account of *Land Revenue* made in 1877 was Rs. 22,62,000. With the charges which this was intended to cover were amalgamated others, chiefly for sub-divisional establishments, which were originally Provincial. The gross cost of all in 1876-77 was Rs. 23,53,000. The growing wants of the administration, however, since carried the expenditure far beyond this limit. A grant of Rs. 1,80,000 was made for the management of Government estates. Establishments were strengthened and made more efficient, and additions were sanctioned to the staff of Deputy Collectors.

25. The expenditure on *Education* was Rs. 19,58,000 in 1871-72. This included the charges in Assam. In 1875-76 the expenditure in Bengal amounted to Rs. 26,32,000. In the next year Sir Richard Temple under financial pressure reduced the expenditure to Rs. 24,48,000. Sir Ashley Eden was able to make full provision for the needs of this important department. He replaced one lakh of rupees reduced from the grant for Primary Education in 1876-77, and the gross expenditure allowed for 1881-82 was the liberal sum of Rs. 27,76,000.

26. In the *Medical* administration important savings were made. The management of the Metropolitan Hospitals was reformed and much waste of public money prevented. Government aid to dispensaries in the interior no longer took the form of a free supply of expensive instruments and drugs, and careful management ensued from the responsibility thus thrown on the directing Committees. The charges which amounted to Rs. 14,86,000 in 1875-76, Rs. 13,63,000 in 1876-77, and Rs. 13,85,000 in 1877-78, were reduced to Rs. 12,31,000 in 1878-79 and Rs. 10,75,000 in 1881-82. With this reduction in cost there was an increase in the number of persons actually receiving medical aid.

27. It will be convenient to consider together the figures under *Public Works* and the figures of the *Interest* payable on the capital invested in them. In 1877 the following works were made over to the management of the Government of Bengal with the responsibility for the payment of the interest charges on the capital expended on their construction:—Northern Bengal Railway, Tirhut Railway, Nalhati Railway, Orissa Canals, Midnapore High Level Canal, Hidgellee Canal, and Sone Canals. The Calcutta and South-Eastern Railway was also made over; but as this line had been making barely sufficient to cover the working expenses, no interest was charged on the capital. The amount of capital expenditure on which the Provincial Government was liable for interest up to the end of 1877-78 was—

	Rs.
Railways	2,10,17,000
Canals	4,56,43,000
	6,66,60,000

The sum due for interest on this capital was Rs. 30,00,000; but in consideration of the short levy of Public Works Cess, the Government of India only took Rs. 20,00,000 in that year. In 1878-79 the capital expenditure on Railways was Rs. 66,41,000 chiefly on the extension of the Northern Bengal line and the construction of the Patna and Gaya line. The expenditure on Canals was Rs. 25,44,393. In 1879-80 the expenditure was Rs. 22,12,000 on Railways and Rs. 16,14,000 on Canals. Of the first sum, however, Rs. 3,15,000 was provided from Provincial Funds in order to expedite the completion of the Patna-Gaya line. In 1881-82 the expenditure on Railways amounted to Rs. 30,34,000. chiefly for the extension of the Tirhoot line to Bettiah on the west and Peepra Ghât on the east, and Rs. 36,60,000 for expenditure on Canals.

28. In 1877-78 the receipts under *Railways* amounted to Rs. 7,32,000 and the charges to Rs. 6,26,000, while the charges for interest amounted to Rs. 8,26,000. The Northern Bengal line was only opened from Porada to Jalpaiguri in January 1878; and the extensions from Parbatipur to Rangpur and from Siliguri to Jalpaiguri were only ready for traffic, the former in July and the latter in November 1878. The Patna-Gaya line and the extension of

the Northern Bengal line to Kaunia on the Teesta were opened for traffic in June 1879. In 1880 the Lieutenant-Governor was permitted by the Government of India to begin, as a Provincial work, the construction of a line from Sonapore on the Calcutta and South-Eastern line to Mugra Hát, an important mart in the 24-Parganas district, and a sum of Rs. 2,‿0,000 was expended upon it from Provincial Funds. This line was constructed on the broad gauge, and was afterwards extended to Diamond Harbour. The estimates for 1881-82 included a charge of Rs. 7,50,000 for expenditure on this line. Provision was also made for the expenditure of Rs. 4,50,000 for preliminary work on a line to connect Parbutipur on the Northern Bengal Railway with the important town of Dinajpur, and of two lakhs for raising and bridging the road from Mugra to Diamond Harbour to make it available for railway extension.

29. The *Canals* which were taken over by this Government in 1877 were financially of a very different character from railways, and there was no hope of their being in a position to pay the interest on the capital invested in them for many years to come. The construction of the Orissa, Midnapore, and Hidgelee Canals was originally undertaken in 1863 by the East Indian Irrigation and Canal Company, with the most extravagant expectations of profit. Five years after the work had been begun, the Government of India purchased the canals from the Company for Rs. 1,17,28,560, and proceeded to develop a modified scheme. Up to the present these works have been a heavy drag on Provincial resources, which have to bear the charges. The receipts from irrigation on the Orissa and Midnapore Canals, however, show a steady increase; leases are taking the place of yearly agreements; and, as the system of distributaries is extended, it is hoped that the revenue will gradually develop. The opening of the Sone Canals gave a great impetus to the extension of sugarcane cultivation, and caused a considerable increase in the agricultural wealth of the tracts supplied. The Commissioner, in 1879-80, estimated the increase of profit derived from this source by the people of Shahabad at Rs. 4,73,000 per annum.

30. The following table shows the net receipts from each work during the period 1877-82, with the interest charges payable in each year:—

	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.
	Rs.	Rs.	Rs.	Rs.	Rs.
Orissa Canals	—54,970	—57,090	—96,996	—40,000	(—)1,06 000
Midnapore „	—33,730	—2,120	92,822	27,000	22,000
Hidgellee „	81,720	37,610	3,500	29,000	19,000
Sone „	—1,51,110	67,120	1,74,291	6,000	2,79,000
Total net receipts ...	—2,08,090	45,520	1,73,614	22.000	2,14,000
Interest charges ...	20,03,270	21,20,416	22,04,767	22,75,000	20,75,000

31. Apart from these schemes, the Government of Sir Ashley Eden also undertook other irrigation and canal works from Provincial Funds. A sum of Rs. 6,28,000 was spent on a canal to connect the river Gunduk with the principal water-courses of the Saran district. A still more important work was the Joojooty Scheme, whereby a constant supply of pure water from the river Damoodah was poured into old channels in the Burdwan and Hooghly districts. The silting up of these channels was undoubtedly for many years the cause of much disease and suffering throughout a large tract of country, and the introduction of a copious supply of pure water for drinking and irrigation purposes was expected to have a marked effect on the health and prosperity of the people. With the admission of the river water there was an almost entire disappearance of the epidemic which so long raged among the villages situated on the banks of the silted-up channels in the Hooghly district. It was calculated that nearly nine-tenths of the inhabitants of these villages were swept away in the epidemic which prevailed before 1877. The beds of these water-courses were studded with pools of stagnant water, which, as the dry season advanced, became more and more fœtid and noxious, and spread disease and death among the people who consumed the fluid. At the same time the drainage of the country was obstructed by the endeavours of the people to collect and retain water for agricultural purposes.

32. Sanction was also given to the construction, from Provincial Funds, of a navigation canal to connect the existing tidal canal in Hidgellee with the Orissa system. This was a work of the first importance. Orissa was then wholly

dependent on the sea for its communications with Bengal; the coasting trade could only be carried on by large vessels; the ports were bad; and if any serious failure of the crops occurred, it was impossible to throw a sufficient supply of food into the province. The projected canal was intended to bring Orissa into direct inland communication with Bengal, so that steamers and country boats would be able to ply at all seasons of the year, and while the province will be protected from famine, a large expansion of trade might be confidently expected.

33. It is not possible to make any useful comparison of the expenditure under *other Public Works* before and after the contracts of 1877. The expenditure on works during the scarcity of 1874 was abnormal, the Provincial balances were exhausted, and the Government of India found it necessary to accept the outlay, and to make the local Government a net grant of five lakhs with which to begin the year 1876-77. The expenditure on Ordinary Public Works during that year was Rs. 25,59,000. In 1877-78 Sir Ashley Eden found it necessary to proceed with extreme caution in the matter of expenditure. The charges thrown upon the Provincial revenues on account of Productive Public Works were very serious; the full outturn of the Public Works Cess could not be obtained during the year; and he recognized the necessity of securing a substantial working balance to provide for emergencies. The expenditure in this year was therefore restricted to Rs. 25,12,000. In framing the revised estimates for 1878-79, the Lieutenant-Governor found it possible to make provision for various important and useful schemes that had been left in abeyance for want of funds; but in this year and the next the expenditure was, under instruction, kept down in consequence of the financial difficulties which famine, war, and adverse exchange had brought upon the Government of India. In 1879 the Government of India found itself compelled to call upon Local Governments to make all possible reductions in expenditure. The orders went so far as to direct that no new work estimated to cost more than Rs. 2,500 should be commenced, even though it might have already received the sanction of Government. In order to avoid the necessity of peremptorily putting a stop to works, the Lieutenant-Governor offered a special contribution of 20 lakhs to Imperial Funds. Under the influence of the same policy of retrenchment unduly low estimates were made for 1880-81, but the Lieutenant-Governor was afterwards permitted by the Government of India to increase the grant by 20 lakhs, and the expenditure during the year was Rs. 47,60,000. In 1881-82, the Public Works expenditure aggregated Rs. 67,58,000 and included, besides miscellaneous improvements on buildings, and on the construction, bridging, and metalling of Provincial roads, provision for new Court-houses at Sealdah, Jessore, Mymensingh, Dacca, Ranchi, Gaya, Darbhanga, and Motihari, for various sub-divisional buildings and Munsifs' Courts, for new Jails at Jalpaiguri, Bogra, Pabna, Gaya, Darbhanga, and Motihari, for a college at Rampur-Boalia, and a Railway school at Kurseong, and for the completion of the new Secretariat buildings and the new Obstetric Hospital at the Medical College.

34. That the system of decentralization was up to this time thoroughly successful in Bengal is sufficiently clear from the foregoing sketch. The revenues increased rapidly, independently of any new taxation; useless expenditure was curtailed; and funds were made available for improvement under all branches of the Administration. The three heads of improveable revenue made over to the management of the Provincial Government, with an income of 165¼ lakhs in 1876-77, showed an income of not less than 213 lakhs in 1881-82. In the meanwhile, the Government was able to carry out numerous works of improvement, many of which, under the previous system, would have been indefinitely postponed. Besides making a special contribution of 20 lakhs to the Imperial treasury in time of need, means were found during these five years to increase the staff of executive and judicial officers; to provide increased facilities for the administration of justice; to increase the grant for education; to make grants-in-aid of district communications, and of works of drainage, sanitation, and municipal improvement; to build schools, colleges, and hospitals; to replace the huts in which the public business was transacted, or prisoners were confined, by substantial masonry court-houses and jails; to spend 20 lakhs on railways which have since brought in a large return, 5½ lakhs on tramways, ¾ of a lakh on a steamer service to improve communications with Assam, and 2 lakhs on a road to develop the trade with Thibet; to lay out 11 lakhs on the first portion of a work which will develop the trade of Orissa and protect it from famine;

and to devote 38¼ lakhs to improving navigation and providing a supply of pure water for the people. While 77½ lakhs were thus expended on great measures of material improvement, and the expenditure on Ordinary Public Works was increased from Rs. 25,12,000 in 1877-78 to Rs. 67,58,000, exclusive of expenditure on preliminary works of railway construction, in 1881-82, and while no legitimate outlay was spared to strengthen every department of the Administration, the five years' period, which opened with a credit balance of Rs. 2,88,000 only, closed with a credit balance of Rs. 75,43,000. When it is recollected that under the system which prevailed before 1871 every new charge required the sanction of the Imperial Government, that the decision on the demands of each province took no cognizance of the extent to which it had contributed to the general Exchequer, that nothing was to be gained by economy, because money left unspent by any one Government was practically lost to it, and only went to increase the amount to be scrambled for by all, some idea may be formed of the advantages which Bengal had reaped up to this time from the control of its own finances.

35. The principal features of the contract of 1877 have been described above. The Local Government was allowed, as in the first contract of 1870, to appropriate the whole of the receipts under the heads of Police, Jails, Registration, Education, Medical, Printing, Roads and Civil Buildings, and received in addition a gross annual allotment of Rs. 1,10,59,000 to meet the charges on account of these departments. The receipts from *Excise*, *Stamps*, and *Law and Justice* (proper) were also made over to the Provincial Government in consideration of a payment to the Imperial Treasury of lump contract sums, which were to increase by one lakh per annum in the case of Excise, and 2¾ lakhs per annum in the case of Stamps and Law and Justice. The following heads of revenue were also made over in return for fixed contract payments, viz., *Customs* (miscellaneous receipts), *Salt* (minor items), *Marine* and *Miscellaneous*. On the expenditure side, the Local Government was entrusted with the management of the following heads of expenditure, receiving in each case an annual grant of fixed amount:—*Refunds* of the assigned revenues, *Land Revenue*, *Excise*, *Customs*, *Salt*, *Stamps*, *Administration*, *Minor Departments*, *Law and Justice*, *Marine*, *Miscellaneous*, and one or two smaller items. Simultaneously—and this was one of the most important elements of the contract—the gross receipts of certain railways and canals which had been, or were to be, constructed with borrowed capital were transferred to the Local Government, which also became responsible for the working expenses of the same and for the payment to the Imperial Government of the interest charges on the capital with which they had been constructed. As these interest charges were expected to exceed considerably the net earnings of the works thus provincialised, the Lieutenant-Governor was authorised to impose special provincial taxation to make up the deficiency, and to this end the Public Works Cess was imposed by Act II (B.C.) of 1877. The provincialisation of these charges for interest, and the introduction of the Public Works Cess, formed integral parts of Sir John Strachey's scheme of famine finance.

36. The contract of 1877 thus fell naturally into three parts—(1) in respect of the branches of service which had been provincialised by Lord Mayo, the old principle was retained: a fixed annual grant was made from Imperial revenues, which, together with the receipts of those departments, was expected to cover their expenditure, any growth of charges being provided for from the increase in the receipts. (2) In respect of the civil heads of revenue and expenditure then provincialised for the first time, a separate contract was made for each head of revenue and for each head of expenditure; the rates of increase in the payments on account of the revenue from Excise, Stamps and Law and Justice being advisedly taken at a low figure, so as to leave the Local Government a margin wherewith to meet the normal growth of civil expenditure for which no direct allowance was made. (3) In respect of public works constructed from borrowed capital, the Lieutenant-Governor was authorised to resort to local taxation to make good the deficit of interest charges in excess of net earnings.

37. The contract, which came into force in 1882, differed materially from that which it succeeded. The principles on which it proceeded were the following:—

Contract of 1882—87.

Instead of giving the Local Government a fixed sum of money to make good any excess of provincialised expenditure over provincialised receipts, a certain proportion of the Imperial revenue was devoted to this object. A few heads

were reserved as Imperial; others were divided in proportions, for the most part equal, between Imperial and Provincial; the rest were made Provincial. The balance of transfers, being against the Local Government, was rectified by a fixed percentage on its Land Revenue otherwise reserved as Imperial. At the same time a distinct declaration was made of the policy to be followed during the term of the contract. The Imperial Government was to make no demand on the Local Government, except in the case of disaster so abnormal as to exhaust the Imperial reserves and resources, and to necessitate a suspension of the entire machinery of public improvement throughout the Empire. On the other hand the Local Government was to look for no special aid from the Imperial Government, except in the case of severe famine, and then only within the following limits:—(1) current income must have been exhausted, every avoidable expense in every department having been retrenched, and the public works grants applied to famine work to the very utmost possible; (2) savings of past years in excess of the ordinary working balance must have been drawn upon to two-thirds of their total amount; (3) the margin of Provincial surplus in normal was made be liable for the completion of works begun as relief works, and where there was no need of such completion, was to be chargeable up to one-fourth at most for payment of interest on any Imperial loans which may have been raised to meet the excess cost of the famine in general.

38. The following were the principal additions made to the provincial receipts and charges under the new scheme:—This Government was admitted to a half share in the receipts from Forests and Assessed Taxes, and took all the receipts under the heads of Superannuations, Miscellaneous, and Other Public Works, except contributions from the military and medical funds; gain by exchange on Imperial transactions, premium on bills and unclaimed bills of exchange; receipts from military works; and any unspecified miscellaneous receipts exceeding Rs. 10,000. Under Forests and Assessed Taxes it was liable for half the charges. The Imperial Government only retained under Land Revenue the same percentage on charges for collection and on the cost of surveys and settlements as was retained of land revenue. To the existing provincial charges was added under Law and Justice and Medical all that was reserved as Imperial; under Stationery and Printing all except the cost of stationery purchased from central stores; and under Other Public Works, the charges for Museums, Educational Buildings, and Light-houses. On the other hand, one-half the net receipts from Excise, Stamps, and Registration, including record-room fees, was surrendered to the Imperial Government. The percentage of Land Revenue was, however, only calculated after allowing for the claim of the Government of India to share in the general improvement that had resulted to the Provincial revenues during the five years then just expired. That share was fixed at 30 lakhs a year. From this the Government of India deducted three lakhs to be expended on the improvement of the Subordinate Executive and Judicial Services and the establishment of the new district of Khulna. In order, too, that the Local Government might not be embarrassed by a sudden reduction of 27 lakhs in its income, His Excellency the Governor-General in Council added a sum of 28½ lakhs to the credit balance of the Province for 1881-82.

39. The amount of percentage of Land Revenue which, under the new scheme was assigned to this Government, was calculated, as stated above, upon the basis of the regular estimate for the year 1881-82. It was fixed at 32·2284. A sum of Rs. 30,00,000 was, on account of the annual contribution to the Government of India, added to the Provincial deficit, provision being at the same time made for an additional expenditure of three lakhs for the improvement of the Subordinate Civil Service and for a new district of Khulna.

40. The chief points in which the contract of 1882 differed from that of 1877 were the following:—*First*, the excess of provincialised expenditure over provincialised receipts was balanced, not by an annual allotment of fixed amount, but by a fixed percentage of the land revenue of the Province. Inasmuch as the receipts credited under Land Revenue are to some extent capable of improvement, and ordinarily show a tendency towards steady, if small, increase, this change was to the advantage of the Local Government. *Secondly*, the Local Government was no longer permitted to appropriate the whole of the increase in the three principal sources of improvable revenue, viz., Excise, Stamps, and Registration. Under the former contract, the increase which the Local

Government had to surrender was only one lakh of rupees per annum under Excise, 2¾ lakhs per annum under Stamps (combined with Law and Justice), and *nil* under Registration; whereas the actual rate of increase averaged nearly six lakhs per annum under Excise, 4¾ lakhs under Stamps and Law and Justice, and Rs. 90,000 under Registration. Under the old contract the whole of this profit went to the Local Government: under the new arrangement one-half went to the Government of India. This change operated greatly to the disadvantage of the Provincial revenues, whose expansive power was thereby largely diminished.

41. The *third* point of difference between the contracts of 1882 and 1877 lay in the extension of the interest of the Local Government to the revenue heads of *Assessed Taxes* and *Forests*, and to the receipts and expenditure under *Superannuations*, and certain sub-heads of branches of service of which the bulk was already Provincial.

42. The last important point of difference was that the contract of 1882 was a *consolidated* contract. In other words, no attempt was made to estimate the future receipts and expenditure under separate heads and to fix distinct assignments for each. The new arrangements were applied to the revised estimates for 1881-82 as a whole; the total receipts were compared with the total expenditure; and (after making a deduction of 27 lakhs from the Revenue side, being the share of the profit on the old contract which the Imperial Government decided to appropriate) the adjusting percentage of Land Revenue was calculated so as to balance the account.

43. following statements show the actual receipts and expenditure of the period 1882-87.

REVENUE.

Receipts.	Actuals, 1882-83.	Actuals, 1883-84.	Actuals, 1884-85.	Actuals, 1885-86.	Actuals, 1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.
Opening balance	75,43,005	21,46,903	6,86,636	12,02,044	14,69,818
Principal Heads of Revenue—					
I.—Land Revenue	1,30,54,115	91,93,743	1,28,31,915	1,29,60,300	1,31,10,080
III.—Salt	1,64,999	99,984	1,24,556	1,01,470	1,02,120
IV.—Stamps	61,06,765	62,88,457	64,95,607	66,29,030	67,31,589
V.—Excise	48,94,183	52,12,696	50,26,110	47,92,350	50,62,913
VI.—Provincial Rates	36,06,713	38,14,746	37,64,961	38,71,170	39,95,254
VII.—Customs	71,276	54,224	61,032	51,180	68,810
VIII.—Assessed Taxes	7,60,169	7,58,797	7,48,243	7,66,800	7,66,798
IX.—Forest	3,46,979	3,47,167	2,85,576	2,98,710	3,26,817
X.—Registration	5,19,942	4,91,480	5,41,200	5,46,930	5,19,218
Total ...	2,95,25,441	2,62,61,294	2,98,79,200	3,00,17,940	3,06,83,597
XII.—Interest	44,227	67,614	74,242	73,340	82,640
Post Office, Telegraph and Mint—					
XIV.—Telegraph	......	94	22	50	1,063
Receipts by Civil Departments—					
XVI.—Law and Justice—					
Fees, fines and forfeitures of Judicial Courts	8,23,309	7,63,875	7,54,500	7,40,870	7,56,324
Jails	8,46,672	6,45,823	7,28,720	7,86,762	7,44,617
XVII.—Police	4,86,449	5,02,803	6,95,862	6,90,630	6,69,260
XVIII.—Marine	9,51,889	8,96,260	7,71,644	8,51,000	8,97,193
XIX.—Education	5,21,235	5,31,648	5,23,556	5,24,310	5,28,817
XX.—Medical	1,32,934	1,41,756	1,48,262	1,46,270	1,56,482
XXI.—Scientific and other Minor Departments	1,67,830	2,05,567	1,55,519	1,17,980	1,22,221
Total ...	39,30,318	37,47,732	37,78,063	38,57,822	38,74,914
Miscellaneous—					
XXII.—Receipts in aid of Superannuations ...	72,793	75,347	61,669	52 650	46,247
XXIII.—Stationery and Printing	1,46,615	1,20,715	1,08,493	1,93,970	2,02,539
XXV.—Miscellaneous	5,53,726	7,14,621	8,37,682	6,07,550	7,02,760
Total ...	7 73,139	9,10,683	10,07,844	8,54,170	9 51,537
Railways—					
XXVI.—State Railways (gross earnings) ...	37,88,454	41,24,074	42,87,293	44,72,801	52,71,606
Irrigation—					
XXIX.—Major works (direct receipts)	13,03 246	11,60,841	13,07,521	15,84,935	13,86,629
XXX.—Minor works and Navigation	7,68,259	7,92,338	7,77,818	10,32,040	8,39,164
Total ...	20,71,505	19,62,179	20,85,339	26,16,975	22,25,793
Buildings and Roads—					
XXXII.—Civil Works—					
By Public Works Department ...	2,13 126	2,02,292	6,39,152	2,28,670	3,86,255
By Civil Department	5,22,510	5,88,345	6,21,303	5,17,696	4,81,091
Total ...	7,35,636	7,90,637	12,60,455	7,46,366	8,67,346
Contributions	21,754	......	20,000	......	16,104
Total Revenue ...	4,08,90,474	3,78,64,307	4,23,92,458	4,26,39,464	4,39,74 600
Grand Total ...	4,84,33,479	4,00,11,210	4,30,79,094	4,38,41,508	4,54,44,418

EXPENDITURE.

Expenditure.	Actuals, 1882-83.	Actuals, 1883-84.	Actuals, 1884-85.	Actuals, 1885-86.	Actuals, 1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.
Direct demands on the Revenues—					
1. Refunds and drawbacks	1,21,264	1,42,429	1,39,772	1,28,920	1,20,319
Charges in respect of collection—					
3. Land Revenue	30,93,586	36,03,038	32,75,069	33,67,300	34,09,676
4. Opium	19,017	......	......	......	......
5. Salt	17,628	18,320	21,046	18,130	11,005
6. Stamps	2,13,830	2,20,350	2,33,664	2,46,210	2,42,576
7. Excise	1,33,958	1,36,147	1,44,333	1,61,320	1,88,903
8. Provincial Rates	......	......	......	......	37,772
9. Customs	5,57,547	4,85,898	4,98,143	4,90,160	5,13,707
10. Assessed Taxes	47,416	48,342	46,947	43,780	43,780
11. Forests	1,91,068	1,93,849	2,05,663	1,85,180	2,11,301
12. Registration	3,13,650	2,78,033	2,96 741	3,00,680	2,81,187
Total ...	47,08,937	48,27,306	48,61,380	49,41,680	51,50,316
Post Office, Telegraph and Mint—					
16. Telegraph	......	2,814	955	640	803
Salaries and expenses of Civil Departments—					
18. General administration	15,10,493	15,45,027	16,05,594	15,82,360	15,93,887
19. Law and Justice—					
Judicial Courts	92,76,255	93,18,108	94,09,177	97,39,430	79,52,620
Jails					16,66,127
20. Police	44,60,624	45,85,892	48,02,147	47,87,580	47,03,840
21. Marine (including River Navigation) ...	9,51,039	8,60,143	8,47,151	8,29,070	8,53,014
22. Education	30,16,318	31,55,409	34,00,405	32,94,530	33,53,892
24. Medical	13,71,873	13,63,645	14,56,187	14,39,010	14,64,036
25. Political	......	447	......	......	......
26. Scientific and other Minor Departments ...	3,50,541	3,97,685	3,50,866	3,54,230	2,95,128
Total ...	2,09,37,143	2,12,35,356	2,18,71,527	2,20,26,210	2,18,82,544
Miscellaneous Civil Charges—					
29. Superannuation allowances and pensions ...	11,79,456	11,40,086	11,99,258	12,39,270	12,67,353
30. Stationery and Printing	10,51,283	9,27,844	10.86 490	11,13,920	10,30,353
32. Miscellaneous	4,52,573	3.70,628	3,97,467	4,51 730	3,76,830
Total ...	26,83,311	24,38,558	26,83,155	28,04,920	26,83,536
Famine Relief and Insurance—					
33. Famine relief	......	.....	5,770	1,23,840	......
37. Construction of Railways	......(a)	......(a)	......(a)	21,580	3,362
Railway Revenue Account—					
38. State Railways—					
Working expenses	20,40,250	24,99,810	30,72,039	30,39,960	31,42,937
Interest on debt	14,13,620	15,93,830	17,15,257	19,07,310	20,67,753
40. Subsidized Companies, Land, &c.	10,600	39.723	57,984	25,970	1,074
41. Miscellaneous Railway expenditure ...	18,49,463	—27,60,039	1,31 643	29,690	54,866
Total ...	53,13,933	13,73,324	49,76,923	50,02,230	52,66,630
Irrigation—					
42. Major Works—					
Workings expenses	11,47,967	10,69,394	11,79,758	11,58,420	13,32,600
Interest on debt	21,15,506	21,60,760	22 12,627	22,49,190	22,73,490
43. Minor Works and Navigation	23,67,231	11,77,816	8,16,172	10,62,950	6,90,635
Total ...	56,30,704	44,07,970	42,08,557	44,65,560	42,96,725
Buildings and Roads—					
45. Civil Works—					
By Public Works Department	66,82,211	45,75,267	27,15,149	27,26,650	38,85,406
By Civil Department	46,679	1,43,549	2,99,183	58,070	76,650
Total ...	67,28,890	47,18,816	30,14,332	27,84,720	39,62,056
Contributions ...	2,83,663	3,20,431	2,54,451	2,00,310	1,90,462
Total ...	4,62,86,581	3,93,24,575	4,18,77,050	4,23,71,690	4,34,45,494
Closing balance ...	21,46,898	6,86,635	12,02,044	14,69,818	19,98,924
GRAND TOTAL ...	4,84,33,479	4,00,11,210	4,30,79,094	4,38,41,508	4,54,44,418

(a) Included under 41 Miscellaneous Railway expenditure.

44. The following figures illustrate the progress of the province during the contract of 1882—87:—

Revenue.

		(Contract estimate.)	1882-83.	1886-87.
		Rs.	Rs.	Rs.
Land Revenue	...	1,22,32,000	1,30,54,000	1,31,10,000
Stamps	...	59,00,000	61,07,000	67,32,000
Excise	...	49,55,000	48,94,000	50,63,000
Provincial rates	...	35,40,000	36,07,000	39,95,000
Assessed taxes	...	8,25,000	7,60,000	7,67,000
Forests	...	3,14,000	3,47,000	3,27 000
Registration	...	4,96,000	5,20,000	5,19,000
Law and Justice Jails	... ...	16,00,000	16,70,000	15,01,000
Marine	...	10,44,000	9,52,000	8,97,000

Expenditure.

		(Contract estimate.)	1882-83.	1886-87.
		Rs.	Rs.	Rs.
Land Revenue	...	28,91,000	30,94,000	35,00,000
Forests	...	1,98,000	1,91,000	2,11,000
Registration	...	3,05,000	3,14,000	2,81,000
Law and Justice	...	88,33,000	92,76,000	79,53,000
Jails	...			16,66,000
Police	...	41,32,000	44,61,000	47,04,000
Education	...	26,77,000	30,16,000	33,54,000
Marine	...	10,97,000	9,51,000	8,53,000
Civil works	...	67,52,000	67,29,000	39,62,000
Contributions	...	3,33,000	2,84,000	1,99,000
State Railways (capital)	...	11,32,000	18,49,000	58,000
Irrigation (capital)	...	19,29,000	8,40,000	2,18,000

45. The figures shown in the last paragraph against *Land Revenue* receipts are the net sum credited to Provincial after all adjustments had been made. Eliminating these, we get the following result :—

	Contract estimate.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Land revenue proper ...	1,21,34,000	1,22,28,000	1,22,20,000	1,20,60,000	1,24,28,000	1,24,97,000
Grant for Government estates	1,95,000	3,94,000	3,69,000	3,94,000	3,85,000	4,25,000
Total ...	1,23,29,000	1,26,22,000	1,25,89,000	1,24,54,000	1,28,13,000	1,29,22,000

46. When it is remembered that only a small part of Bengal is temporarily settled, and that 1884-85 and 1885-86 were years of unfavourable harvests, the improvement seems fairly satisfactory. The improvement on the grant for the management of Government estates (which was then fixed at 10 per cent. on collections and has since been raised to 12) was much greater than in the case of Land Revenue proper. This, however, did not represent any real relief to the Provincial revenues, as the whole amount of this grant was devoted to the improvement of the estates in question.

47. The expenditure charged under *Land Revenue*, which was wholly Provincial (except the charge for Surveys and Settlements, which was divided in the same proportion as the receipts are divided), rose from Rs. 28,91,000 to Rs. 35,00,000, or by Rs. 6,09,000 in five years. The chief causes of increase under this head were the creation of the district of Khulna, the improvement in the pay and position of the Subordinate Executive Service (half of whose salary is shown against Land Revenue, and half against Law and Justice), and the additional expenditure on Government estates, which was balanced by the higher receipts referred to in the last preceding paragraph. The pay of the Directorship of Agriculture, which was sanctioned in 1884 temporarily for two years, was also shown under this head, as well as the Provincial share of the survey of Muzaffarpur under the Tenancy Act. These two items, which were not in existence when the contract was made, alone account for Rs. 1,12,000 of the total increase.

48. Under the head of *Stamps*, the development of he revenue was steady and continuous. The total receipts, which had risen from Rs. 1,08,15,000 in 1877-78 to Rs. 1,20,24,000 in 1881-82, again rose to Rs. 1,32,58,000 in 1885-86, and to Rs. 1,34,63,000 in 1886-87. The contract estimate of receipts (Provincial share) was taken at 59 lakhs, while the actuals were Rs. 61,07,000, Rs. 62,88,000, Rs. 64,96,000, Rs. 66,29,000, and Rs. 67,32,000 respectively. The profit of the Local Government on the contract under this head was therefore about 2 lakhs in the first year, 3¾ lakhs in the second, 6 lakhs in the third, 7¼ lakhs in the fourth, and 8⅓ lakhs in the fifth. The increase was uniformly distributed over the whole period of the contract. There was no legislation during this period affecting the

stamp laws, but a material portion of the improvement in the revenue was undoubtedly due to the arrangements under which process-serving fees in revenue courts, and copying fees, were levied in court-fee stamps instead of in cash. To the former cause at least Rs. 50,000 of the increase in 1884-85 were due, and larger sums in the following years. The remainder of the increase, of which two lakhs came under non-judicial stamps, and upwards of 10 lakhs under court-fees, was attributable to improved administration and greater facilities for obtaining justice. The expenditure of this department, the contract grant for which was fixed in 1881-82 at Rs. 2,17,000, was Rs. 2,14,000, Rs. 2,20,000 Rs. 2,34,000, Rs. 2,46,000, and Rs. 2,43,000 in each year of the contract, the ultimate increase being only Rs. 26,000. More than half of this increase, small as it is, was due to the greater cost of the new description of court-fee stamps introduced during 1884-85 for greater security against fraud. The direct cost of raising the stamp revenue in Bengal was slightly over 3¾ per cent.

49. Under the previous contract, the extraordinary development of the revenue from *Excise*, and the consequent profit to the Provincial revenues, were among the most striking features of the financial history of the period. Between 1877-78 and 1881-82 the receipts from this source rose from Rs. 68,68,000 to Rs. 93,74,000, or by close upon 25 lakhs of rupees; and the whole of this, except 4 lakhs, represented clear gain to the Local Government. Simultaneously the corresponding charges were reduced by improved administration from Rs. 3,06,000 to Rs. 2,73,000. This remarkable increase was due partly to the outstill system, the general adoption of which dates from the first year of Sir Ashley Eden's government and also to the bumper harvests, the activity of trade, and the general prosperity of the country which marked the three years 1879-80, 1880-81, and 1881-82.

50. A serious check in the excise revenue was anticipated by Sir Ashley Eden, and his anticipations were fulfilled to the letter. The flood tide of commercial and agricultural prosperity reached high-water mark in 1883, and the ebb was swift and extreme. The rainfall in that year was deficient and unevenly distributed; and though no actual distress occurred at that time, the advance in the price of food and the recession in the wages of labour in the western districts injuriously affected the settlements of the outstills, which are highly sensitive to seasonal influences. The revenue from country spirits in 1884-85 fell short of that of the previous year by Rs. 1,13,000 (the decrease being almost entirely in the Patna Division), and this would have been more than doubled but for a large apparent increase of Rs. 1,28,000 in Calcutta, which represented advance payments for the triennial period 1884-87. In 1884 and 1885 the rainfall was again unfavourable in quantity and distribution, and the failure the crops was so serious in parts of the Burdwan, Presidency, and Rajshahi Divisions as to exhaust the reserves of the villagers and necessitate the opening of relief works by Government. In 1883, a Commission was appointed under the presidency of Mr. Edgar, C.S.I., to enquire into the working of the outstill system and its chief recommendations were approved by Government and carried into effect. The Sadar distillery system was re-introduced into all considerable towns where country liquor is the principal alcoholic drink of the people. These include Patna, Gaya, Arrah, Chapra, Bettiah, Muzaffarpur, Darbhanga, Monghyr, Jamalpore, Bhagalpur, Murshidabad, Berhampore, Burdwan and Dacca. The hours of working and sale were contracted. The sale of liquor to children was rigidly prohibited. District officers were instructed to allow District and Municipal Boards a voice in the selection of sites and other matters of local interest; and a large addition was made to the supervising and detective staff including ten Special Deputy Collectors, who were selected for their knowledge of and aptitude for excise work, and who were employed on that work alone. The increase of expenditure incurred in giving effect to these proposals was considerable.

51. The head of *Provincial Rates*, which is wholly Provincial, represents principally the proceeds of the Public Works Cess, but it includes also the rates for the general management of Wards' and Attached estates, and from October 1886 the recoveries from District Funds of the proportional cost of collecting Road Cess. The contract estimate of receipts was taken in 1881-82 at Rs. 35,40,000, and the actuals in each year were Rs. 36,07,000, Rs. 38,15,000, Rs. 37,65,000, Rs. 38,71,000, and Rs. 39,95,000. The profit of the Local Government was

therefore Rs. 67,000 in 1882-83, Rs. 2,75,000 in 1883-84, Rs. 2,25,000 in 1884-85, Rs. 3,31,000 in 1885-86, and Rs. 4,55,000 in 1886-87. This increase was due to revaluations which were in progress in almost every district during the period of the contract.

52. The head of *Assessed Taxes*, which was wholly Imperial under the former contract, and was equally divided between Imperial and Provincial in the contract of 1882, represents the receipts of the abolished License-tax. The Income-tax was at first wholly Imperial; and the figures shown under this head for 1886-87 merely represent the grants made by the Supreme Government—of amounts equal to those credited to Provincial in 1885-86—to avoid the disturbance of the contracts. The depression of trade, which marked the greater part of the period 1882—87, and which was intensified for Bengal by special causes, such as the through opening of the Rajputana-Malwa State Railway in the latter part of 1881, and the consequent diversion of a part of the trade of Northern India to Bombay, injuriously affected the receipts from this source. The contract of 1882 was framed on the basis of a revenue of Rs. 8,25,000 (Provincial share) from this source, whereas the actuals were Rs. 7,60,000, Rs. 7,59,000, Rs. 7,48,000, Rs. 7,67,000, and Rs. 7,67,000, respectively. The aggregate loss to the Provincial revenues exceeded therefore 3¼ lakhs of rupees during the currency of the contract, notwithstanding that special efforts were made to ensure the accuracy of the assessments, and to prevent the escape of persons legally liable.

53. The Public Works Cess and the License-tax represent the taxation imposed in Bengal (the former being peculiar to the province) in connection with the scheme of "famine finance," with which the name of Sir John Strachey is associated. That scheme proposed to improve the financial position of the Empire to the extent of two crores of rupees a year, of which 50 lakhs were to be regarded as a normal working surplus, while 150 lakhs were to be devoted to famine insurance, being expended either on actual relief, on reduction of debt, or on the construction of remunerative works calculated to prevent or mitigate the severity of famine. Part of this sum it was proposed to provide by new taxation (*i.e.* by the License tax), and part by throwing additional charges on the Provincial Governments; but as far as Bengal is concerned, the whole contribution paid towards the so-called Famine Fund was raised by additional taxation; for the charges thrown on Provincial by the Contract of 1877, which consisted mainly of the interest on provincialized railways and canals, were met by the imposition of the Public Works Cess, which, as already stated, is peculiar to Bengal. The total net sum contributed by Bengal in each year since 1878-79 under those two heads was as follows:—

Net contribution (receipts, less cost of collection).	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Assessed taxes ...	17,21,000	20,88,000	12,18,000	15,43,000	14,26,000	14,22,000	14,02,000	14,46,000	*14,46,000
Provincial rates ...	35,93,000	35,67,000	34,68,000	35,03,000	35,60,000	37,68,000	37,18,000	38,04,000	38,59,000
Total ...	53,14,000	56,55,000	46,86,000	50,46,000	49,86,000	51,90,000	51,20,000	42,50,000	53,05,000

* The substitution of the Income-tax for the License-tax makes it impossible to determine the correct contribution to be paid in 1886-87. But it may be assumed that the License-tax, if continued, would have yielded the same amount as in 1885-86.

54. In 1880-81 the minimum assessable limit was raised to Rs. 500, with the result of exempting about 66,567 assessees of the poorest classes, and giving up about 5½ lakhs of net revenue. These figures show that since 1878-79, the first year in which the new taxes were in full operation, the people of Bengal paid rather more than half a million sterling per annum as an insurance against famine. During this period the only expenditure in the province on actual relief of famine or the construction of protective works was as follows:—

	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Famine Relief	......	......	......	......	62,940	12,760	14,841	1,23,840	Nil.	2,14,381
Protective works, Railways ...	......	......	......	......	Nil.	Nil.	Nil.	Nil.	Nil.	......
Protective works, Irrigation...	......	......	......	......	Nil.	3,00,000	4,00,000	Nil.	Nil.	7,00,000
Total ...	......	......	......	......	62,940	3,12,760	4,14,841	1,23,840	Nil.	9,14,381

55. Under the heads of Forests and Registration, the following figures compare the net revenue in each year with the contract estimate:—

FORESTS.—(*Imperial and Provincial.*)

	Contract estimate.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts ...	6,28,000	6,94,000	6,94,000	5,72,000	5,97,000	6,54,000
Expenditure ...	3,96,000	3,82,000	3,88,000	4,12,000	3,70,000	4,23,000
Net revenue ...	2,32,000	3,12,000	3,06,000	1,60,000	2,27,000	2,31,000
Provincial share .	1,16,000	1,56,000	1,53,000	80,000	1,13,000	1,16,000

REGISTRATION.—(*Imperial and Provincial.*)

	Contract estimate.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Receipts ...	9,92,000	10,40,000	9,82,000	10,82,000	10,94,000	10,38,000
Expenditure ..	6,09,000	6,28,000	5,58,000	5,94,000	6,01,000	5,62,000
Net revenue ...	3,83,000	4,12,000	4,24,000	4,88,000	4,93,000	4,76,000
Provincial share ...	1,91,000	2,06,000	2,12,000	2,44,000	2,47,000	2,38,000

56. The *Forest* Department in Bengal is of comparatively little importance from a revenue point of view; and during 1882-87 the depression of trade caused a slackness in the demand for timber, especially for railway sleepers. The operations of the five years resulted in a small aggregate profit of Rs. 38,000. From 1883-84 revenue record-room receipts and charges were transferred from Registration to Land Revenue. These averaged about Rs. 85,000 and Rs. 70,000 a year respectively, so that the net revenue under Registration was really about Rs. 15,000 a year more than appears from the above statement. Allowing for this, it will be seen that the net revenue from this source increased in five years from Rs. 3,83,000 to Rs 4,91,000, or by over 28 per cent., while the profit of the Provincial Government amounted to Rs. 2,22,000 during the whole period of the contract. These satisfactory results were due to the steady introduction of rural in place of official agency, and to the increase of registrations consequent on the passing of the Bengal Tenancy Act.

57. Under the heads of *Law and Justice* (proper) and *Jails* the contract worked very unfavourably for the Local Government. On the receipt side the contract estimate was taken at 9 lakhs and 7 lakhs, respectively, the former including an item of 8 lakhs under the subhead of general fines, fees, and forfeitures, while the latter was almost wholly composed of the sale proceeds of jail manufactures. Under the latter head the estimate was realised, except in 1883-84, when the orders of Lord Ripon's Government restricting jail manufactures reduced the receipts from that source to Rs. 6,38,000. The total receipts from jails in each year were Rs. 8,47,000, Rs. 6,46,000, Rs. 7,29,000, Rs. 7,87,000, and Rs. 7,45,000, against the contract estimate of 7 lakhs. The receipts from fees and fines, however, never came up to the estimate, and the total receipts under Law and Justice (proper) were Rs. 8,23,000, Rs. 7,64,000, Rs. 7,55,000, Rs. 7,41,000, and Rs. 7,56,000, against the contract estimate of 9 lakhs. The net loss on the whole contract was about 4 lakhs of rupees. The expenditure on these two branches of the administration rose from a contract estimate (1881-82) of Rs. 88,33,000 to Rs. 96,19,000 in the last year, and the deficit which had to be made up from other sources was Rs. 4,43,000, Rs. 4,85,000, Rs. 5,76,000, Rs. 9,06,000, and Rs. 7,86,000 in each year since the contract was framed. Valuable reforms were carried out in the

Jail Department, including the reorganisation and complete equipment of the personnel of the superior staff, the development of the Central Jails at Dacca and Midnapore, the establishment of a district jail at Khulna, the introduction of warder guards in place of police, the establishment of a new Juvenile Reformatory at Hazaribagh, and the large development of that at Alipore. These measures cost nearly 1½ lakhs per annum. The rise in the price of food increased the expense of dieting prisoners by an equal sum. though the jail population steadily diminished in numbers. During the five years, the pay of the Subordinate Judicial Service was improved at a cost of about 1½ lakhs a year. Seven Subordinate Judges and 12 munsifs were added to the permanent staff, while numerous temporary officers were appointed. Three additional Judges were temporarily appointed to clear off arrears in the High Court. For the rest, the increase in litigation caused a steady continuous increase in the charges for ministerial establishments, for the service of processes, and for the copying of judicial documents.

58. Under the head of *Police* the contract grant was fixed at Rs. 41,32,000, and the actual expenditure in 1881-82 was Rs. 40,87,000. From the beginning of 1882-83, however, the cost of police in mufassal municipalities was assumed by Government, and a charge of about 4½ lakhs per annum, for which the terms of the contract made no provision, was thus added to the Provincial burdens. There was a set off against this of about one lakh under Medical, and half a lakh under Education, on account of various charges which were simultaneously transferred to Municipal Boards; and the net cost of this reform was about 3 lakhs a year since the beginning of the contract. This was increased by Rs. 61,000 a year from the beginning of 1884-85, when by Act IV (B.C.) of 1884 a similar measure of relief was extended to the Howrah and Suburban Municipalites; which since then paid only Rs. 49,000 a year for police, instead of Rs. 1,10,000 a year as formerly.

59. Under *Marine* the net receipts and charges in each year since 1882-83 were as follows:—

	Contract estimate.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Gross receipts* ...	11,09,000	10,17,000	9,61,000	8,37,000	9,16,000	9,62,000
Charges ...	10,97,000	9,51,000	8,69,000	8,47,000	8,29,000	8,53,000
Net receipts ...	12,000	66,000	92,000	......	87,000	1,09,000
Net charges ...	......	......	......	10,000	......	......

* Includes in each year a special allotment of Rs. 65,000 for the cost of the *Undaunted*, credited under Land Revenue.

The falling off in receipts was wholly due to the stagnation of trade. In 1881-82, the last year of Sir Ashley Eden's administration, the number of vessels which entered the Port of Calcutta was 1,074, with a total tonnage of 1,808,005, while the number of clearances was 1,058, with a total tonnage of 1,774,084. In both cases the number of vessels and the aggregate tonnage reached the highest figure ever recorded at Calcutta. By 1884-85 the shipping had fallen to 903 entries with a tonnage of 1,729,874, and 923 clearances with a tonnage of 1,745,271, representing the smallest aggregate trade that has visited Calcutta in any year since the opening of the Suez Canal.

Except in respect of pilotage the Bengal Marine Department is of little importance. The only matters of note during the five years 1882-87 were the grant of a subsidy of Rs. 35,000 a year to Messrs. Macneill and Company since 1883-84 for a rapid steamer service between Dhubri and Dibrughar; and a grant of Rs. 10,000 a year to the same firm, for a similar service to Sylhet. In both cases the subsidies were supplementary of similar grants made by the Chief Commissioner of Assam.

60. The expenditure on *Education* was taken in the contract estimates at Rs. 26,77,000. The actual expenditure in each year was Rs. 30,16,000 Rs. 31,55,000, Rs. 34,00,000, Rs. 32,95,000, and Rs. 33,54,000. Up to 1884-85 it was possible to provide annually increasing allotments for this branch of service, but since then the demands of other Departments swallowed up

the scanty increments of the Provincial revenues, and educational expenditure remained stationary. Efforts were, however, made to give effect to the recommendations of the Education Commission. The inspecting staff was strengthened by the appointment of two new Inspectors of Schools, four Joint and Assistant Inspectors, three Deputy Inspectors, and 16 Sub-Inspectors, while the pay of the latter class of officers was raised to Rs. 50 wherever it was less than that sum. These measures were carried out at a cost of Rs. 60,000 a year. The primary grant was gradually raised from 5 lakhs, at which it stood at the close of Sir Ashley Eden's term of office, to 7½ lakhs; while the annual provision for grants-in-aid of schools managed by independent agency was simultaneously raised by upwards of 1½ lakhs. The transfer of police charges to Government enabled Municipal Boards to increase their expenditure on education by upwards of Rs. 60,000 a year. The limited resources at the disposal of Government made it impossible to do much in the way of developing technical education, but it was not altogether neglected. The Engineering College at Sibpur was enlarged and developed, and the School of Art in Calcutta was sedulously encouraged, and made rapid strides in the number of its students and the quality of the instruction imparted.

61. The operation of the contract was more keenly felt in the *Public Works Department* than in any other branch of the public service. The Government of India originally proposed to settle the terms of the contract on the basis of a normal expenditure of 75 lakhs a year for public works of all kinds, including the maintenance, repair, and working expenses of all railways and canals, the construction of new works, and the construction, maintenance and repair of civil roads and buildings, but exclusive of interest charges. Sir Ashley Eden strenuously urged that the grant should not be less than 99 lakhs, the average of the preceding three years, but eventually the offer of the Government of India was accepted with the modification that a lump sum of 15 lakhs, equivalent to 3 lakhs a year, was credited to the Local Government.

62. The following table shows the actual expenditure incurred in each year since 1881-82:—

	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
State Railways (Capital).	11,32,000	18,49,000	8,27,000	1,32,000	51,000	58,000
Subsidised Railways	......	11,000	40,000	58,000	26,000	1,000
Irrigation (Capital)	22,09,000	17,18,000	5,03,000	2,02,000	3,77,000	2,18,000
Civil works ...	66,87,000	66,82,000	45,75,000	27,15,000	27,27,000	38,85,000
Total ...	1,10,28,000	1,02,60,000	59,45,000	31,07,000	31,81,000	41,62,000

63. The dwindling of the grants under every head was most striking. During the first two years of the contract funds were provided, though with difficulty, for the Dinajpur branch of the Northern Bengal State Railway, and for the completion of the Diamond-Harbour branch of the Calcutta and South-Eastern Railway, the whole cost of which was found from Provincial revenues. With the completion of these works, the construction of railways from Provincial funds was entirely suspended, the small sums shown in 1884-85 and subsequent years being merely on account of the Kaunia-Dhurlla State Railway which is a Provincial work. In respect of irrigation works, the course of events was almost precisely similar. No new work of any kind was undertaken during the term of the 1882—87 contract, and it was with the utmost difficulty that funds were provided for the improvement of the Calcutta canals, and the prosecution of the Orissa Coast Canal, both of which works had been undertaken during Sir Ashley Eden's term of office. The Orissa Coast Canal, designed to place Orissa in inland communication with Bengal, and likely to be of the highest value in the event of famine, was begun in 1881. The final opening of the canal was delayed in consequence of unexpected difficulties in locking the Burrabulong river, and of the damage done by the cyclone of September 1885, which also caused the estimates to be exceeded. This work was admittedly *protective* in its nature, and its

importance chiefly consists in the security it is calculated to afford against famine. Yet the only assistance which the Bengal Government received in its construction from the Famine grants consisted of two grants of three and four lakhs respectively, given on the condition that the Imperial Government should share proportionately in the receipts. The whole of the remainder of the cost, which was expected to amount to nearly 40 lakhs, was provided from Provincial Funds, and nearly 20 lakhs of this were found during the currency of the contract.

64. During the first two years of his administration, Sir Rivers Thompson endeavoured to provide for the completion of works in progress and to meet the demand for new works to the full extent of the balance at credit of the Province. The offices of the Bengal Government in Calcutta were completed, court-houses were completed or constructed at Jessore, Mymensingh, Faridpur, Pabna, Gaya, Ranchi, and Darbhanga; jails at Dacca, Midnapore, Buxar, Gaya, Ranchi, Darbhanga, Bogra, Mymensingh and Purulia; the Secretariat offices at Darjeeling since converted into the Deputy Commissioner's Court were begun; numerous sub-divisional court-houses and munsifis were constructed, and a variety of miscellaneons public improvements carried out. By the end of 1883-84, however, the Provincial balances had been reduced to Rs. 6,87,000, and at this juncture the Secretary of State issued orders that they should not ordinarily be allowed to fall below 20 lakhs. The Public Works grant for 1884-85 including Civil Works in charge of Civil Department was therefore restricted to 30 lakhs; and that for 1885-86 was, under pressure of the complications on the North-West frontier, cut down to Rs. 27,85,000.

65. Sir Rivers Thompson's power of making contributions from the Provincial revenues in aid of public objects was greatly circumscribed by financial pressure. The expenditure in no one year exceeded Rs. 3,20,000, and averaged about 2½ lakhs a year; and when it is remembered that nearly 1½ lakhs a year represent compulsory payments of an official nature, the available balance is seen to be exceedingly small. Nevertheless, it was found possible to give grants of Rs. 50,000 each to the municipalities of Burdwan, Bhagalpur, and the Suburbs of Calcutta in aid of local schemes of water-supply; of Rs. 46,000 to the District Road Committee of the 24-Parganas; of Rs. 55,000 to that of Champaran; and of Rs. 20,000 to that of Nadia, for feeder roads; of Rs. 30,000 to the Darjeeling Municipality for the construction of a market, a wire tramway for the removal of rubbish, and other local works; of Rs. 10,000 for the improvement of the town of Chittagong; of Rs. 15,000 for drainage works in Serampore; and of numerous smaller amounts to District Road Committees and Municipal Boards for miscellaneous objects. The Lieutenant-Governor also gave large grants from the balance of the Wahabee Fund for the improvement of the town and district of Patna, including a sum of Rs. 30,000 for a much needed road from the city chowk to the Railway Ferry Ghat, and a grant-in-aid of Rs. 10,000 towards the Anglo-Arabic School established for the special encouragement of Muhammadan education.

66. The following table shows the net financial result of the working of all Provincial *Railways* and *Canals*, whether technically classed as Productive Public Works or not, during each year from 1881-82 to 1886-87.

RAILWAYS.

	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Gross receipts ...	32,70,000	37,88,000	41,24,000	43,10,000*	45,03,000	53,02,000
Working expenses	19,03,000	20,40,000	25,00,000	30,72,000	30,39,000	31,43,000
Net earnings ...	13,67,000	17,48,000	16,24,000	12,38,000	14,64,000	21,59,000
Interest ...	12,86,000	14,14,000	15,94,000	17,15,000	19,07,000	20,68,000
Net profit ...	81,000	3,34,000	30,000	......	......	91,000
Net loss ...	......	......	......	4,77,000	4,43,000	......

* From the 1st July 1884, the Calcutta and South-Eastern Railway was resumed by the Imperial Government, and its receipts and charges disappear from the Provincial account. A lump sum of Rs. 22,500 for 1884-85, and of Rs. 30,000 for each succeeding year (credited on this account under Land Revenue) is here added to gross earnings, and the interest charges are also diminished by the amount credited to Provincial on this account.

CANALS.

	1881-82.	1882-83.	1883-84.	1884-85.	1885-86.	1886-87.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Gross receipts ...	19,55,000	20,72,000	19,62,000	20,85,000	26,17,000	22,26,000
Working expenses	14,51,000	17,97,000	17,44,000	17,93,000	18,39,000	18,05,000
Net earnings ...	5,04,000	2,75,000	2,18,000	2,92,000	7,78,000	4,21,000
Interest ...	20,75,000	21,16,000	21,61,000	22,13,000	22,49,000	22,73,000
Net loss ...	15,71,000	18,41,000	19,43,000	19,21,000	14,71,000	18,52,000

By the end of 1881-82, when the contract of 1877 came to an end, the total capital expenditure on State Railways in Bengal (exclusive of the East Indian Railway and private lines) amounted to 427 lakhs of rupees, and the mileage of lines open for traffic was 467. Interest, however, was payable only on 336 lakhs, the remainder consisting of Provincial contributions and the capital of the Calcutta and South-Eastern Railway. The principal lines which were then under the control of the Government of Bengal were the Northern Bengal State Railway with an open mileage of 230, the Tirhoot State Railway with 85 miles, the Patna-Gaya with 57 miles, the Calcutta and South-Eastern Railway with 33, and the Kaunia-Dharla (a Provincial railway) with 40. During the five years 1882-87, 19 miles were added to the Northern-Bengal State Railway by the opening of the branch to Dinajpur; the Tirhoot system was practically completed by the construction of branches to Bettiah, Jhinjarpur, and Hajipur, aggregating about 160 miles; a branch of the Calcutta and South-Eastern State Railway was constructed to Diamond Harbour; and an entirely new line, 85 miles in length, was constructed connecting Narainganj, Dacca, and Mymensingh. A swift daily steamer service was started between Narainganj and Goalundo on the Eastern Bengal State Railway, and the chief districts of Eastern Bengal were thus placed in close communication with Calcutta. These works cost 147½ lakhs of rupees, of which upwards of 124 lakhs bore interest at 4 per cent., the remainder having been provided from the Provincial revenues. Seventy-eight lakhs and a half were spent on the Assam-Bihar State Railway, designed to link the Tirhut and Northern Bengal systems, and including the important bridge across the Gunduck to connect the Tirhut line with the Bengal and North-Western Railway. The early part of the contract of 1882-87 witnessed unusual activity in the construction of railways by private agency. Short branch lines were constructed by private bodies and firms connecting Tarkessur with Seoraphuli on the East Indian Railway and Baidyanath with Deoghur and Rohini. The Central Bengal Railway Company constructed lines aggregating 125 miles in length, connecting Ranaghat on the Eastern Bengal State Railway with Bongong and Khulna; and the Bengal and North-Western Company, receiving a guarantee from the Imperial Government, constructed a valuable and most successful railway, 460 miles in length, from the North-Western Provinces to Sonepore on the Ganges opposite Patna.

67. The table given in the last-preceding paragraph shows that while the gross receipts on the State Railways rose from Rs. 32,70,000 to Rs. 53,02,000 (or, excluding the Calcutta and South Eastern Railway, from Rs. 31,10,000 to Rs. 52,72,000), this improvement was accompanied by so heavy an increase of working expenses and interest that the net loss to the Provincial Government during the five years covered by the contract was Rs. 4,65,000. A considerable part of this was due to the locking up of capital on lines not yet open for traffic, or still in their infancy. For instance, close upon 90 lakhs of rupees was spent upon the Assam-Bihar line. The Bengal Government had to pay 4 per cent. per annum on this capital, which of course represented so much dead weight to be carried by the open lines. Similarly, 64 lakhs were spent on the Dacca State Railway, which, though certain to yield a handsome return ultimately, could do little more during the contract than pay its working expenses. For similar reasons part of the capital expended on the Tirhoot State Railway was only partially

productive. But much of the retrogression was undoubtedly due to the stagnation of trade in the years succeeding 1883-84, combined with the failure of the food-grain harvests in parts of Bihar, and of the jute crop in Bengal. The only Provincial railways of importance which were open sufficiently long for a fair comparison are the Northern Bengal, the Patna-Gaya, and the Tirhoot State Railways. The following table shows the capital outlay on each of these lines (both Imperial and Provincial), the gross receipts, working expenses, net earnings, and percentage of earnings to capital, in each year from 1881-82 to 1885-86:—

NORTHERN BENGAL STATE RAILWAY.

	Capital to end of year.	Gross receipts.	Working expenses.	Net earnings.	Percentage of earnings on capital.
	Rs.	Rs.	Rs.	Rs.	
1881-82 ...	2,09,54,000	19,27,000	9,60,000	9,67,000	4·6
1882-83 ...	2,16,52,000	22,80,000	10,72,000	12,08,000	5 5
1883-84 ...	2,25,43,000	21,33,000	12,35,000	8,98,000	3·9
1884-85 ...	2,16,73,000	21,67,000	15,20,000	6,47,000	2·9
1885-86 ...	2,27,72,000	23,39,000	14,70,000	8,69,000	3·8

TIRHUT STATE RAILWAY.

	Capital to end of year.	Gross receipts.	Working expenses.	Net earnings.	Percentage of earnings on capital.
	Rs.	Rs.	Rs.	Rs.	
1881-82 ...	1,15,17,000	5,79,000	3,49,000	2,30,000	1·9
1882-83 ...	1,18,14,000	7,10,000	4,41,000	2,69,000	2·2
1883-84 ...	1,40,56,000	9,82,000	6,79,000	3,03,000	2·1
1884-85 ...	1,50,73,000	12,50,000	9,68,000	2,82,000	1·8
1885-86 ...	1,52,71,000	12,80,000	9,12,000	3,68,000	2·4

PATNA-GAYA STATE RAILWAY.

	Capital to end of year.	Gross receipts.	Working expenses.	Net earnings.	Percentage of earnings on capital.
	Rs.	Rs.	Rs.	Rs.	
1881-82 ...	38,56,000	5,36,000	3,41,000	1,95,000	5
1882-83 ...	38,58,000	3,98,000	2,71,000	1,27,000	3·2
1883-84 ...	37,63,000	4,70,000	2,34,000	2,36,000	6·3
1884-85 ...	39,40,000	5,18,000	2,98,000	2,20,000	5·6
1885-86 ...	40,38,000	5,17,000	2,72,000	2,45,000	6

68. The net results of the working of the *canals* under the Bengal Government fluctuated less, chiefly for the reason that deficient rainfall, which tends to contract the traffic on railways, stimulates the demand for water for irrigation purposes. The works managed by the Bengal Government included the Orissa and Midnapore Canals, the Hidgellee Tidal Canal, and the Sone system, which are classed as Productive Public Works; and the Orissa Coast Canal, the Calcutta and Eastern Canals, the Nuddea works, and the Saran and Damoodar Canals, which are not classed as productive.

69. The general financial result of the contract of 1882 may be summarised thus—the revenue, which was estimated at Rs. 3,93,21,000, averaged

Rs. 4,15,52,000, giving an increase of Rs. 22,31,000; the expenditure, which was estimated at Rs. 4,48,53,000, averaged only Rs. 4,26,61,000, being a reduction of Rs. 21,92,000; and the deficit, which averaged Rs. 11,09,000, was met by drawing upon the accumulated balances of the province to the extent of Rs. 55,44,000. The chief branches of revenue which contributed to the increase in receipts were Stamps, Provincial Rates, and Registration; while the reduction in expenditure was almost wholly confined to the Public Works Department, in which the grants for civil works, for capital expenditure on railways and canals, and for irrigation (net charges) were cut down so as not merely to balance the account, but to provide for a large increase of expenditure on Revenue establishments, Judicial Courts, Jails, Police, Education, Superannuations, and the net charges of Provincial State Railways. The contract closed with a credit balance in the Imperial Treasury of only Rs. 19,99,000, which was short by Rs. 1,000 only of the minimum working balance of twenty lakhs which had been prescribed by the Secretary of State.

70. From these figures, and from what has gone before, it may readily be perceived how different was the task imposed on Sir Rivers Thompson from that which fell to the lot of his predecessor. Sir Ashley Eden enjoyed the advantage of a contract, which secured to the province under his control the entire benefit accruing from improved administration, and which in the event yielded financial results surpassing all anticipation. His term of office was favoured with entire immunity from famine and other forms of natural disaster; the commercial torpor then paralysing the industries of the civilized world had not yet spread to India; and a succession of splendid harvests raised the cultivating classes almost into temporary affluence. The ample resources thus unexpectedly brought within his reach he liberally employed in improving many branches of the machinery of Government and in supplying the province with railways, canals, public buildings and other permanent improvements, of which the want had long been admitted. During the five years 1882-87, the financial history of Bengal was altogether different. The contract of 1877 was succeeded by a settlement, which left little scope for the development of the Provincial revenues, and which speedily necessitated a serious contraction in the scale of Provincial expenditure. Trade at last succumbed to the influences which had produced universal stagnation in the commercial world of Europe and America, and its languishing vitality was promptly reflected in many branches of the public exchequer. A scanty and uneven rainfall in three years in succession swallowed up the profits of five years of plenty, and although actual distress was nowhere so acute as to call for the intervention of the State, except on a small and partial scale, in many districts the resources of the poorer classes were wholly exhausted, and no margin whatever left for expenditure on luxuries. It was often difficult to provide adequately for the ordinary requirements of the public service, and it was necessary rather to seek for opportunities of effecting economies than of introducing administrative reforms. The chief measures of Sir Rivers Thompson's Government of Bengal were of the class to which large financial resources are not indispensable. The Bengal Tenancy Act, the prosecution of the Kidderpore Docks for which the capital was found by the Government of India, the grant of an elective constitution to Municipal Boards, the inauguration of self-government in the interior, the introduction of competitive examinations for appointment to the Subordinate Civil Service, the appointment of the Commission for the revision of ministerial salaries, and the re-arrangement of work and authority in district and divisional offices—all these are measures whose importance is mainly economic and political and which leave little trace on the financial history of the time. Nevertheless funds were provided for certain reforms and improvements which the progress of the province had rendered more than ordinarily pressing. The establishment of an Agricultural Department supplied a want to which in other provinces a much higher degree of priority had been attached, and which the revision of the law of landlord and tenant in Bengal had forced into immediate prominence. The increase to the salaries of the Subordinate Executive and Judicial Services improved the prospects of a deserving body of public servants. The appointment of additional judicial officers supplied the means of a swifter, and therefore of a better, administration of justice. The progressive additions to

the grant for primary education kept pace with the downward filtration among the masses of the desire for mental improvement. The Calcutta Exhibition of 1883 84 was instrumental in spreading a wider knowledge of the raw products of India among the manufacturers of Europe, and in acquainting the native population of this country with the capabilities of European machinery. In taking over and carrying on the Iron-works at Barrakur, the Lieutenant-Governor kept alive the embers of an industry which cannot fail to have a great future before it, when the mineral wealth of Chota Nagpur and Central India shall have been adequately exploited. The Orissa Coast Canal was a work of supreme importance for the security of the province of Orissa, and its speedy completion forms the only safeguard against a repetition of the calamity of 1865-66.

Contract of 1887—92.

71. The following comparative statements show the results under receipts and expenditure according to the contract assignment with the Governmet of India for the five years 1887-92 compared with the actuals of the subsequent years:—

REVENUE.

RECEIPTS.	Contract assignment.	Actuals, 1887-88.	Actuals, 1888-89.	Actuals, 1889-90.	Actuals, 1890-91.	Actuals, 1891-92.
		R.	Rs.	Rs.	Rs.	Rs.
Opening balance		19,98,924	33,08,931	26 51,072	36,76,547	24,72,774
Principal heads of Revenue—						
I.—Land Revenue. Proper	98,53,000	97,88,195	95,87,775	1,00,16,495	99,92,530	} 1,14,02,385
I.—Land Revenue. Adjustment ...	—6,89,000	(—)2,40,185	(—)5,01,838	(+)1,61,032	(—)22,97 338	
III.—Salt	1,00,000	78 207	88,195	1,23,718	1,28,226	1,10,854
IV.—Stamps	1,09,87,000	1,03 62,028	1,03,79,239	1,06,78,523	1,06,85,194	1,13 25,346
V.—Excise	24,82,000	27,16,436	27,22,909	26,18,829	26,16,210	27,83,491
VI.—Provincial Rates	39,20,000	42,36,538	41,56,323	43,08,024	43,19,933	45,24,517
VII.—Customs	57,000	59,584	46 891	55,094	57,973	57,104
VIII.—Assessed Taxes	17,84,000	18,60,971	19,55,698	20,83,503	21,19,441	21,53,964
IX.—Forests	3,50,000	3,28,897	3,38,454	3,84,359	3,63,696	3,94,776
X.—Registration	5,38,000	5,08 912	5,46,772	6,00,083	6,19,539	6 67,156
Total ...	2,84,82,000	2,97,08,583	2,93,20,418	3,10,27,610	2,86,05,404	3,34,19,598
XII.—Interest	73,000	67,094	97,383	1,04,267	92,509	1,18,163
Post Office, Telegraph and Mint—						
XIV.—Telegraphs	......	1,163	926	868	129	......
Receipts by Civil Department—						
XVI.—Law and Justice— Fees, fines, and forfeitures of Judicial Courts ...	7,60,000	7,74,255	7,89,538	8,04,582	8,96,317	8,81,016
Jails	8,46,000	7,10,279	7,75,021	8,59,502	7,63,298	9,27,642
XVII.—Police	7,05,000	3,13,349	3,38,197	4,26,742	4,51,678	4,48,634
XVIII.—Marine	8,08,000	9,10,096	9,11,734	8,54,207	9,18,736	9,65,408
XIX.—Education	5,25,000	6,94 613	6,11,884	5,69,861	5,75,686	5,95,123
XX.—Medical...	1,46,000	1,38,554	1,36,165	1,46,352	1,42,812	1,46,848
XXI.—Scientific and other Minor Departments	1,41,000	1,56,308	1,65,154	1,55,780	1,77,394	1,96,040
Total ...	39,40,000	36,97,494	37,27,693	38,17,026	39,28,936	41,60,711
Miscellaneous—						
XXII.—Receipts in aid of superannuation	41,000	45,504	48,840	45,601	1,26,597	1,26,979
XXIII.—Stationery and Printing ...	1,23,000	1,88,397	1,75,074	1,50,506	2,94,147	1,57,368
XXV.—Miscellaneous	7,45,000	6,94,837	8,34,785	8,02,574	7,70,249	8,36,024
Total ...	9,09,000	9,28,738	10,58,708	9,98,681	11,90,903	11,20,371
Railways—						
XXXVI.—State Railways (gross earnings)	1,00,19,000	1,13,73,485	1,17,33,868	1,25,04,406	1,46,45,003	1,60,30,547
Irrigation—						
XXIX.—Major works (direct receipts)	13,30,000	11,63,220	13,94,369	15,21,274	13,46,728	16,02,710
XXX.—Minor works and navigation—						
By Public Works Department	} 9,44,000	{ 8,62,662	8,67,844	7,88,642	8,41,062	8,17,934
By Civil Department ...		1,02,008	1,02,154	1,02,130	93,637	1,17,692
Total ...	22,74,000	20,67,890	23,64,367	24,12,046	22,84,427	25,38,336
Buildings and Roads—						
XXII.—Civil works—						
By Public Works Department	} 7,50,000	{ 1,75,422	2,00,076	2,52,843	4,72,445	} 4,05,262
By Civil Department		2,27,379	2,74,564	3,16,758	2,64,451	
Total .	7,50,000	4,02,801	4,74,640	5,69,601	7,36,896	4,05,262
Total ..	4,64,47,000	4,81,47,256	4,87,78,003	5,14,34,505	5,14,84,207	5,78,01,983
GRAND TOTAL ...	. ....	5,01,46,180	5,20,86,994	5,40,85,577	5,51,60,754	6,02,74,757

EXPENDITURE.

Expenditure.	Contract assignment.	Actuals, 1887-88.	Actuals, 1888-89.	Actuals, 1889-90.	Actuals, 1890-91.	Actuals, 1891-92.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Direct demands on the revenues—						
1. Refunds and Drawbacks	1,55 000	1,56,096	1,40,156	1,50,185	1,48,135	1,54,203
2. Assignments and Compensations	1,68,000	1,88,565	1,39,300	1,55,060	1,63,447	1,56,129
Charges in respect of collection—						
3. Land Revenue	34,08,000	31,05,968	35,13,039	35,47,957	36,30,983	41,14,334
5. Salt	11,000	12,369	21,224	46,521	68,258	51,608
6. Stamps	3,75,000	3,64,216	3,70,334	3,84,679	3,63,961	3,38,834
7. Excise	96,000	1,06,629	1,08,602	1,41,480	1,62,972	1,66,416
8. Provincial Rates	......	3,47,213	3,17,410	3,37,184	4,05 650	4,34,386
9. Customs	4,97,000	5,30,638	5,24,020	5,39,442	5,42,113	5,18,724
10. Assessed Taxes	85,000	75,705	74,845	80,649	87,930	90,014
11. Forests	2,25,000	1,94,859	1,88,101	1,96,985	2,06,660	2,10,235
12. Registration	2,95,000	2,89,231	2,99,729	3,14,316	3,14,872	3,41,736
Total ...	53,15,000	56,71,487	56,96,800	58,96,458	60,94,967	65,86,519
13. Interest on ordinary debt ...	......	......	45,802	67,637	84,461	1,01,134
Post Office, Telegraph and Mint—						
15. Post Office	......	......	......	......	......	4,498
16. Telegraphs	1,000	915	884	868	(−)481	......
Salaries and expenses of Civil Department—						
18. General Administration	15,62,000	15,42,879	15,71,096	16,20,623	15,84,964	16,16,331
19. Law and Justice—						
Judicial Courts	80,11,000	79,40,386	81,01,737	81,54,840	82,40,807	84,82,775
Jails	17,28,000	15,31,090	17,95,705	18,99,078	20,40,307	20,22,010
20. Police	47,48,000	47,86,787	48,34,099	52,93,645	58,65,884	59,61,810
21. Marine	7,81,000	9,16,601	10,71,199	12,11,342	9,40,470	9,42,251
22. Education	32,46,000	24,22,221	24,58,200	24,94,936	25,24,854	25,51,576
24. Medical	14,59,000	14,43,691	14,87,730	15,29,158	15,65,936	15,66,727
25. Political	......	......	24,462	21,273	21,891	34,505
26. Scientific and other Minor Departments.	3,30,000	3,03,598	3,10,050	3,04,008	2,97,048	3,12,858
Total ...	2,18,65,000	2,08,87,253	2,16,54,358	2,25,28,383	2,30,82,071	2,34,90,843
Miscellaneous—						
29. Superannuation, &c.	12,54,000	12,79,572	13,70,007	14,36,145	15,13,417	15,99,525
30. Stationery and Printing	10,59,000	10,46,423	10,21,438	9,89,272	11,51,087	13,35,849
32. Miscellaneous	3,48,000	3,43,134	2,40,632	2,44,974	2,25,640	2,95,254
Total ...	26,61,000	26,69,129	26,32,077	26,70,391	28,90,144	32,30,628
Famine Relief and Insurance—						
33. Famine Relief	......	......	54,338	1,34,269	12,682	......
37. Construction of Railways ...	......	(—)1,849	(—)10,303	235	13,040	7,750
Railways (Revenue Account)—						
38. State Railways—						
Working expenses	59,61,000	59,34,865	59,49,007	60,84,635	71,30,816	1,04,88,032
Interest on debt	28,02,000	30,81,696	32,61,382	34,32,670	35,81,548	36,98,508
40. Subsidized Companies—						
Land, &c.	......	49	(—)366	1,072	5,129	1,358
41. Miscellaneous Railway expenditure.	......	68,290	1,42,602	82,510	79,914	76,164
Total ...	87,63,000	90,84,900	93,52,715	96,00,887	1,07,97,407	1,42,64,062
Irrigation—						
42. Major works—						
Working expenses	11,25,000	15,03,585	14,18,090	13,55,565	13,51,272	13,54,171
Interest on debt	22,94,000	23,13,446	23,39,849	23,04,042	23,81,997	24,03,107
43. Minor works and navigation—						
Minor works by Public Works Department.	11,48,000	15,18,533	14,75,746	14,19,180	15,02,988	15,59,796
Minor works by Civil Department.	2,000	1,916	1,911	2,017	11,508	14,553
Total ...	45,69,000	53,37,480	52,35,596	51,40,804	52,47,765	53,31,627
Buildings and Roads—						
45. Civil works—						
By Public Works Department }	31,14,000 {	27,61,075	39,04,303	31,24,008	35,06,058	} 40,25,425
By Civil Department ... ... }		1,65,736	1,19,658	61,640	65,416	
Total ...	31,14 000	29,26,811	40,23,961	31,85,648	35,71,474	40,25,425
Contributions ..	1,59,000	2,61,063	7,50,184	11,82,950	8,94,450	8,78,840
Total ...	4,64,47,000	4,68,37,189	4,94,35,922	5,04,09,030	5,26,87,980	5,79,21,326
Closing balance ..	......	33,08,991	26,51,072	36,76,547	24,72,774	23,53,431
Grand Total ...	......	5,01,46,180	5,20,86,994	5,40,85,577	5,51,60,754	6,02,74,757
Provincial surplus (+) or deficit (—)	......	(+)13,10,067	(—)6,57,919	(+)10,25,475	(—)12,03,773	(—)1,19,343

72. The contract of 1887 between the Government of India and the Government of Bengal was based on arrangements made by the Finance Committee. No material advance in the system of decentralisation was made, but by a redistribution of the shares of the Imperial and Provincial Governments in the three principal heads of Land Revenue, Stamps and Excise, and by certain reductions in expenditure which were considered feasible, a general standard of normal revenue and expenditure was obtained, which was adopted as the "Ruling account." The surplus of this account,

amounting to Rs. 6,89,000, was appropriated by the Government of India through the Land Revenue head, leaving the province with a Revenue and Expenditure exactly equal. Under this arrangement the Government of Bengal was admitted to a quarter share in the land revenue collections, except those from Government estates, whilst under Stamps and Excise its share was changed from one-half to three-fourths and one-fourth respectively. The proportion of charges under Stamps and Excise followed the proportion of receipts. The cost of surveys and settlements and the maintenance of agricultural works and embankments was made entirely Provincial. Refunds and drawbacks followed the proportions assigned for the revenues. The Patna-Gaya State Railway was made Imperial, and the Eastern Bengal State Railway System Provincial, with this reservation that any excess over 30 lakhs in the net revenue from the Eastern Bengal State Railway proper would be credited to Imperial revenues, and that any deficiency below 20 lakhs would be made good by Imperial to Provincial. The interest on funds provided for outlay on State Railways and Irrigation Major Works was borne by the Provincial revenues and calculated on the entire capital outlay, including loss by exchange, from the commencement of operations, but excluding the amount advanced from Provincial revenues during the term of the contract.

The only important change made since the contract was finally settled was the transfer of the management of the Tirhoot State Railway to the Bengal and North-Western Railway Company from 1st July 1890. This change did not, however, materially affect the resources of the Provincial Government, although its accounts were swollen by the inclusion of the receipts and working expenses of the Railway, and the payment of the Company's share of the net receipts from the entire undertaking.

73. The first year of the contract, 1887-88, was a period of comparative prosperity. The receipts under the principal heads of revenue were highly favourable. Railways showed a great advance above the contract estimate, and at the same time there was a large reduction of expenditure in the Civil Department. To a considerable extent this reduction was fictitious, as the savings under the head of Education were adjusted by corresponding grants made to District Boards. But these adjustments were not completed within the year, and while the accounts closed with a small increase of expenditure over the contract assignment of only Rs. 3,90,189, the increase in receipts was Rs. 17,00,256. The net surplus of the year was Rs. 13,10,067 and the closing cash balance Rs. 33,08,991.

74. The year 1888-89 opened accordingly under favourable conditions. But the harvest generally was a poor one, and the elasticity of the revenues which had been marked under several years of prosperity suffered a severe check. For the first time for many years the stamp revenue receded. But the income from railways continued to show a satisfactory increase. It was from this cause mainly that the total receipts of the year were about 6¼ lakhs of rupees more than they were in 1887-88. The expenditure side showed, however, an increase of nearly 26 lakhs. This was largely due to the increased grant for civil works of about 11 lakhs. This grant was made when it was known that the credit opening balance of the year was more than 33 lakhs, and financial prospects in other directions were generally good. The additional grant was urgently required and was very profitably expended. There was an unavoidable increase in expenditure under Railways, under Contributions to District Boards, and an augmented outlay under most heads of general administration. The net financial results of the year were, however, less unsatisfactory than was at one time anticipated. The accounts closed with an increase of expenditure over the contract assignment of Rs. 29,88,922, and an increase in the receipts of Rs. 23,31,003. The net deficit was Rs. 6,57,919, and the closing cash balance was reduced to Rs. 26,51,072.

75. The receipts of the year 1889-90 were generally satisfactory. The principal heads of revenue showed a large increase, of which, however, about 2¼ lakhs were due to special assignments from the Government of India to the Local Government for special works, principally the Orissa Coast and Hijili Tidal Canals which, under the rules in force, are shown under the head of Land Revenue, and a grant of Rs. 1,91,423 was made under the same head for a new pilot brig. A grant of two lakhs was also made to the Provincial Government with effect from that year on account of the cost of the Metropolitan

Police. Stamps, Provincial rates, Assessed taxes, Forests and Registration all showed an increase. The item of Land Revenue proper was augmented by the payment of large arrears of revenue due from the Burdwan Raj estate for the preceding year. The receipts from Railways increased by nearly eight lakhs of rupees. On the other hand, there was a falling off in Excise, and the prospects of the year, which would otherwise have been very favourable, were clouded by bad harvests and distress in Bihar and Orissa. The increase in expenditure under ordinary heads was not more than must be expected under a progressive administration. A larger outlay was necessary to ensure a larger revenue. The increase under Police was principally due to the conversion of the entire cost of the Calcutta and Suburban Police as a Provincial charge with effect from the 1st April 1889, and under Marine to the purchase of the steamer *Guide*. The outlay on Famine Relief was of a special nature. The expenditure on Civil Works was curtailed. The accounts closed with an increase of expenditure over the contract assignment of Rs. 39,62,030, and an increase in the receipts of Rs. 49,87,505. The net surplus of the year was Rs. 10,25,475, and the closing cash balance amounted to Rs. 36,76,547.

76. The financial position of the year 1890-91 was primarily affected by the payment of ten lakhs of rupees, which was transferred under the orders of the Government of India from Provincial to Imperial revenues. This payment was adjusted under the head of Land Revenue. The large increase under Railways was principally due to the inclusion of the gross receipts of the Bengal and North-Western Railway for the last nine months of the year. There was a corresponding increase on the expenditure side, and the net surplus was discounted by a credit for 10½ lakhs taken by the Government of India under the head of Land Revenue on account of the estimated net earnings of the Company for the nine months, from July 1890 to March 1891, which were not paid during the year. A credit for Rs. 3,17,000 was taken under Civil Works, being the estimated value of a portion of land in the Custom House premises made over to the East Indian Railway Company for the extension of their office building. The ordinary heads of revenue showed but little expansion, while the expenditure, on the contrary, showed a tendency to increase under almost all heads. There was a large increase under Land Revenue on account of Surveys and Settlement; under Law and Justice on account of the increase in Civil Courts; under Railways as already explained; and also under Irrigation and Civil Public Works. A special grant of four lakhs was made from Provincial Revenues to the Public Works Department to undertake urgent works, and especially to defray the cost of repairs and maintenance of the roads in the Darjeeling district, which had been much damaged by heavy rains, and to construct new feeder roads to the Railway in Chota Nagpur.

77. For the year 1891-92, the last year of the contract, the total revenue under all heads of account amounted to Rs. 5,78,01,983, which was Rs. 1,13,54,983 in excess of the figures in the contract assignment. But at the same time the expenditure had increased in a still larger proportion, and amounted to Rs. 5,79,21,326 or Rs. 1,14,74,326 in excess of the assignment.

78. The following table shows the receipts under the principal heads of revenue according to the contract assignment, and the receipts under the same heads for 1891-92:—

	Contract assignment. Rs.	Actuals, 1891-92. Rs.	Increase. Rs.
Land Revenue (proper) ...	98,53,000	1,00,21,000	1,68,000
Ditto adjustment ...	(—)6,89,000	+13,81,000	20,70,000
Salt	1,00,000	1,11,000	11,000
Stamps	1,00,87,000	1,13,25,000	12,38,000
Excise	24,82,000	27,83,000	3,01,000
Provincial rates (proper)...	39,20,000	41,60,000	2,40,000
Ditto (recoveries of cess collection charges from District Boards) ...	......	3,65,000	3,65,000
Customs	57,000	57,000	Nil.
Assessed Taxes ...	17,84,000	21,54,000	3,70,000
Forests	3,50,000	3,95,000	45,000
Registration ...	5,38,000	6,67,000	1,29,000
Total ...	2,84,82,000	3,34,19,000	49,37,000

79. The large increase under Land Revenue was due to special assignments from Imperial to Provincial Funds, which are adjusted under this head. The other increases arose from the natural expansiveness of the revenues, especially under the head of Stamps and Assessed Taxes. The increase under Provincial Rates was principally due to a change in procedure under which the cost of collecting the Road and Public Works cesses is adjusted under Provincial Rates, the share debitable to district funds being shown as receipts under the same head. After eliminating adjustments and transfers of account, the real increase credited to the Provincial revenues under principal heads during the last year of the contract came to Rs. 25,02,000.

80. Under Railways there was an extraordinary increase during the same period of from Rs. 1,00,19,000 to Rs. 1,60,40,000, or nearly 60¼ lakhs of rupees, of which nearly half was nominal and due to the inclusion of the receipts of the Bengal North-Western Railway, while the remainder was a real Provincial asset derived from the successful administration of the Eastern Bengal Railway System.

81. A comparative statement of the expenditure under Revenue heads is also shown in detail—

	Contract assignment.	Actuals, 1891-92.
	Rs.	Rs.
Refunds and drawbacks	1,55,000	1,54,000
Assignments and compensation ...	1,68,000	1,66,000
Land Revenue	34,08,000	41,14,000
Salt	11,000	52,000
Stamps	3,75,000	3,39,000
Excise	96,000	1,66,000
Provincial rates	......	4,34,000
Customs	4,97,000	5,19,000
Assessed taxes	85,000	90,000
Forests	2,25,000	2,10,000
Registration	2,95,000	3,42,000
Total ...	53,15,000	65,86,000

82. The increase in round numbers amounted to 12¾ lakhs of rupees. The increase under Land Revenue was principally due to surveys and settlements. The increase of expenditure under Excise was the necessary accompaniment of the important changes which were made in the administration of this Department. The new charge shown under Provincial Rates is a matter of account only, and represents the cost of collecting the cesses in the districts to which the Local Self-Government Act has been extended. The other returns do not seem to call for explanation.

83. The items which compose the major head of Salaries and Expenses of the Civil Department may be compared as follows:—

	Contract assignment.	Actuals. 1891-92.
	Rs.	Rs.
General Administration	15,62,000	16,16,000
Judicial Courts	80,11,000	84,83,000
Jails	17,28,000	20,22,000
Police	47,48,000	59,62,000
Marine	7,81,000	9,42,000
Education	32,46,000	25,52,000
Medical	14,59,000	15,67,000
Political	....	34,000
Scientific and other Minor Departments ...	3,30,000	3,13,000
Total ...	2,18,65,000	2,34,91,000

84. Under some of these heads the increase in expenditure was very large. The increase of nearly 4¾ lakhs under Judicial Courts represents the financial effect of the increase which was found necessary in the number of Subordinate Judges and Munsifs and judicial establishments generally. The increase under Jails was on account of the large outlay on machinery and manufactures, and was in a measure

counterbalanced by a corresponding increase in receipts. The increase in the cost of Police amounts to nearly 12 lakhs of rupees. This was partly due to the cost of the Metropolitan Police, which was provincialised, partly to the large expenditure incurred in connection with subjugation of the South Lushai country and the formation of the South Lushai Hill District, and partly to the improvements effected in the Police Department in consequence of the recommendations made by the Police Commission. The reduction under Education is fictitious only. A great portion of the expenditure under this head has ceased to be departmental, but is incurred by District Boards to which an equivalent grant is made for the purpose under the head of Contributions. A portion of the increase under the head of Medical was due to the establishment of a Sanitary Board.

85. Miscellaneous expenditure increased from Rs. 26,61,000 to Rs. 32,31,000. There was, however, a decrease under Miscellaneous (proper), and the real increase under this heading was due to Superannuation or pensionary charges, which rose from Rs. 12,54,000 to Rs. 16,00,000, and also to increased charges under Stationery and Printing, mainly on account of the census operations.

86. The expenditure on Railways increased from Rs. 87,63,000 to Rs. 1,42,64,000; of this amount the major portion was due to the inclusion of the working expenses of the Bengal and North-Western Railway and the Company's share of net receipts.

87. Irrigation expenditure increased from Rs. 45,69,000 to Rs. 53,32,000. The Interest charge rose from Rs. 22,94,000 to Rs. 24,03,000, and the remainder was due to expenditure on works. A large share of the expenditure on the Orissa Coast and Hidgilee Tidal Canals was contributed by the Government of India and credited under the head of Land Revenue.

88. The increase in expenditure on Civil Works from Rs. 31,14,000 provided in the contract to Rs. 40,25,000 in 1891-92 was unavoidable with reference to the necessities of so large a province.

89. The increase under Contributions from Rs. 1,59,000 to Rs. 8,79,000 was due to the development of Local Self-Government and the assignments it was necessary to make to local bodies in order to maintain an equilibrium between their receipts and the expenditure imposed on them.

H. H. RISLEY,

Secretary to the Government of Bengal.

The 1*st April* 1893.

SURVEY AND SETTLEMENT OF THE GOVERNMENT ESTATE OF BANKI IN CUTTACK.

REVENUE DEPARTMENT—LAND REVENUE.

Calcutta, the 11th April 1893.

RESOLUTION No. 1791.

READ—

Letter No. 180A., dated 21st February 1893, from the Board of Revenue, with enclosures, submitting the final report on the survey and settlement of the Government estate of Banki in Cuttack.

Previous history.

Banki was formerly a Tributary State, the property of the Raja of Banki. The Raja was dethroned in 1839 for misconduct, and his territory was confiscated by Government. From 1839 to 1882 Banki was under the management of the Superintendent of the Tributary Mahals, but in 1882 it was annexed to the Cuttack district, and it has since been treated as a Government estate, and has been managed by a Sub-Deputy Collector. It was settled in 1844 after measurement for ten years, and again after measurement for 14 years from 1854. The period of the second settlement was extended to 1888 in consequence of the Orissa famine of 1866.

Agency employed on survey work.

2. The survey-settlement, which is the subject of the report now submitted, was begun in 1888 and completed in 1891 under Act VIII (B.C.) of 1879. The survey was carried out by a detachment from the Survey of India under Mr. R. B. Smart, Surveyor. An attempt was made to utilize local agency for the field survey and record-writing, and a number of sarbarahkars, or managers of villages, and their relatives were trained in survey schools opened for the purpose at different centres. By these means the sarbarahkars were enabled to understand the operations and to render valuable assistance; but, generally speaking, the work was done by outsiders, the sarbarahkars being found as a class unequal to the task. The settlement was carried out by Babu Balaram Das, Sub-Deputy Collector, who explains that the delay in the completion of the work was due (1) to his being in charge of the estate as Sub-divisional Officer, in which capacity he had the tahsil and criminal case work to attend to; (2) to the failure of the rice crop in 1888-89, and the consequent increase of work in other directions; (3) to difficulties met with in determining the rent of holdings; (4) to the fact that after the preliminary enquiries had been made, and the principles on which the settlement was to be concluded were decided, 5,730 objections were received and had to be disposed of; and (5) to the re-arrangement of the sarbarahkari circles. The draft jamabandi was published in March 1891, when the Settlement Officer ceased to draw the special settlement allowance of Rs. 100 per mensem, though some work still remained to be done, which delayed the submission of the final report. That report is dated 7th April 1892, and did not reach Government till the end of February 1893. The delay occurred chiefly in the office of the Director of Land Records, time being lost in printing the report and the Director being absent on tour and having much other work to engage his attention.

Cost and rental.

3. The total area of the estate is 74,530 acres or 117 square miles. The cost of the operations was Rs. 38,613, or a little more than eight annas an acre. Although this average rate cannot be considered low having regard to the fact that the pay of the Settlement Officer was separately met by Government and that only his special allowance of Rs. 100 per mensem was charged to the settlement, it is very cheap compared with the average rate of cost of the survey and settlement operations lately carried out in the neighbouring estate of Khurda. The gross rental was raised from Rs. 23,866 to Rs. 33,107, and the net revenue from Rs. 21,421 to Rs. 28,820, the increase (Rs. 7,399) being mainly due to the addition of 4,210 acres to the cultivated area, which has increased from 33,000 to 37,210 acres.

Particulars of land.

4. The particulars of the cultivated area are given in the following statement furnished by the Settlement Officer:—

Class of Cultivator.	Number of holdings.	Cultivated area.	Average area per holding.	Rent.	Average rent per acre.
1	2	3	4	5	6
		Acres.	Acres.	Rs. A. P.	Rs. A. P.
1. *Sir* land of tenure-holders	63	242·05	3·84	184 14 9	0 12 2
Raiyats holding under Government.					
2. Raiyats at fixed rates	222	612·22	2·75	172 12 11	0 4 11
3. Settled raiyats	7,825	17,133·54	2·18	16,708 6 10	0 15 7
4. Occupancy	11,931	13,327·89	1·11	13,509 9 4	1 0 2
5. Non-occupancy	12	59·06	4·92	124 8 0	2 1 0
Total ...	20,058	31,374·76	1·56	30,694 10 10	0 15 7
6. Rent-free-holders, including lakhirajdars ...	3,361	2,762·07	·82	......	......
Grand Total ..	23,414	34,136·83	1·45	30,694 10 10	0 14 4
Raiyats holding under tenure-holders.					
Under jagirdars and bajiaftidars. — Settled raiyats ...	315	468·05	1·48	755 0 3	1 9 9
Under jagirdars and bajiaftidars. — Occupancy raiyats ...	329	413·87	1·25	723 5 8	1 11 11
Under tankidars ... — Settled raiyats ...	47	58·09	1·23	99 11 0	1 11 5
Under tankidars ... — Occupancy raiyats ...	121	102·44	·84	131 3 10	1 4 5
Under tankidars ... — Non occupancy raiyats ...	19	2·43	·12	12 7 0	5 1 10*
Total ...	831	1,044·88	1·25	1,721 11 9	1 10 4
Raiyats holding under Lakhirajdars.					
Settled raiyats	150	295·43	1·30	694 7 11	2 5 6
Occupancy	2,029	1,700·67	·83	3,504 5 2	2 [illegible] 10
Non-occupancy	54	33·15	·61	42 14 2	1 4 8
Total ...	2,233	2,029·25	·90	4,241 11 3	2 1 4
Under-raiyats	4,001	3,552·32	·88	5,766 4 10	1 9 11

* Chandna rates.

The raiyats are locally divided into three classes, Thani, Pahi, and Chandna, all of whom enjoy occupancy rights. Thani raiyats are cultivators residing in the village, the land of which they till, while a Pahi raiyat is one who holds and cultivates land in a village other than that of his residence. Chandnadars are raiyats who have homestead lands, but no cultivation. In the above statement the term "settled raiyat" has been used by the Settlement Officer apparently as the equivalent of "thani raiyats," whose rights are greater than those of settled raiyats, as defined in the Bengal Tenancy Act, no portion of which, however, had been extended to Orissa before the completion of the settlement of Banki. The total number of holdings is 26,478, or 30,479, including under-raiyats. According to the local custom the under-raiyats cannot ordinarily be ejected from their holdings except by order of the Court. Most of the raiyats under the lakhirajdars and jagirdars pay rent partly in cash and partly in kind, or in some cases in kind only. These produce rents have been recorded by the Settlement Officer. It is stated that the raiyats are eager to commute the grain into money rent, but that the tenure-holders are opposed to the change.

Division and transfer of holdings

5. The Lieutenant-Governor desires that in the case of raiyats holding under Government division of holdings should be forbidden, as in Khurda; and His Honour directs that all transfers should, following the arrangements sanctioned in Government order No. 856L.R., dated 4th March 1892, for that estate, be registered at the head-quarters, and also recorded by the sarbarahkars. His Honour directs that the rights of Government in the dead and fallen trees in their holdings, referred to in paragraph 108 of the report of the Settlement Officer, shall be abandoned in favour of the raiyats.

Mafidars.

6. The class of tenants known as mafidars, who hold homestead lands free of rent, consist chiefly of Sahars, Pans, Sanais and such like who live on the margin of subsistence and from whom the criminal population is chiefly drawn. The Lieutenant-Governor agrees with the Collector that these men should be well looked after and only allowed the privilege of holding land rent-free during good behaviour. The number of such holdings is 730, covering the small area of 93·16 acres.

Uncultivated area and orchards.

7. The uncultivated area amounts to 37,819 acres, of which 11,840 acres are culturable waste. Of the latter area, 4,034 acres are covered by mango orchards, of which only 653 acres were assessed at Rs. 166-10-5. Young orchards or orchards required for public purposes are not assessed. The remainder of the culturable waste (7,805 acres) is not brought under cultivation, chiefly because there are no means of irrigation. As to the unculturable area (25,979 acres), village sites occupy 1,083 acres, and 6,473 acres include hills and forests and other ground open for grazing purposes.

Fisheries.

8. Another source of revenue is the fisheries, which yield Rs. 683-7. The leases granted run for 15 years, and contain clauses providing against the fishermen interfering with the use of water for the irrigation of crops.

Leniency of settlement.

9. It is stated that the settlement is acceptable to the raiyats and sarbarahkars, and that, though some appeals were made to the Collector, not a single suit was instituted to contest the jamabandi. There is no doubt that the settlement is lenient, as may be inferred from the rise in the selling price of raiyati holdings and in the price of food-grains, facts which appear from the following statements extracted from the Settlement Officer's report, showing (1) the average price at which raiyati holdings were sold for 15 years between 1863-64 to 1886-87, and (2) the average price of common rice during the years 1843 and 1874 to 1891:—

1. *Average selling price of raiyati holdings.*

Year.	Average price per mân (which is approximately equal to an acre). Rs. A.	Year.	Average price per mân. Rs. A.
1863-64	11 4	1871-72	39 0
1864-65	20 3	1873-74	52 13
1865 66	25 11	1874-75	48 6
1866-67	24 3	1875-76	60 9
1867-68	33 12	1884-85	50 0
1868-69	25 8	1885-86	80 6
1869-70	29 14	1886-87	88 4
1870-71	31 2		

2. *Average annual price of common rice.*

Year.	Average in seers per rupee. S. CH.	Year.	Average in seers per rupee. S. CH.
1843	58 5	1883	27 2
1874	26 15	1884	18 2
1875	24 8	1885	16 3
1876	27 13	1886	16 8
1877	16 9	1887	18 9
1878	14 4	1888	18 8
1879	15 4	1889	17 3
1880	18 8	1890	24 5
1881	29 8	1891	24 3
1882	30 8		

The statistics in both tables are very remarkable, especially those in the former. It will be seen that the average selling price of raiyati holdings in Banki has risen by 800 per cent. within the last twenty-three years. This rise, moreover, has been virtually continuous, the price receding slightly in years of scarcity and advancing again directly prosperity was restored. No better evidence could be wished for of the steady and growing prosperity of the agri-

cultural population of this estate. The record of average prices commences with 1843, when common rice stood at 58 seers to the rupee. By 1874, communications having meanwhile been improved by the opening of the High Level Canal and the development of the Orissa ports, the price had risen to 26 seers. In 1877—79 the demand occasioned by the Madras famine sent the average price up to rates varying from 14 to 16 seers per rupee. In the period 1881—83 plentiful harvests raised the average to 27—30 seers, while in 1885-86 the cyclone, floods and failure of crops brought it down to 16·8. It now stands at 24·3, which may perhaps be assumed to represent the normal average of the area in ordinary years. The effect of the opening of the East Coast Railway and the extension of the Bengal-Nagpur line will be watched with interest, and will no doubt bring about a further rise of price. It will be observed that the rate of increase in the case of prices falls far short of that obtaining in the case of holdings. The former has risen by 100 per cent. in 50 years; the latter by 800 per cent. in less than half that time.

Crops.

10. The subjoined statement, also taken from the Settlement Officer's report, gives details of the various crops and the extent to which each crop is grown in the estate; but there are no data to show the net gain to cultivators:—

	Area. Acres.	
Food crops—		
Biali paddy	2,228·03	
Sarad paddy	27,259·90	
Dalua paddy	2,753·68	
Brinjals (*solanum melongena*) ...	157·98	
Saru (*colocasia antiquorum*)	42·22	
Sweet potato	2·73	
Pumpkin	21·17	
Cucumber	114·97	
Mung (*phaseolus mungo*)	2,000·32	
Biri (*phaseolus radiatus*)	2,663·03	
Arhar (*cajanus indicus*)	1·30	
Kurthi (*dolichos biflorus*)	2,691·55	
Mandia (*eleusine coracana*)	120·29	
China (*panicum miliaceum*)	3·49	
Kodua (*paspalum scrobiculatum*) ...	166·86	
Vegetables	223·36	
		40,450·88
Non-food crops—		
Sugarcane	245·73	
Tobacco	26 97	
Cotton	132·62	
Castor	92·94	
Mustard	17·38	
Rasi (*Desamum orientale*)	19·05	
Dhania (*Coriandrum sativum*) ...	4·81	
Chilly	0·09	
Saffron	1·56	
Miscellaneous non-food crops ...	0·71	
		541·86
GRAND TOTAL		40,992·74
Deduct area cropped more than once		3,781·78
Net cropped area		37,210·96

Sarbarahkars.

11. The sarbarahkars of Banki hold the same position as those of Khurda, *i.e.*, they are farmers and public accountants, and are responsible for the total demand due to Government, whether they collect from the raiyats or not. They have no rights beyond those conferred on them by their engagements, and are liable to dismissal for misconduct under the orders of the Collector. In making appointments to the post of sarbarahkar, a relative of a deceased or retired sarbarahkar, who has rendered good service, is preferred, provided he be otherwise qualified. Under the orders of the Board of Revenue, the number of the

sarbarahkari circles in the estate has lately been reduced from 143 to 75, and the number of sarbarahkars from 159 to 99. Compensation at the rate of one year's commission was granted to each sarbarahkar whose services were dispensed with. These arrangements are approved generally by the Lieutenant-Governor. The sarbarahkars receive a commission at the rate of from 10 to 20 per cent., and they have been allowed to take the profits of new cultivation for the term of the present settlement, which has been fixed at 15 years, from 1298 to 1312 Amli, or 1891 to 1905. The average amount of the annual commission now drawn by these officers is Rs. 32-8 a year, but 40 of them draw less than Rs. 20, and 47 draw between Rs. 20 and Rs. 50. Of the remainder 8 draw over Rs. 50 and 4 over Rs. 100. Engagements will be taken from those who agree to keep up the settlement records, copies of which have been supplied to them. As regards increase of commission, His Honour is of opinion that the capacity of the sarbarahkar to maintain the records should be clearly proved before any additional percentage is given to him. The Lieutenant-Governor therefore directs that the orders contained in Government letter No. 856L.R., dated 4th March 1892, regarding the inspection of records in Khurda, shall also apply in Banki; and His Honour authorises the grant of a reward of 5 per cent. of his collections to each sarbarahkar found to have kept his records in proper order and up to date each year.

Chaukidars.

12. The question of improving the position of chaukidars will be considered in the Judicial Department of this Government.

13. The Lieutenant-Governor awaits the report promised by the Collector on the proposed establishment of a dispensary in Banki.

14. The Settlement Officer, Babu Balaram Das, deserves commendation for his good work and for the intelligent report which he has submitted. The Lieutenant-Governor sanctions the continuance to him of the special allowance of Rs. 100 a month for six months from the beginning of March 1891. The suggestion of the Director of Land Records that he should be appointed a Deputy Collector will be considered in the Appointment Department of this Office.

ORDER.—Ordered that this Resolution be published in the *Calcutta Gazette*, and that a copy of it be forwarded to the Board of Revenue for information and guidance.

By order of the Lieutenant-Governor of Bengal,

H. H. RISLEY,

Secretary to the Govt. of Bengal.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 8th April 1893.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.			
BURDWAN DIVN.			
1	Burdwan April 8, '93 Kalna ... Katwa ... Raniganj ...	0·09 Nil 0·51 Nil	Weather—fairly cool at nights, hot in the day. Lands being ploughed. Fodder and water sufficient. Prices of common rice:— Srs. Burdwan ... ... 10½ to 13 } Kalna ... ... 10 to 13 } Katwa ... ... 13 } per rupee. Raniganj ... ... 13 }
2	Bankura „ 8, '93 Vishnupur ...	Nil Nil	Weather—hot and fair. Ploughing still going on. Pressing of sugarcane continues in places. Fodder sufficient. Prices of common rice:— Srs. Sadar ... ... 11½ } Vishnupur ... ... 11½ } per rupee.
3	Birbhum „ 8, '93 Rampur Hát ...	Nil Nil	Weather—hot. Wheat gathered in. Sugarcane pressing still going on. Ploughing of fields for winter rice has commenced. Common rice 13 to 15 seers per rupee.
4	Midnapore „ 8, '93	Nil	Weather—warm. Ploughing going on. Indigo being sown. Prices of common rice:— Srs. Sadar ... ... 12 } Contai ... ... 14 } Tamluk ... ... 12 to 13 } per rupee. Garhbeta ... ... 11 to 12 }
5	Hooghly „ 8, '93 Serampore ... Jahanabad ...	Nil Nil Nil	Weather—hot. Sugarcane and *boro* paddy and vegetable crops doing well. Fodder and water plentiful except in Dwarbasini and Pandua. Cattle-disease dimished. Prices of common rice:— Srs. Sadar ... ... 11 } Serampore ... ... 10 to 11 } per rupee. Jahanabad ... 12 srs. 9 ch. to 12 srs. 10 ch. }
6	Howrah „ 8, '93 Ulubaria ...	Nil Nil	Weather—getting warm. Lands are being ploughed. Condition of cattle good. Supply of fodder and water sufficient. Prices of rice 10 to 11½ seers per rupee.
PRESIDENCY DIVN.			
7	24-Parganas „ 8, '93	Nil	Weather—seasonable. Ploughing going on. Sufficient fodder and water. Prices of common rice:— Srs. C. Sadar ... ... 10 to 13 0 } Dum-Dum ... ... 12 0 } Barasat ... ... 10 5 } Basirhat ... ... 11 7 } per rupee. Barrackpore ... ... 11 0 } Diamond Harbour ... ... 13 0 }
8	Nadia „ 8, '93 Kushtia ... Meherpur ... Chuadanga ... Ranaghat ...	1·14 1·37 1·86 0·56 0·44	Weather—hot. *Rabi* harvest nearly over; outturn throughout the district is estimated at 9 or 10 annas. Plenty of moisture for preparation of *aus* rice lands. General prospects fair. Sufficient fodder and water for cattle.
9	Khulna „ 8, '93 Bagerhat ... Satkhira ...	1·26 0·25 2·45	Weather—hot. There has been local rain. *Rabi* crops harvested; outturn 8 annas in Bagerhat and somewhat higher in Satkhira. Price of common rice remains high. Fodder and water abundant.
10	Jessore „ 8, '93 Jhenida ... Magura ... Narail ... Bangaon ...	0·24 1·21 0·24 0·25 1·22	Weather—windy; stormy at times; clouds gather almost every evening with thunder and lightning. Harvesting of *rabi* crops nearly completed. Ploughing for next paddy crop continues. *Boro* planting going on. Cattle-disease still reported from parts of Bangaon. Fodder and water sufficient.
11	Murshidabad „ 8, '93	Nil	Weather—getting warmer. Harvesting of *rabi* crops continues. Sowing of *til* finished. Lands are being prepared for sowing of *aus* and *aman* paddy. Prospects of mango crops not favourable. Common rice sells at 12½ seers per rupee. Fodder and water sufficient for cattle.

Division	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and State and prospects of the crops.
BENGAL—*concld.*					
CHITTAGONG DIVN.	12	Chittagong	...	...	Report not received.
	13	Noakhali	April 8, '93	Nil	Weather—seasonable. Harvesting of *rabi* crops continues. *Aus* and *aman* are being sown. No cattle-disease reported except from Begamganj and Companyganj. Fodder and water sufficient. Prices stationary.
	14	Tippera	" 8, '93	0·16	Weather—seasonable; hot; nights fairly cool. High winds prevalent. *Til* paddy and jute being sown. *Boro* paddy plants thriving. Prices stationary.
	15	Chittagong Hill Tracts.	" 7, '93	2·90	Weather—sultry and hot. Condition of vegetables generally good. *Jum* cutting and *jum* burning going on. No cattle-disease reported. Common rice being sold at 10 seers per rupee.
DACCA DIVN.	16	Dacca	" 8, '93	0·88	Weather—hot and cloudy at intervals. *Aman, aus* and jute plants thriving. Prospects of *rabi* crops good. Fodder available. No cattle-disease. Common rice selling at from 11 to 13 seers per rupee.
	17	Faridpur	" 8, '93	0·62	Weather—seasonable. Lands are being sown with *aus* and *aman*. Early paddy doing well. Common rice sells at from 12 to 13 seers per rupee. Cattle doing well and get fodder.
	18	Backergunge	" 8, '93	1·20	Weather—seasonable. State and prospects of *rabi* crops fair. Ordinary rice selling at from 10 to 13 seers per rupee. Fodder and water sufficient.
		Pirojpur	...	0·69	
		Bhola	...	0·06	
		Patuakhali	...	0·56	
	19	Mymensingh	" 8, '93	0·85	Weather—getting hot. Prospects of standing crops good. Sowing of *aus* and jute going on. Common rice selling at from 11 to 13½ seers per rupee. Condition of cattle good, and supply of fodder and water sufficient.
RAJSHAHI DIVN.	20	Dinajpur	" 8, '93	0·48	Weather—hot during day, mornings cool and cloudy with easterly wind. The rain has facilitated cultivation of lands for *bhadoi* and jute; sowing going on. Price of rice at Sadar 14 seers per rupee; that at Thakurgaon unchanged. Condition of cattle good. Supply of fodder and drinking water plentiful.
		Thakurgaon	...	0·76	
	21	Rajshahi	" 8, '93	0·28	Weather—normal—dry and hot. The late rain has not done any appreciable harm, and has in places done much good. Lands are being prepared everywhere. *Boro*, jute, *til*, and sugarcane, wherever grown, coming on well. Agricultural prospects are wholly favourable. Cattle are in good condition. Fodder and water ample. Price of rice varies from 11 seers 8 chitaks to 15 seers per rupee.
		Nator	...	0·13	
		Naugaon	...	0·40	
	22	Rangpur	" 8, '93	1·75	Weather—cloudy. *Aus* and jute sowings going on: the former nearly finished. Price of rice 12 to 15 seers per rupee.
		Gaibanda	...	0·21	
		Nilphamari	...	1·37	
		Kurigram	...	3·38	
		Ulipur	...	2·65	
	23	Bogra	" 8, '93	0·20	Weather—seasonable. Ploughing for jute and paddy still going on. Common rice sells at 13½ seers per rupee. Fodder and water sufficient.
		Sherpur	...	0·75	
		Naukhila	...	Nil	
	24	Pabna	" 8, '93	1·66	Weather—cloudy and sultry; sometimes stormy with occasional rain. Ploughing and sowing continue. Price of rice at head-quarters 12½ seers per rupee, and at Sirajganj Rs. 8-4 to Rs. 4-12 per maund. Condition of cattle good. Water-supply and fodder sufficient.
	25	Darjeeling	" 8, '93	2·60	A wet week with thick clouds and hail on Friday (7th) afternoon. *In the hills*:—Wheat and barley coming to perfection. *Bhutta* and *kangni*, potatoes, *phafar* and *chhota marua* progressing favourably. *In the terai*.—Lands are being ploughed for jute and *bhadoi* paddy. Prices of coarse rice:— Srs. Hills ... ... 10 } per rupee. Terai ... ... 12 } per rupee.
		Siliguri	...	0·82	
	26	Jalpaiguri	" 8, '93	0·38	Weather—getting hot; nights still fairly cool. Lands continue to be prepared for *bhadoi* and jute. Harvesting of tobacco approaching completion. Price of common rice stationary. No cattle-disease reported. Fodder and water-supply good.

	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
BHAGALPUR DIVN.	27	Monghyr April 8, '93 Begusarai ... Jamui ...	Nil Nil Nil	Weather—warm days, cool nights. Outturn of *rabi* expected to be 10 annas on the average. Indigo doing well. Small-pox among cattle reported towards Chakai (in Jamui). Plenty of fodder and water. Prices of common rice:— Srs. Sadar ... ... 13 to 15 } Begusarai ... ... 15 } per rupee. Jamui ... ... 13½ }
	28	Bhagalpur " 8, '93 Banka ... Madhipura ... Supaul ...	Nil Nil Nil Nil	Weather—seasonable. Standing crops doing well. *Rabi* harvest in progress. Lands are being prepared for *bhadoi*, and *aghani* paddy is being sown on low lands. Price of common rice 15 seers 2 chitaks per rupee.
	29	Purnea " 8, '93 Kishanganj ... Araria ...	0·61 0·49 0·68	Weather—cloudy and cold for season. *Rabi* harvest nearly over; outturn satisfactory. Late rain did some damage to *rabi*, but benefited *bhadoi* cultivation and jute and paddy seedlings. Fodder and water sufficient. Prices still high but stationary.
	30	Malda " 8, '93 Chanchal ... Shibganj ... Gajole ...	0·20 0·15 0·60 0·07	Weather—days hot; mornings and evenings cool. Reaping of *rabi* crops in full progress; outturn is expected to be not less than 14 annas. *Boro* paddy thriving. Price of common rice 12½ to 15 seers per rupee. Fodder and water ample.
	31	Sonthal Parganas " 6, 93 Deoghur ... Godda ... Jamtara ... Pakur ... Rajmahal ...	0·03 Nil Nil Nil Nil Nil	Weather—hot and dry with west winds; still cool at night. *Mahua* falling; outturn is better than was expected. Mango fruit forming; will not be good. *Chaiti* crops being gathered; outturn fair. Prices as in last week. Fodder and water sufficient.
PATNA DIVISION.	32	Patna " 8, '93	Nil	Weather—clear. Heat increasing. Harvesting of *rabi* has been completed; outturn expected to be good. Opium weighment going on. Castor and banga plants doing well. *Rahar* promises well. Sugarcane and millet being sown. Prices of common rice:— Srs. Sadar ... ... 16 } Barh ... ... 11 to 11½ } per rupee. Dinapore ... ... 15 }
	33	Gaya " 8, '93 Jahanabad ... Nawada ... Aurangabad ...	Nil Nil Nil Nil	Weather—hot with west wind. *Rabi* harvest approaching completion. Opium weighments going on. Mango prospects unfavourable. Common rice sells at 14 to 15 seers per rupee. Water and fodder-supply sufficient.
	34	Shahabad " 8, '93	Nil	Hot weather with strong westerly winds. *Rabi* harvest is practically over, and threshing is in progress. Young sugarcane now requires rain, which would also be beneficial to *kharif* ploughing. Cattle-disease prevalent in the south. Prices show a tendency to fall.
	35	Darbhanga " 8, '93	Nil	Weather—warm with cool mornings. Harvesting of *rabi* continues. Paddy and *mung* being sown. Collection of opium virtually over. Prices remain stationary. Condition of cattle good.
	36	Muzaffarpur " 8, '93	Nil	Weather—seasonable. Harvesting of *rabi* crops continues. Linseed outturn 13 annas. Opium weighment commences on the 10th. No cattle-disease. Water and fodder sufficient.

	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR—*concld.*				
PATNA DIVISION—*concld.*	37	Saran April, 8, '93 Siwan .. Gopalganj ..	Nil Nil Nil	Weather—days seasonably hot, nights somewhat cooler than usual. East winds. *Rabi* harvesting complete in Siwan, and nearly so in Sadar and Gopalganj subdivisions. Fodder and water sufficient. Prices of common rice:— Srs. c. Chapra ... ... 13 8 } per rupee. Siwan ... ... 13 2 } per rupee. Gopalganj ... ... 13 14 } per rupee.
	38	Champaran „ 8, '93	Nil	Weather—days hot, nights cool. *Rabi* is being gathered and threshed. *Cheena* and paddy are being sown. Indigo thriving. Opium collection finished; weighment has commenced. No marked change in prices. No cattle-disease. Water and fodder sufficient.
ORISSA.				
ORISSA DIVN.	39	Cuttack „ 8, '93	Nil	Weather—warm. Prospects good. Supply of fodder and water sufficient. Price of common rice stationary.
	40	Puri „ 6, '93 Khurda ... Banpur ...	Nil Nil 0·29	Weather—seasonable. Lands are being ploughed for the ensuing *sarad* crop. *Dalua* paddy being harvested. Miscellaneous crops good. Price of rice stationary.
	41	Balasore „ 8, '93	Nil	Weather—normal. Ploughing continues. Rice sells at 15 seers per rupee at Balasore and 17 seers at Bhadrak.
CHOTA NAGPUR.				
South-West Frontier Agency.				
CHOTA NAGPUR DIVN.	42	Hazaribagh April, 8, '93 Giridi ...	Nil Nil	Weather—seasonable. Yield of *rabi* crops 8 to 12 annas. Sugarcane being planted out. Prospects of *mahua* and mango fair. Common rice 11 to 14 seers per rupee. Fodder and water sufficient.
	43	Lohardaga ...	...	Report not received.
	44	Palamau „ 7, '93	Nil	Weather—seasonable. *Rabi* harvest continues. Sugarcane planted out in some parts. Foot-and-mouth disease continues amongst the cattle. Fodder and water sufficient. Prices stationary.
	45	Singhbhum „ 8, '93	0·35	Weather—cool for this season of the year. What crops there are on the ground are doing fairly well. Price of common rice ranges from 12 to 16 seers per rupee. No cattle-disease. Water and fodder plentiful.
	46	Manbhum „ 8, '93 Gobindpur ...	Nil Nil	Weather—bright and warm. *Mohua* crop has been materially benefited by the bright weather. Prospects so far fair. Rice 10 to 13 seers per rupee. Fodder and water-supply ample.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 11th April, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

STATEMENT SHOWING THE STOCKS OF RICE IN AND AROUND CALCUTTA.

Names of Marts.	Stock in hand as compiled on—												
	1st week of April 1892.	1st week of May 1892.	1st week of June 1892.	1st week of July 1892.	1st week of August 1892	1st week of Sept. 1892	1st week of Oct. 1892.	1st week of Nov. 1892	1st week of Dec. 1892	1st week of Jan. 1893.	1st week of Feb. 1893.	1st week of March 1893.	1st week of April 1893.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Baliaghata	12,67,000	10,25,000	12,28,000	9,62,000	8,39,000	6,74,000	4,96,500	4,30,000	3,16,000	3,34,000	4,05,000	6,19,000	9,04,000
Ultadanga	69,000	85,900	73,900	65,800	65,900	70,900	65,100	57,300	57,800	65,200	78,700	99,500	1,06,500
Chitpur, Golabaree, Kumartooly, Hatkhola, and Culpi Ghat.	8,78,400	7,88,000	7,61,300	7,20,400	6,58,300	6,41,400	5,63,300	5,64,800	5,40,700	5,64,700	7,01,900	6,54,500	6,46,600
Pathuriaghatta, Posta, and Jorabagan.	4,000	5,000	4,000	3,000	4,000	3,700	3,000	2,500	2,000	3,000	8,000	3,500	3,000
Tollygunge Chetla, Kidderpore, and Munshiganj.	1,44,500	1,41,500	1,37,200	1,12,100	1,43,400	96,500	93,600	51,100	40,600	87,900	1,14,200	1,46,400	1,56,700
31 Minor bazars (estimated) ...	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000
Other retail shops, 3,129 in number (estimated).	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000
Baidyabati, Nowabganj, Bhadreshwar, and Chandernagore.	59,450	42,000	32,325	26,062	61,125	51,250	33,908	31,125	40,037	63,961	69,800	76,380	6,662
Total ...	29,12,350	25,77,400	27,26,725	23,79,362	22,59,725	20,27,750	17,45,408	16,35,825	14,87,137	16,08,761	18,67,600	20,89,280	23,13,462
On Railway premises on both sides of the river.	38,171 (on 3rd April 1892.)	17,133 (on 3rd May 1892.)	12,011 (on 3rd June 1892.)	5,239 (on 3rd July 1892.)	1,322 (on 3rd August 1892.)	11,338 (on 3rd Sept. 1892.)	17,216 (on 8th Oct. 1892.)	9,774 (on 3rd Nov. 1892.)	24,557 (on 3rd Dec. 1892.)	35,589 (on 3rd Jan. 1893.)	32,791 (on 3rd Feb. 1893.)	21,643 (on 3rd March 1893.)	23,773 (on 3rd April 1893.)
On boats unloaded ... By Port Commissioners' returns.	29,556 (1st to 3rd April 1892.)	28,662 (2nd to 4th May 1892.)	25,508 (1st to 3rd June 1892.)	27,288 (1st to 3rd July 1892.)	25,889 (1st to 3rd August 1892.)	18,308 (1st to 3rd Sept. 1892.)	27,678 (6th to 8th Oct. 1892.)	13,606 (1st to 3rd Nov. 1892.)	38,882 (1st to 3rd Dec. 1892.)	47,638 (3rd to 5th Jan. 1893.)	40,930 (1st to 3rd Feb. 1893.)	41,298 (1st to 3rd March 1893.)	25,720 (1st to 3rd April 1893.)
On boats unloaded ... By Canal returns.	38,474 (1st to 3rd April 1892.)	17,050 (2nd to 4th May 1892.)	37,916 (1st to 3rd June 1892.)	21,650 (1st to 3rd July 1892.)	17,415 (1st to 3rd August 1892.)	27,069 (1st to 3rd Sept. 1892.)	24,097 (6th to 8th Oct. 1892.)	15,777 (1st to 3rd Nov. 1892.)	16,296 (1st to 3rd Dec. 1892.)	1,30,459 (3rd to 5th Jan. 1893.)	1,20,600 (1st to 3rd Feb. 1893.)	1,99,575 (1st to 3rd March 1893.)	76,791 (1st to 3rd April 1893.)
Grand total of Stocks ...	30,18,551	26,40,245	28,02,250	24,33,539	23,04,351	20,84,463	18,14,399	16,74,982	15,66,872	18,22,447	20,61,021	23,52,796	24,39,746
Probable stock available for exportation by sea.	19½ lakhs	15¾ lakhs	17⅞ lakhs	13¾ lakhs	12½ lakhs	10½ lakhs	7¼ lakhs	6¼ lakhs	5 lakhs	7½ lakhs	10 lakhs	13 lakhs	13¼ lakhs

STATISTICAL DEPARTMENT,
The 10th April, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

Meteorological Report of the Province of

Meteorological Division.	District.	Representative stations.	STATION OBSERVATIONS. Air Pressure. Highest, 8 A.M., barometer reading.	Lowest, 8 A.M., barometer reading.	Mean, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, Lat. 45°.	Variation from normal mean.	Wind. Mean direction at 8 A.M.	Mean velocity in miles daily.	Temperature. Highest of month.	Lowest of month.	Mean daily maximum temperature.	Mean daily minimum temperature.	Mean daily temperature.	Variation from normal mean.	Humidity. Mean, 8 A.M., humidity.	Variation from normal mean.
Orissa.	Puri ...	Puri ...	30·135	29·784	29·952	29·911	—	N60°W	219	86·7	66·6	83·2	72·2	77·7	—	84	—
		Gopalpur ...	30·144	29·775	29·957	29·918	+·040	N50°W	289	87·7	65·9	83·4	70·4	76·9	−2·4	85	—
		False Point ...	30·135	29·773	29·956	29·919	+·030	N87°W	242	87·9	61·0	82·5	68·6	75·6	−4·5	87	−3
	Cuttack ...	Cuttack ...	30·077	29·708	29·892	29·917	+·041	S72°W	57	98·1	65·3	88·2	69·9	79·1	−6·0	75	+1
	Balasore ...	Balasore ...	30·093	29·724	29·907	29·911	+·029	S89°W	113	96·4	54·5	85·4	67·0	76·2	−4·3	83	—
South-West Bengal.	Midnapore ...	Midnapore ...	30·012	29·633	29·823	29·921	+·040	S32°W	220	98·3	59·2	87·0	66·2	76·6	−5·3	74	—
	24-Parganas ...	Calcutta ...	30·127	29·765	29·946	29·913	+·035	S27°W	65	92·6	57·7	83·7	65·6	74·7	−5·6	84	+3
		Saugor Island ...	30·114	29·783	29·943	29·913	+·033	N83°W	266	90·2	61·9	82·3	70·0	76·2	−5·1	89	−1
	Howrah ...	......															
	Hooghly ...	......															
	Nadia ...	Krishnagar ...	30·109	29·730	29·915	29·912	+·064	S23°W	99	96·1	54·4	84·6	63·5	74·1	−5·2	76	—
	Khulna ...	......															
	Jessore ...	Jessore ...	30·107	29·753	29·923	29·909	+·029	S14°W	60	96·0	54·5	84·6	64·7	74·7	−6·0	86	+4
	Burdwan ...	Burdwan ...	30·047	29·685	29·871	29·920?	+·042	S45°W	24	96·7	56·6	84·5	65·1	74·8	−6·5	73	+3
		Raniganj ...	29·822	29·401	29·628	29·935	+·037	N50°W	39	99·7	56·1	85·4	63·8	74·6	−6·6	76	—
	Bankura ...	Bankura* ...	29·817	29·454	29·639	29·898	+·031	N73°W	57	98·1	58·3	85·9	64·7	75·3	−5·9	74	—
	Birbhum ...	......															
	Murshidabad ...	Berhampore ...	30·093	29·713	29·892	29·910	+·036	S18°W	63	91·7	54·7	83·9	63·1	73·5	−6·2	88	+19
North Bengal.	Pabna ...	Sirajganj ...	30·090	29·742	29·915	29·912	+·040	S49°W	40*	90·1	52·3	82·1	61·2	71·6	−5·1	86	—
	Bogra ...	Bogra ...	30·050	29·732	29·892	29·908	+·057	N82°E	68	90·2	50·2	83·3	60·0	71·7	−5·5	84	—
	Rajshahi ...	Rampur Boalia	30·086	29·699	29·885	29·906	+·048	S34°W	71	91·6	52·7	83·3	60·9	72·1	−5·4	78	—
	Malda ...	Malda ...	30·070	29·666	29·876	29·910	—	S17°W	83	92·0	50·2	84·1	59·1	71·6	—	74	—
	Dinajpur ...	Dinajpur ...	30·025	29·660	29·836	29·913	+·019	N14°E	87	91·6	49·9	83·4	59·7	71·6	−4·5	76	—
	Rangpur ...	Rangpur ...	30·028	29·667	29·840	29·921	+·053	N18°W	64	88·2	48·6	82·1	58·1	70·1	−4·0	78	—
	Jalpaiguri ...	Jalpaiguri ...	29·890	29·505	29·692	29·911	+·069	N81°E	60	85·9	48·6	80·0	57·8	68·9	−4·0	78	—
	Kuch Bihár ...	......															
	Darjeeling ...	Darjeeling ...	23·089	22·825	22·962	—	−·030	S63°E	185	56·5	31·7	51·4	38·5	45·0	−5·1	77	+11
	Sikkim ...	Gnatong ...	19·270	19·011	19·155	—	—	S59°E	114	43·6	6·3	34·9	13·0	24·0	—	71	—
East Bengal.	Chittagong ...	Chittagong ...	30·036	29·775	29·897	29·934	+·014	N45°E	79	89·2	56·1	84·0	64·1	74·1	−2·9	82	−2
	Chittagong Hill Tracts	Demagri ...					Observations not received.										
	Backergunge ...	Barisal ...	30·117	29·799	29·958	29·916	+·037	S27°E	79*	91·8	54·1	84·0	65·4	74·7	−3·8	87	—
	Noakhali ...	Noakhali ...	30·070	29·794	29·944	29·935	+·036	N24°E	117	85·5	51·0	82·1	63·4	72·8	−4·1	84	—
	Faridpur ...	Faridpur ...	30·107	29·772	29·934	29·920	+·035	S56°W	66	90·5	52·5	82·7	62·8	72·8	−5·5	88	—
	Dacca ...	Dacca ...	30·120	29·781	29·942	29·912	+·027	S	112	92·1	56·3	83·8	64·8	74·3	−5·1	83	+3
	Tippera ...	Comilla ...	30·078	29·797	29·943	29·927	+·036	S48°E	92	89·4	52·6	84·1	63·1	73·7	−3·9	83	—
	Mymensingh ...	Mymensingh ...	30·060	29·750	29·907	29·924	+·026	N86°E	95	88·2	52·7	81·1	62·1	71·6	−3·0	81	—
North Bihar.	Purnea ...	Purnea ...	30·044	29·627	29·832	29·916	+·015	S76°E	50	91·2	49·3	83·8	58·6	71·2	−4·4	85	+25
	Bhagalpur ...	Bhagalpur ...	29·982	29·569	29·784	29·902	+·043	S27°E	21	93·7	52·0	84·5	60·1	72·4	−4·8	69	—
	Darbhanga ...	Darbhanga ...	30·002	29·583	29·793	29·920	+·017	N82°E	94	90·7	51·6	83·1	59·7	71·4	−4·3	69	+15
	Muzaffarpur ...	Muzaffarpur	29·966	29·565	29·773	29·912	—	S51°E	93	90·7	49·3	83·3	57·6	70·5	—	85	—
	Champaran ...	Motihari ...	29·894*	29·527*	29·709*	29·900*	+·046	S14°W	123	90·6	47·9	83·3	55·6	69·5	−4·8	72	—
	Saran ...	Chapra ...	29·967	29·563	29·769	29·910	+·065	S34°W	107	94·3	50·7	84·5	59·4	71·0	−5·0	68	—
South Bihar.	Shahabad ...	Dehri ...	29·764	29·374	29·582	29·899	+·018	S30°W	39*	96·9	54·0	85·3	62·0	73·7	−4·0	62	—
		Buxar ...	29·904	29·504	29·710	29·912	+·037	S72°W	97	96·5	51·4	81·8	60·1	72·5	−5·4	61	—
		Arrah ...	29·946	29·552	29·759	29·908	+·059	S32°W	82	96·1	50·3	85·2	59·4	72·3	−5·4	65	—
	Gaya ...	Gaya ...	29·765	29·369	29·570	29·911	+·027	S2°W	127	97·3	53·6	85·8	61·0	73·4	−6·9	69	+23
	Patna ...	Bankipore ...	29·969	29·569	29·773	29·914	+·040	S22°W	100	93·6	51·4	84·5	60·1	72·3	−5·2	63	+10
	Monghyr ...	......															
	Sonthal Parganas ...	Naya Dumka	29·651	29·272	29·455	29·918	+·050	N81°W	32*	94·6	53·6	83·9	61·7	72·8	−6·5	68	—
Chota Nagpur.	Hazaribagh ...	Hazaribagh ...	28·080	27·734	27·916	29·909	+·008	S75°W	185	91·2	51·3	80·8	59·1	70·0	−6·5	55	+14
	Lohardaga ...	Ranchi ...	27·952	27·619	27·795	29·907	+·011	N70°W	142	90·0	52·4	78·9	58·7	68·8	−7·4	66	—
	Palamau ...	......															
	Singhbhum ...	Chaibassa ...	29·364	28·997	29·190	29·918	+·042	S57°W	35	94·8	57·4	84·8	63·9	74·4	−7·3	78	—
	Manbhum ...	......															
Assam	Sibsagar ...	Sibsagar ...	29·842	29·431	29·647	29·940	+·008	N75°E	40	82·4	52·2	76·3	58·7	67·5	−2·2	94	+5
	Goalpara ...	Dhubri ...	30·030	29·673	29·853	29·927	+·042	N56°E	152	86·2	53·0	81·1	61·0*	71·0*	−4·7*	79	+5
	Cachar ...	Silchar ...	30·076	29·727	29·893	29·952	+·031	S63°E	29	88·0	55·0	82·1	60·7	71·4	−2·9	86	+1

* Mean of 30 days.

Bengal for the month of March 1893.

Cloud.			District Observations.										
			Rainfall.										
			Of month.					Since 16th October 1892.					
Mean cloud amount, 8 A. M.	Variation from normal mean, 8 A. M.	Rainfall.	Mean of district.	Normal mean.	Variation from mean.	Number of rainy days.	Normal mean number of rainy days.	Mean of district.	Normal mean.	Variation.	Mean number of rainy days.	Normal mean number of rainy days.	DISTRICT.
3·0 1·9 6·3	— — +3·2	1·05 2·93 1·51	2·08	0·80	+1·28	5·00	1·36	14·47	8·69	+5·78	19·75	10·56	Puri.
4·2	+2·3	3·20	3·59	1·12	+2·47	5·20	1·91	13·28	6·52	+6·76	21·40	9·66	Cuttack.
2·1	—	2·50	2·16	1·29	+0·87	5·33	2·10	13·17	5·68	+7·49	22·50	8·89	Balasore.
2·6	—	2·00	2·75	1·47	+1·28	5·25	2·04	15·40	5·99	+9·41	19·00	7·58	Midnapore.
4·1 5·4	+1·6 +1·2	1·85 3·76	2·07	1·64	+0·43	4·71	2·21	15·19	6·35	+8·84	19·13	9·00	24-Parganas.
			2·31	1·33	+0·98	5·50	2·37	11·23	5·26	+5·97	19·50	8·65	Howrah.
			2·21	1·26	+0·95	5·00	1·98	15·74	4·98	+10·76	19·00	7·79	Hooghly.
4·2	—	1·83	2·23	1·80	+0·42	6·60	2·44	12·19	5·23	+6·96	19·30	7·54	Nadia.
			4·28	2·19	+2·09	5·00	2·92	16·74	6·65	+10·09	21·67	9·57	Khulna.
5·0	+1·9	2·28	2·96	2·24	+0·72	5·60	3·08	16·91	6·15	+10·76	20·60	8·96	Jessore.
4·4	+2·4	3·10	2·59	1·23	+1·33	4·00	1·92	12·41	4·69	+7·72	19·00	6·72	Burdwan.
0·8 3·4	— —	0·47 1·48	1·77	1·14	+0·63	3·50	1·91	11·94	4·33	+7·61	18·75	7·63	Bankura.
			1·15	0·63	+0·52	3·50	1·24	10·09	3·61	+6·48	16·16	6·12	Birbhum.
4·3	+1·9	1·35	2·03	0·91	+1·12	3·33	1·67	8·55	3·87	+4·68	13·67	6·23	Murshidabad.
5·0	—	4·03	3·22	1·50	+1·72	5·00	2·48	9·39	5·19	+4·20	18·50	8·15	Pabna.
2·9	—	2·49	2·45	1·10	+1·35	3·75	1·94	6·56	4·32	+2·24	12·75	6·25	Bogra.
3·4	—	1·04	2·19	0·87	+1·32	4·67	1·48	7·15	3·59	+3·56	14·34	5·73	Rajshahi.
2·1	—	1·41	0·74	0·60	+0·14	1·00	1·13	4·39	3·13	+1·26	10·50	4·86	Malda.
3·0	—	0·31	0·88	0·70	+0·18	2·40	1·14	3·43	2·89	+0·54	9·00	4·57	Dinajpur.
1·2	—	0·46	1·05	1·47	—0·42	3·00	1·87	3·73	4·25	—0·52	10·00	5·45	Rangpur.
4·8	—	2·45	2·04	1·80	+0·24	4·00	2·11	4·80	5·57	—0·77	13·00	6·07	Jalpaiguri.
			2·32	1·84	+0·48	3·75	2·63	4·64	5·32	—0·68	11·00	6·95	Kuch Bihar.
6·5 3·8	+1·8	1·33 5·37	1·53	2·12	—0·59	4·00	3·33	7·08	6·61	+1·37	15·50	10·32	Darjeeling.
													Sikkim.
4·5	+0·3	1·93	1·39	2·07	—0·68	2·50	2·58	14·83	8·66	+6·17	15·00	10·14	Chittagong.
			1·69	2·78	—1·09	4·00	4·00	11·79	8·85	+2·94	21·00	12·55	Chittagong Hill Tracts.
5·6	—	1·46	2·50	2·17	+0·33	5·50	3·01	14·22	7·63	+6·59	21·00	9·95	Backergunge.
2·8	—	3·47	5·35	3·78	+1·57	5·00	4·40	23·32	10·59	+12·73	24·50	11·08	Noakhali.
4·1	—	3·52	3·25	2·70	+0·55	6·33	3·81	15·38	6·53	+8·85	20·00	9·97	Faridpur.
5·6	+2·3	6·13	4·49	3·21	+1·28	5·25	3·56	17·37	7·54	+9·83	20·00	10·40	Dacca.
5·1	—	2·72	4·86	4·11	+0·75	6·50	4·45	16·33	8·49	+7·84	23·50	11·82	Tippera.
4·9	—	2·41	3·17	2·22	+0·95	6·20	3·32	9·42	5·96	+3·46	15·40	8·66	Mymensingh.
2·0	+0·5	0·08	1·28	0·56	+0·72	2·00	0·97	3·51	3·12	+0·39	8·34	4·48	Purnea.
2·6	—	0·12	0·49	0·37	+0·12	1·50	0·78	3·98	2·75	+1·23	9·50	4·76	Bhagalpur.
2·4	+1·2	0·19	0·10	0·30	—0·20	0·33	0·67	2·82	2·30	+0·52	6·33	4·00	Darbhanga.
2·1	—	0·53	0·37	0·48	—0·11	1·33	0·93	3·06	2·61	+0·45	7·36	5·01	Muzaffarpur.
2·2	—	0·20	0·20	0·37	—0·17	0·50	0·80	2·51	1·94	+0·57	6·50	4·29	Champaran.
3·1	—	0·98	0·48	0·21	+0·27	1·00	0·73	3·10	2·43	+0·67	8·66	4·82	Saran.
1·7 2·5 0·9	— — —	1·19 0·88 0·39	0·76	0·41	+0·35	2·20	0·97	3·71	3·08	+0·63	11·35	5·62	Shahabad.
2·6	+0·5	0·59	0·54	0·39	+0·15	2·50	0·96	4·48	2·63	+1·85	13·00	5·12	Gaya.
2·3	+0·2	0·36	0·39	0·30	+0·09	3·50	0·89	3·32	2·73	+0·59	10·75	5·16	Patna.
			0·43	0·33	+0·10	0·67	0·78	5·63	2·79	+2·84	10·33	4·93	Monghyr.
1·7	—	1·99	1·44	0·56	+0·88	3·00	1·06	6·77	2·86	+3·91	15·01	4·99	Sonthal Parganas.
3·1	+1·5	1·77	1·87	0·85	+1·02	4·60	1·46	10·14	3·31	+6·83	19·15	6·49	Hazaribagh.
2·7	—	2·67	1·93	0·86	+1·07	5·00	2·16	13·78	4·11	+9·67	20·00	8·43	Lohardaga.
3·6	—	2·74	0·95	0·65	+0·30	3·00	1·53	4·43	3·43	+1·00	13·00	6·72	Palamau.
			2·74	1·21	+1·53	6·00	1·49	15·28	4·65	+10·63	22·00	8·04	Singhbhum.
			2·14	0·77	+1·37	4·50	2·99	11·01	3·59	+7·42	21·00	7·96	Manbhum.
5·6	—0·4	4·02											Sibsagar.
4·0	+1·3	1·64											Goalpara.
6·0	+1·6	5·53											Cachar.

Table of Rainfall recorded at stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ORISSA	Puri ...	Puri ...	...	...	...	.	...	0·36	..	...	...	...	...	...	0·18	0·13	...	..	...	...	...	...
		Khurda ...	..	...	...	0·05	...	0·72	...	0·14	0·05	...	...	...	1·85	0·13	...		...	...	...	...
		Banpur ...	...	...	..	0·60	...	0·10	..	0·10	...	...	...	...	0·55	0·07	...	0·28	..	..	...	...
		False Point ...	..	...	...	...	...	0·17	...	...	...	...	...	...	0·21	0·03	...	0·05	...	...	...	...
		Gop ..	...	...	..	...	...	0·32	.	.	...	...	...	...	0 10	...	...	0·60	...	..	...	..
		Satpara ...	...	...	...	...	...	0·05		1·20	0·02	...	...	...	0·40	0·05	...	0·65	...	...	...	...
		Pipli ..	...	...	...	...	...	0·90	..	0·09	...	...	...	...	0·13	0·10	...	0·85	..	...	...	...
	Cuttack ...	Jagatsingpur	..	..	...	0·30	...	1·60	..	..	...	...		...	0·15	0·04	...	0·35	..	...	...	...
		Banki ...	...	..	..	..	..	2·15		0·05	0·09	...	0·11	..	0·39	0·15	...	..	...	...	...	...
		Cuttack ...	...	..	..	...	...	2·40	.	0·41	.	...	...	..	0·92	0·42	..	...	...	...	...	0·07
		Kendrapara ..	...	..	..	.	...	0·72	..	0·01	0·?3	...	...	...	1·19	0·19	...	0·32	...	...	....	...
		Jajpur ...	.	...	..	...	...	0 78	..	...	0·10	...	...	...	0·27	0·35	...	0 07	...	...	...	...
		Dharmsalla ...	..	...	...	..	...	1 80	...	...	...	...	...	...	0·10	0·28	...	...	...	...	...	...
		Salipur ...	.	...	...	...	...	1·00			...	.	.	...	0·48	0·21	.	.	...	...	..	...
		Pal Lahara ...	...	...	...	...	...	...	0·48	1·16	...	...	0·14	...	0·18	..	...	.	...	...	...	0 32
	Balasore ...	Akhyapada ..	...	...	..	...	...	0·36	..	...	0·03	..	...	...	1·02	0·23	...	0·20	..	...	...	...
		Chandbali ...	..	...	..	0·94	...	0·24	.	...	0·10	...	...	...	0·16	0·24	...			...	...	...
		Bhadrak ..		...	.	0·09	...	.	...	...	0·77	...	...	..	0·36	0·27	...	0·30		...	...	...
		Soro ...	..	...	...	0·30	..	0·08	..	...	...	...	..	...	0 30	0 2?	.	0 10	.	...	.	0·30
		Balasore ...	...	...	..	...	...	0·02	.	...	0·11	0·01	...	.	0 24	0·22	..	0·14	.	...	.	0·20
		Jellasore ...	...	...	..	...	...	...		...	0·21	...	...	...	.	...	..	...	.	..	...	...
		Baripada ...	...	...	...	...	...	...	...	...	0·18	...	...	..	0·18	...	...		...	...	...	0·45
SOUTH-WEST BENGAL.	Midnapore .	Contai ...	...	..	..	...	...	...		...	0·09	..	...	...	0 09	0·17	...	0·06	...	...	...	0·12
		Tamluk ..	...	...	..	...	...	...		...	0·13	...	...	...	0·25	.	...	0 04	...	...	...	0·24
		Midnapore ...	..	...	...	...	..	...	...	...	0·15		...	.	0·21	0·07	...		...	...	...	0·12
		Ghatal ..	..	..	.	...	..	...		...	0·08	...	..	...	0·18	0·13	...	0·62	..	...	...	1·19
		Kukrahaty ...	...	..	.	...	...	...	.	...	0·08	...	..	...	0·97	0·?5	...			...	...	0·35
		Garhbeta ...	...		..	...	...	...	..	...	0·70	..	...	..	0·??	0·05	...	0·08	...	...	...	0·25
		Panskura ...	.	.	..	...	..	...		.	...	...	...	..	0·11	0·0?	..	0·03	..	...	..	...
	24 Parganas...	Saugor Island		...		.	...	...	...	.	.	...	...	...	0·11	0·3?	..		...	...	..	...
		Diamond Harbour.	..	..	...	...	...	...	...	...	0·50	...	...	...	1·30	.	...	..	..	...	...	0·34
		Canning Town	...	...	..	...	...	...		..	0·80	...	...	...	0·32	0·16	...	..	...	..	...	0·80
		Alipore (Observatory).	...	.		..	...	...		...	0·24	...	...	...	0·29	0·01	...	...	..	...	..	0 25
		Barrackpore...	...	.	...	...	...	...		...	0·20	...	...	...	...	0·25	...	..	...	..	...	0·73
		Dum-Dum ...	..	..	...	...	...	...		...	0·25	...	...	...	0·38	...	...	..	...	...	...	0·46
		Barasat ...	..		...	...	..	...	...	...	0·61	...	...	...	0·30	...	...	..	...	...	...	0·23
		Basirhat ..	...	...	...	...	...	...	...	...	0·12	...	..	...	0·54	...	...	...	...	...	...	0·21
	Howrah ...	Howrah ...	...	.	...	...	...	...	...	..	0·10	...	..	...	0·22	...	...	..	..	...	...	0·18
		Mohesreka ...	...	.	...	.	...	...		..	0·52	...	...	...	0·28	0 02	..	..	..	...	...	0·16
		Ulubaria ...	...	...	...	...	..	...	.	...	0·16	...	...	...	0·30	...	...	...	...	...	...	0·65
	Hooghly ...	Serampore ...	...	...	...	..	..	...	...	...	0·19	...	...	...	0·21	0·06	...	.	...	...	...	1·12
		Hooghly ...	...	...	...	...	...	...	.	..	0·29	...	...	...	0 10	1·?5	.	...	...	...	...	0·85
		Jahanabad ...	...	...	..	...	...	...	...	...	0·13	...	..	...	0 11	1·04	...	0 35	...	...	..	0·49
	Nadia ...	Ranaghat ...	..	..	..	...	...	...	..	...	0·33	...	...	...	0·27	0·14	...	...	...	...	...	...
		Krishnagar ...	.	...	.	...	..	...	.	.	1·24	...	...	...	0·08	0·12	...	...	...	...	...	0·05
		Chuadanga ..	...	...	...	...	...	...		..	0·35	...	...	...	0·04	0 11	...	...	..	...	...	0·25
		Meherpur ...	...	...	.	...	...	...			0·55	...	...	...	0·07	0·03		0·04	...	...	...	0·31
		Kushtia ..	.	...	..	...	...	...	..	0·45	0·32	...	...	...	0·03	..	0·10	0·03	..	...	...	0·46
	Khulna ..	Satkhira ...	...	...	...	...	...	...		...	0 10	...	...	...	0·03	1·60	..				...	1·17
		Bagerhat ...	...	..	..	..	...	...	..	...	...	...	...	...	0·04	1·?2	...	..	..	...	...	2·92
		Khulna ...	...	...	.	...	...	...	...	...	...	...	.	...	0·23	1·20	...	...	...	..	...	2·42
		Nakipur ...	...	...	.	...	...	...	...	..	...	...	..	...	0·20	...	...	...	0·52	...	...	0·53
		Rampal ..	...	...	...	...	...	...	.	...	...	...	...	...	...	0·30	.	...	...	...	...	2·10
	Jessore ...	Narail ...	..	...		...	...	...	.	..	0·?3	...	...	...	0·24	0·46	..	..	...	...	...	1·25
		Jessore ...	..	.	..	...	...	...	.		0·08	...	...	...	0·11	0·33	...	..	...	...	...	0·28
		Jhenidah ...	.	...	..	...	...	...	..	...	0·31	...	...	...	0·04	0·13	...	...	...	...	...	0·34
		Magura ...	.	..	...	..	...	...	...	..	0·85	...	..	...	0·06	0·05	...	...	...	...	...	0·33
		Bangaon ...	...	..	...	..	...	...	...	.	0·12	...	...	...	0·07	1·29	...	...	...	...	...	0·45
	Burdwan ...	Kalna ..	...	...	...	...	...	...	...	...	0·44	...	...	...	0·04	0·16				...	...	...
		Burdwan ...	...	...	...	..	...	...	..	0·01	1·15	...	...	...	0·34	0·09	...	0·32	...	...	...	0·01
		Katwa ...	...	...		.	...	...	..	...	0·65	...	0·01	..	0·06	...	.	0·36	0·01	...	...	0·71
		Raniganj ...	...	..	..	...	...	...	..		0·15	...	0·05	0·05	0·?8	..	0·02		...	...	...	...
		Mankur ...	...	.	...	...	...	...	...	0·30	0·45	...	...	...	0·06	...	...	...	...	..	...	...
	Bankura ...	Bankura ...	...	.	..	...	...	...	..	.	0·31	...	...	0·02	0·06	...	...	...	...	...	...	0·17
		Vishnupur ...	...	...	..	...	...	...	..	0·08	0·37	...	...	.	0·25	...	...	..	...	...	...	0·94
		Maliara ...	...	...	...	...	...	...	..	...	0·98	...	...	0·03	0·15	...	0 11	..	..	..	...	...
		Khatra ...	...	...	..	...	...	...	...	.	0·40	..	...	...	...	...	...	...	...	...	...	0·12
		Indas ...	..	...	...	...	...	...	..	...	1·68	...	...	...	0·46	...	...	...	...	...	...	0·23
		Kotalpur ...	...	...	...	...	...	...	...	...	1·62	...	...	...	...	...	...	...	...	...	...	0·62
		Anda ...	...	...	..	...	...	...	.	0·41	0·35	...	...	0·15	0·27	...	...	...	...	...	...	0·43
		Gangajalghati	...	...	...	...	...	...	...	0·22	0·22	...	...	...	0·68	...	0 82	...	...	...	..	0·11
		Raipur ...	...	...	...	...	...	...	...	...	1·64	...	...	...	...	...	...	...	...	...	...	...
		Sonamukhi ...	...	...	...	...	...	...	...	...	0·43	...	...	...	0·56	...	...	...	...	...	...	...
	Birbhum ...	Suri ...	...	...	...	...	...	...	...	...	0·58	...	0·05	0·07	0·01	0·01	0·46	0·65	...	...	0·30	0·11
		Hetampur ...	...	...	...	...	...	...	...	...	0 25	...	0·05	0·07	0·03	0·01	0·01	...	...	...	...	0·05
		Rampur Hát	...	...	...	...	...	...	...	...	0·31	...	...	0·09	...	0·03	0·12	...	...	...	0·29	...
		Bolpur ...	...	...	...	...	...	...	...	...	1·19	...	...	...	0·11	...	...	...	...	...	...	0·30
		Murarai ...	...	...	...	...	...	...	...	...	0·14	...	...	...	...	0·70	...	...	...	...	0·76	0·35
	Murshidabad	Kandi ...	...	...	...	...	...	...	...	...	0·42	...	...	0·04	...	...	0·06	...	...	...	...	0·18
		Berhampore...	...	...	...	...	...	...	...	...	0·42	...	...	0·03	...	0·07	...	...	...	...	...	0·81
		Lalbagh ...	...	...	...	...	...	...	...	...	0·37	...	...	...	...	0 30	0·03	...	...	...	...	0·55
		Azimganj ...	...	...	...	...	...	...	...	...	0·29	...	...	0·04	...	1·30	1·20	...	...	...	...	0·45
		Jangipur ...	...	...	...	...	...	...	...	...	0·09	...	...	0·05	...	0·21	...	0·02	...	...	0·43	0·61
		Lalgola .	...	...	...	...	...	...	...	...	0·35	...	...	...	...	...	0·60	...	...	...	...	1·35
		Akhriganj ...	...	...	...	...	...	...	...	...	0·21	...	...	...	...	1·48	0·07	...	...	...	...	0·57
		Patkabari ...	...	...	...	...	...	...	...	...	0·80	...	...	...	...	...	...	...	...	...	...	0·20
	Pabna ...	Pabna ...	...	...	...	...	...	...	...	...	0·21	...	...	...	...	...	...	0·56	..	...	...	0·76
		Sirajganj ...	...	...	...	...	...	...	...	...	0·19	...	...	...	...	0·18	0·26	.	...	...	...	1·02
	Bogra ...	Sherpur ...	...	...	...	...	...	...	...	...	0·17	...	...	...	...	...	0·34	...	...	...	...	0·85
		Nowkhilla ...	...	...	...	...	...	...	...	...	0·17	...	...	...	...	0·02	...	...	...	...	...	1·28
		Bogra ...	...	...	...	...	...	...	..	..	0·12	...	...	...	...	0·30	...	...	...	...	0·02	1·20
		Panchbibi ...	...	..	...	...	...	...	...	...	1·29	...	...	...	...	1·26	...	0·70	..	...	0·55	0·22
	Rajshahi ...	Boalia ...	...	...	...	...	...	...	...	..	0·18	...	...	...	...	0·28	0·16	...	...	...	...	0·64
		Natore ...	...	...	...	...	...	...	...	...	0·19	...	...	...	...	0·08	0·13	0·12	...	...	...	1·37
		Naogaon ...	...	...	...	...	...	...	...	...	0·10	...	...	...	...	0·07	...	...	...	...	1·00	...
		Lalpur ...	...	...	...	...	...	...	...	...	0·20	...	...	...	...	0·08	0·80	1 00	...	...	0·50	0·83
		Manda ...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	1·03	...	...	...	1·80

in Bengal in March 1893.

21	22	23	24	25	26	27	28	29	30	31	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 16th October 1892 to 31st March 1893.	Average rainfall from 16th October to 31st March.	Station.	District.	Meteorological division.
...	...	...	0·38	...	...	...	...	...	...	...	4	0·80	1·05	0·52	0·38	16·37	9·15	Puri ...	Puri	ORISSA.
...	...	0·15	0·55	...	...	...	...	...	...	...	6	1·53	3·64	0·82	1·85	11·00	6·85	Khurda.		
...	...	0·05	0·07	...	...	...	...	0·29	...	...	6	1·60	2·11	0·72	0·60	15·82	8·55	Hanpur.		
...	...	0·91	0·14	...	...	...	...	...	...	...	4	1·.0	1·51	1·06	0·91	14·64	10·05	False Point.		
...	...	...	0·10	...	...	...	0·15	...	...	...	5	?	1·27	?	0·60	12·85	?	*Gop.*		
...	...	...	2·30	...	...	...	...	...	...	...	3	?	4·07	?	2·.0	15·27	?	*Satpara.*		
...	...	...	...	...	...	...	...	...	...	...	4	?	2·07	?	0·90	10·63	?	*Pipli*		
...	...	1·88	...	...	...	...	...	...	...	...	5	1·21	4·32	0·81	1·88	16·47	6·12	Jagatsingpur.	Cuttack	
...	0·03	0·33	...	...	...	...	...	0·04	...	...	5	2·63	3·34	1·28	2·.5	11·36	6·93	Banki.		
...	...	0·11	...	...	...	...	...	...	...	...	4	1·75	4·.2	1·27	2·41	16·41	6·55	Cuttack.		
...	0·12	1·72	...	...	...	...	...	...	...	...	6	1·84	2·67	0·87	1·19	11·85	6·46	Kendrapara.		
...	0·15	1·60	...	...	...	...	...	...	...	...	6	2·11	3·41	1·13	1·72	10·33	6·22	Jajpur.		
...	...	0·30	...	...	...	...	...	...	...	...	5	?	3·33	?	1·80	12·45	?	*Dharmsala.*		
...	...	...	...	...	...	...	...	...	...	...	4	?	2·02	?	1·00	11·04	?	*Salipur.*		
...	0·10	...	...	...	...	...	...	...	...	...	6	?	2·68	?	1·16	11·10	?	Pal Lahara.		
...	0·26	1·35	...	...	...	...	...	...	...	...	6	?	3·55	?	1·35	9·38	?	Akhyapada ...	Balasore	
...	0·06	1·37	...	...	...	...	...	...	...	...	6	1·63	3·11	1·09	1·37	10·57	6·82	Chandbali		
...	0·11	0·94	...	...	...	...	...	...	...	...	6	2·00	2·84	1·38	0·94	15·02	6·24	Bhadrak.		
...	0·25	...	...	...	...	...	...	...	...	...	6	2·31	1·53	1·13	0·30	11·31	5·38	Soro.		
0·97	0·07	0·08	...	...	...	...	...	...	...	...	6	2·65	2·06	1·35	0·37	16·96	6·91	Balasore.		
0·92	0·94	...	...	...	...	...	...	...	...	...	3	1·81	2·07	0·99	0·94	10·29	4·16	Jellasore.		
0·22	0·33	...	...	...	...	...	...	...	...	...	5	2·18	1·36	1·21	0·45	13·97	4·42	Baripada		
0·13	0·13	1·85	...	...	...	...	...	...	...	...	5	1·70	2·64	1·05	1·85	16·88	8·29	Contai	Midnapore	SOUTH-WEST BENGAL.
1·15	0·80	0·74	...	...	...	...	...	...	...	...	6	2·42	3·35	1·77	1·15	12·96	0·25	Tamluk.		
1·19	...	0·30	...	...	...	...	...	...	...	...	5	2·20	2·04	1·46	1·19	14·72	5·44	Midnapore.		
0·72	...	0·04	...	...	...	...	...	...	...	...	5	1·85	2·.6	1·62	1·11	17·03	3·93	Ghatal.		
0·62	0·15	0·42	...	...	...	...	...	...	...	...	5	?	2·65	?	0·97	12·40	?	*Kukrahaty.*		
0·33	...	0·06	...	...	...	...	...	...	...	...	4	?	1·62	?	0·70	9·95	?	*Garhbeta.*		
0·48	0·10	0·46	...	...	...	...	...	...	...	...	4		1·21?					Panskura.		
0·26	0·17	2·82	0·03	...	...	...	...	...	...	...	5	1·70	3·76	1·29	2·82	21·59	8·33	Saugor Island	24-Parganas.	
0·48	0·20	0·54	...	...	...	...	...	...	...	...	6	2·11	3·36	1·44	1·30	16·78	6·60	Diamond Harbour.		
1·15	0·64	1·95	1·20	...	...	...	...	...	...	...	8	?	7·02	?	1·95	21·57	?	*Canning Town.*		
0·72	0·01	0·35	...	...	...	...	...	...	...	...	5	2·26	1·85	1·69	0·72	11·70	6·52	Alipore (Observatory.)		
0·11	0·05	0·10	...	...	...	...	...	...	...	...	5	2·32	1·44	1·72	0·73	16·42	5·55	Barrackpore.		
...	...	0·33	...	...	...	...	...	...	...	...	4	2·05	1·42	1·57	0·46	11·67	5·49	Dum-Dum.		
0·10	...	...	...	...	...	...	...	...	...	...	4	2·32	1·24	1·.7	0·61	13·46	5·94	Baraset.		
...	...	0·53	...	...	...	...	...	...	...	...	4	2·74	1·40	2·18	0·54	14·61	6·03	Basirhat.		
0·32	...	0·25	...	...	...	...	...	...	...	...	5	2·31	1·07	1·47	0·32	9·06	5·66	Howrah	Howrah	
1·23	0·21	0·82	...	...	...	...	...	...	...	...	6	2·43	3·54	1·18	1·.3	13·37	4·79	Mohesreka		
0·60	0·06	0·55	...	...	...	...	...	...	...	...	5	?	2·32	?	0·65	10·15	?	*Ulubaria.*		
0·11	0·04	0·10	...	...	...	...	...	...	...	...	5	1·84	1·83	1·32	1·12	17·69	5·14	Serampore ...	Hooghly.	
0·19	...	0·03	...	...	...	...	...	0·04	...	...	5	2·00	3·25	1·30	1·75	17·46	4·83	Hooghly.		
0·44	...	...	...	...	...	...	...	...	...	...	5	2·11	1·56	1·15	0·44	12·09	4·95	Jahanabad.		
0·92	0·38	...	...	...	...	...	...	...	...	...	5	2·20	2·24	1·58	0·92	14·04	5·00	Rangahat ...	Nadia.	
0·20	0·14	...	...	...	...	...	...	...	...	...	4	2·20	1·.3	1·48	1·24	14·62	4·25	Krishnagar.		
1·54	0·72	0·05	...	...	...	...	...	...	...	...	5	2·70	3·06	1·88	1·54	?	5·59	Chuadanga.		
0·03	0·50	0·03	...	...	...	...	...	...	...	...	3	2·50	1·56	2·17	0·55	10·58	5·29	Meherpur.		
0·78	0·25	...	...	...	...	...	...	...	...	...	6	2·60	2·42	1·87	0·78	10·55	6·02	Kushtia.		
0·10	...	0·31	...	...	...	...	...	...	...	...	6	3·00	3·57	2·56	1·60	14·68	6·34	Satkhira	Khulna.	
0·47	...	0·52	...	...	...	...	...	...	...	...	4	2·56	4·97	1·82	2·92	17·92	7·08	Bagerhat.		
0·34	...	0·11	...	...	...	...	...	...	...	...	5	3·24	4·30	2·20	2·42	17·60	6·56	Khulna.		
0·32	0·08	2·00	...	...	...	...	...	...	...	...	5	?	3·65	?	2·00	12·12	?	*Nakipur.*		
...	...	0·27	0·40	...	...	...	...	...	...	...	4	?	3·07	?	2·10	13·70	?	*Rampal.*		
2·78	0·60	0·55	...	...	...	...	...	...	...	...	6	3·06	5·91	1·94	2·78	18·46	6·22	Narail	Jessore.	
0·20	1·00	0·24	...	...	...	...	...	...	...	...	6	3·40	2·.8	2·52	1·00	20·64	6·92	Jessore.		
0·35	0·12	0·73	...	...	...	...	...	...	...	...	6	3·05	2·02	2·44	0·73	16·31	6·25	Jhenidah		
0·23	0·51	0·20	...	...	...	...	...	...	...	...	5	3·50	2·23	2·53	0·85	14·17	5·67	Magura.		
0·13	0·25	0·05	...	...	...	...	...	...	...	...	5	2·40	2·30	1·79	1·29	15·01	5·69	Baugaon		
1·42	0·60	...	...	...	...	...	...	...	...	...	4	2·11	2·66	1·31	1·42	15·39	4·79	Kalna ...	Burdwan	
1·14	0·03	...	...	...	...	...	...	...	...	...	4	2·05	3·10	1·57	1·15	14·48	5·13	Burdwan.		
0·09	0·14	...	...	...	...	...	...	...	...	...	4	2·05	2·02	1·29	0·71	10·62	5·07	Katwa.		
0·12	...	...	...	...	...	...	...	...	...	...	2	1·45	0·47	0·65	0·15	7·10	3·70	Raniganj.		
0·95	...	...	...	...	...	...	...	...	...	...	3	?	1·76	?	0·95	8·76	?	*Mankur.*		
0·92	...	...	...	...	...	...	...	...	...	...	3	1·85	1·48	1·25	0·92	11·51	4·69	Bankura ..	Bankura	
1·65	...	...	...	...	...	...	...	...	...	...	4	2·40	3·29	1·37	1·65	14·52	4·20	Vishnupur.		
0·15	...	...	...	...	...	...	...	...	...	...	4	1·00	1·42	0·67	0·98	8·03	3·50	Maliara.		
0·36	...	...	...	...	...	...	...	...	...	...	3	1·89	0·88	1·14	0·40	13·65	4·61	Khatra.		
1·23	...	...	...	...	...	...	...	...	...	...	4	?	3·60	?	1·68	14·11	?	*Indus.*		
...	...	...	...	...	...	...	...	...	...	...	2	?	2·24	?	1·62	11·90	?	*Kotalpur.*		
0·36	...	...	...	...	...	...	...	...	...	...	6	?	1·97	?	0·43	12·32	?	*Anda.*		
0·32	...	...	...	...	...	...	...	...	...	...	6	?	2·37	?	0·82	9·12	?	*Gangajalghati.*		
1·05	...	...	...	...	...	...	...	...	...	...	2	?	2·69	?	1·64	17·46	?	*Raipur.*		
0·21	...	...	...	...	...	...	...	...	...	...	3	?	1·29	?	0·56	14·41	?	*Sonamukhi.*		
0·29	...	...	...	...	...	...	...	...	...	...	6	1·45	2·53	0·73	0·65	11·40	4·01	Suri ..	Birbhum.	
0·14	...	...	...	...	...	...	...	...	...	...	2	1·27	0·61	0·45	0·25	10·86	2·88	Hetampur.		
0·12	0·02	...	...	...	...	...	...	...	...	...	4	1·00	0·98	0·71	0·31	8·62	3·94	Rampur Hât.		
...	0·23	0·21	...	...	...	...	...	...	...	...	5	?	2·04	?	1·19	10·23	?	*Bolpore.*		
0·80	...	...	...	...	...	...	...	...	...	...	5	?	2·75	?	0·80	7·48	?	*Morarai*		
0·60	...	...	...	...	...	...	...	...	...	...	3	1·67	1·30	0·90	0·60	10·67	3·81	Kandi ...	Murshidabad.	
0·02	...	...	...	...	...	...	...	...	...	...	2	1·79	1·35	1·08	0·81	7·72	4·40	Berhampore.		
...	...	...	...	...	...	...	...	...	...	...	3	1·64	1·25	0·97	0·55	8·19	3·54	Lalbagh.		
...	...	...	...	...	...	...	...	...	...	...	4	1·39	2·28	0·93	1·30	7·70	3·83	Azimganj.		
0·46	0·05	...	...	...	...	...	...	...	...	...	4	1·79	1·92	0·65	0·61	7·05	3·30	Jangipur.		
1·75	...	...	...	...	...	...	...	...	...	...	4	1·71	4·05	0·91	1·75	9·92	4·08	Lalgola.		
...	...	...	...	...	...	...	...	...	...	...	3	?	2·33	?	1·48	7·56	?	*Akhrigunj.*		
0·10	...	...	...	...	...	...	...	...	...	...	3	?	1·10	?	0·80	7·50	?	*Patkabari.*		
0·51	0·29	0·08	...	...	...	...	...	...	...	...	5	2·70	2·41	1·72	0·76	10·06	5·20	Pabna ..	Pabna ...	NORTH BENGAL.
2·32	0·06	...	...	...	...	...	...	...	...	...	5	2·26	4·03	1·28	2·32	8·70	5·17	Sirajganj.		
0·47	...	...	...	...	...	...	...	...	...	...	4	2·77	1·83	1·48	0·85	7·04	5·17	Sherpur ...	Bogra.	
...	...	...	...	...	...	...	...	...	...	...	2	2·15	1·47	1·21	1·28	6·31	4·86	Nowkhilla.		
0·85	...	...	...	...	...	...	...	...	...	...	4	1·60	2·49	0·82	1·20	6·70	4·11	Bogra.		
...	...	...	...	...	...	...	...	...	...	...	5	1·23	4·02	0·90	1·29	6·16	3·13	Panchbibi.		
...	0·39	...	...	...	...	...	...	...	...	...	5	1·35	1·65	0·81	0·64	7·26	3·61	Boalia ..	Rajshahi.	
0·30	0·13	...	...	...	...	...	...	...	...	...	6	1·79	3·49	0·93	1·37	9·25	4·42	Nato		
0·26	...	...	...	...	...	...	...	...	...	...	3	1·29	1·43	1·27	1·00	5·03	3·06	*Naogaon.*		
0·07	...	...	...	...	...	...	...	...	...	...	5	?	3·48	?	1·00	8·54	?	*Lalpur.*		
...	...	...	...	...	...	...	...	...	...	...	2	?	2·83	?	1·80	6·16	?	*Manda.*		

Table of Rainfall recorded at Stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
NORTH BENGAL—*concld.*	Malda ..	Malda ...	...	...	...	...	...	...	...	...	0·08	...	...	0·01	...	0·24	0·01	0·01	...	...	0·01	...
		Chanchal ...	...	...	...	...	...	...	...	...	0·05	...	...	...	...	...	...	...	...	...	0·02	...
		Gajol ...	...	...	...	...	...	...	...	...	0·05	...	...	...	...	...	...	0·08	...	...	...	...
		Sibganj ...	...	...	...	...	...	...	...	...	0·08	...	...	...	...	0·24	...	...	...	...	0·70	...
	Dinajpur .	Mohadebpur	...	...	0·06	...	...	...	...	...	0·09	...	...	...	...	0·19	...	...	...	...	0·24	...
		Churamon ...	...	...	...	...	...	...	...	...	0·19	...	...	0·02	...	...	0·03	...	...	...	...	0·02
		Raiganj ...	...	...	...	...	...	...	...	...	0·55	...	...	...	...	...	...	...	...	...	0·18	...
		Dinajpur ...	...	...	...	...	...	...	...	...	0·22	...	...	0·07	...	...	...	...	...	...	0·02	...
		Baloorghat .	...	...	...	...	...	...	...	...	0·47	...	...	...	...	0·97	...	0·11	...	...	...	0·34
		Thakurgaon...	...	...	...	...	...	...	...	...	0·45	...	...	0·09	...	...	...	0·40	...	...	0·87	...
	Rangpur ...	Bhawaniganj (*Gyabanda*).	...	...	...	...	...	...	...	...	0·33	...	...	...	...	...	...	0·16	...	...	0·10	...
		Rangpur ...	...	...	...	...	...	...	...	...	0·18	...	...	...	...	...	...	...	0·28	...	...	...
		Kurigram ..	...	...	...	...	...	...	...	...	0·02	...	...	...	...	0·42	...	0·65	...	...	0·38	...
		Bagdogra (*Nilphamari*)	...	...	...	...	...	...	...	...	0·63	...	...	0·05	...	...	...	0·12	...	...	0·16	...
		Ulipur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·31	0·45	...	...	0·12	...
	Jalpaiguri ...	Jalpaiguri ..	...	...	...	...	...	...	...	...	0·38	0·04	...	0·04	...	0·03	0·76	0·43	...	...	0·36	...
		Alipore Duar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·53	0·56	...	...	...	...
		Falacotta ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·78	...	...	...	...	0·92
		Debiganj	...	...	...	...	...	...	...	...	0·10	...	...	0·05	...	...	...	0·70	...	...	0·16	...
		Bhagatpur (*Nagrakatta*).	...	...	...	...	...	...	...	...	0·43	0·11	...	0·32	...	...	0·10	0·17	...	...	0·06	0·19
	Kuch Bihar ..	Dinhatta ...	...	...	...	...	...	...	...	...	0·12	0·02	...	0·08	...	...	1·86	0·11	...	...	1·44	0·07
		Kuch Bihar ...	...	...	...	...	...	...	...	...	...	...	...	0·18	...	...	1·48	0·84	...	...	0·23	...
		Mickliganj ...	...	...	...	...	...	...	...	...	0·30	...	...	0·11	...	...	0·09	0·51	...	...	0·05	...
		Mathabhanga	...	...	...	...	...	...	...	...	0·02	...	...	0·06	...	...	0·73	0·20	...	...	0·56	0·08
	British Bhutan	Pedong ...																				
	Sikkim .	Gnatong ...	...	...	0·20	...	...	...	0·04	0·01	0·41	0·36	0·05	0·57	0·02	0·25	0·47	0·98	0·01	0·13	1·09	0·21
	Darjeeling ...	Buxa ...	...	...	...	...	...	...	...	...	0·07	...	...	0·20	...	...	0·20	0·11	...	...	0·28	0·62
		Siliguri ...	...	...	...	...	...	...	...	...	0·49	...	...	0·08	...	...	0·10	0·13	...	...	...	...
		Darjeeling ...	...	...	...	...	...	...	...	...	...	0·02	...	0·54	...	0·02	0·07	0·61	...	0·02	...	...
		Kalimpong ...	...	...	...	...	...	...	...	...	...	0·12	...	0·38	...	...	0·31	0·11	...	0·05	...	...
		Kurseong ...	...	...	...	...	...	...	...	...	0·35	0·15	...	0·35	...	0·08	0·22	0·33	...	...	...	...
		Mongpoo ...	...	...	...	...	...	...	...	...	0·06	...	0·35	...	0·03	0·25	...	...	...	...	0·25	...
EAST BENGAL	Chittagong ...	Cox's Bazar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·04	...	...	...	...	...	...
		Chittagong ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·04	...	...	...	...	...	...
		Kutubdia ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10
		Satkanya ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kodala ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·11	...	...	...	...	...	0·18
		Fenoa ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·15
		Mirsarai ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·14	...	...	...	...	...	0·15
		Chandpore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·16
	Chittagong Hill Tracts.	Rangamati ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·08	...	...	...	0·06	...	0·15
		Bandarban ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·11	...	...	...	...	...	0·25
		Demagiri ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·23	...	...	0·17	...	...	0·45
	Backergunge...	Patuakhali ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·03	...	1·14	0·03	...	...	1·82
		Pirojpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·18	...	...	0·14	...	...	2·20
		Barisal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	0·32
		Gournaddi ...	...	...	...	...	...	...	...	...	...	...	...	...	0·11	0·15	...	...	...	...	1·98	0·53
		Bhola ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·14	...	...	0·11	...	0·12	0·15
		Doulatkhan ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·20	...	...	1·12
		Bauphal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·07	...	...	...	...	...	1·79
	Noakhali .	Noakhali ...	...	...	...	...	...	...	...	...	...	...	...	...	0·02	0·06	...	...	...	...	...	1·38
		Fenny ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	...	...	0·17	0·15	...	2·15
		Harishpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·18	...	...	...	...	...	1·26
		Ramganj ...	...	...	...	...	...	...	...	...	...	...	...	...	0·06	0·23	...	...	...	...	...	1·62
	Faridpur ..	Madaripur ...	...	...	...	...	...	...	...	...	...	...	...	...	0·21	...	...	...	...	0·22	...	0·54
		Faridpur ...	...	...	...	...	...	...	...	...	0·46	...	...	...	0·08	0·18	...	...	...	...	0·30	0·42
		Goalundo ...	...	...	...	...	...	...	...	...	0·13	...	...	...	...	0·33	...	...	...	...	...	0·74
	Dacca ..	Munshiganj	...	...	...	...	...	...	...	...	...	...	...	...	0·08	0·06	...	...	...	0·04	...	1·26
		Dacca ...	...	...	...	...	...	...	...	...	...	...	...	...	0·04	0·18	0·03	...	...	0·02	0·12	1·14
		Naraingunj	...	...	...	...	...	...	...	...	0·03	...	...	...	0·09	0·11	0·25	...	0·06	0·04	...	1·75
		Manikganj	...	...	...	...	...	...	...	...	0·04	...	...	...	0·05	0·04	...	...	...	...	0·01	0·61
		Joydebpur ...	...	...	...	...	...	...	...	...	0·03	...	...	...	0·06	0·14	0·02	...	0·40	...	...	0·82
	Hill Tippera	Agartola ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·43	...	1·12	1·27
	Tippera ...	Comilla ...	...	...	...	...	...	...	...	...	...	...	...	...	0·16	...	...	...	0·15	...	0·25	1·20
		Chandpur ...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	0·11	...	...	...	...	...	0·80
		Brahmanbaria	...	...	...	...	...	...	...	...	...	...	...	...	...	0·05	...	...	0·06	...	0·05	0·53
		Ramchandra-pur.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·90	0·70
		Nasirnagar...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·40	...	0·44	0·38	...	0·74
		Daudkandi ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·25	...	...	...	0·60	0·90
		Kasba ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·30	0·50
		Laksham ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	...	...	...	...	...	2·00
	Mymensingh	Kishoreganj	...	...	...	...	...	...	...	...	0·18	...	...	...	...	0·63	0·57	...	...	0·11	0·27	0·55
		Atia (*Tangail*)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·69	...	0·48	...	...	0·91
		Mymensingh	...	...	...	...	...	...	...	...	0·07	...	...	...	0·53	...	0·21	...	...	...	0·07	0·37
		Jamalpur ...	...	...	...	...	...	...	...	...	0·13	...	...	...	...	...	...	0·12	...	...	...	0·09
		Netrokona ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·31	...	...	0·31	...	...	1·30
		Subarnakhali	...	...	...	...	...	...	...	...	0·13	...	...	...	...	...	0·25	...	...	0·06	1·06	...
		Durgapur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·40	...	0·30	...	...	...	1·00
		Sherpur Town	...	...	...	...	...	...	...	...	0·26	...	...	...	0·13	...	0·03	...	...	...	0·05	0·09
		Dewanganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·74	...	0·22	...	...	...
NORTH BIHAR	Purnea ...	Kishanganj ...	...	...	...	...	...	...	...	...	0·23	...	...	0·20	...	...	...	0·53	...	...	0·75	...
		Araria ...	...	...	...	...	...	...	...	...	0·04	...	...	...	...	1·50	0·05	0·30	...	...	0·05	...
		Purnea ...	...	...	...	...	...	...	...	...	...	...	...	0·01	...	...	...	...	...	...	0·07	...
		Gondwara (*Korah*).	...	...	...	...	...	...	...	...	0·17	...	...	...	...	...	...	...	...	...	0·16	...
		Barsoe ...	...	...	...	...	...	...	...	...	0·33	...	...	...	...	...	...	...	...	...	...	...
		Forbesgunj ...	...	...	...	...	...	...	...	...	0·29	0·15	...	...	...	...	...	0·65	...	...	...	...
		Kaliaganj ..	...	...	...	...	...	...	...	...	0·25	...	...	...	...	...	0·41	0·70	...	...	0·40	...
	Bhagalpur ...	Madhipura ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·25	...	...	...	0·20
		Bongaon (Sytabad).	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Supaul ...	...	...	...	...	...	...	...	...	0·42	...	...	...	...	...	...	0·14	...	...	...	...
		Protabganj ...	...	...	...	...	...	...	...	...	0·30	0·16	...	...	...	...	...	0·06	...	...	...	...
		Bhagalpur ...	...	...	...	...	...	...	...	...	...	...	...	0·02	...	...	...	...	...	...	0·02	...
		Banka ...	...	...	...	...	...	0·60	...	0·05	...	...	...	...	...	...	...	...	...	...	0·10	...
		Kolgong ...	...	...	...	...	...	...	...	...	0·01	...	...	...	...	...	...	...	...	...	0·01	...

a Bengal in March 1893—*continued.*

21	22	23	24	25	26	27	28	29	30	31	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 16th October 1892 to 31st March 1893.	Average rainfall from 16th October to 31st March.	Station.	District.	Meteorological division.
1·08	0·02	...	...	...	...	...	...	...	...	...	2	1·10	1·41	0·74	1·08	5·98	3·67	Malda ..	Malda ...	NORTH BENGAL *concld.*
...	...	...	...	...	...	...	...	...	...	...	Nil	1·16	0·07	0·45	0·05	2·78	2·57	Chanchal.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	0·11	?	0·08	2·37	?	*Gajol.*		
0·33	...	...	...	...	...	...	...	...	...	...	3	?	1·35	?	0·70	6·81	?	*Sibganj.*		
0·31	...	...	...	...	...	...	...	...	...	...	3	1·45	0·89	0·70	0·31	4·06	2·97	Mohadebpur .	Dinajpur.	
..	...	...	...	...	...	...	...	...	...	..	1	1·10	0·26	0·43	0·19	2·71	2·31	Churamon.		
..	...	...	...	...	...	...	...	...	...	...	2	1·00	0·73	0·62	0·55	3·44	2·36	Raiganj.		
...	...	...	...	...	...	...	...	...	...	...	1	1·25	0·31	0·97	0·22	2·26	3·98	Dinajpur.		
0·29	0·03	...	...	...	...	...	...	...	...	...	5	0·89	2·21	0·58	0·97	4·68	2·55	Baloorghat.		
...	...	..	...	...	...	...	...	...	...	...	3	?	1·81	?	0·87	3·28	?	*Thakurgaon.*		
0·02	...	...	...	...	...	...	...	...	...	...	3	2·00	0·61	1·46	0·33	2·23	4·24	Bhawaniganj (*Gyabanda*).	Rangpur.	
...	...	...	...	...	...	...	...	...	...	...	2	1·60	0·46	1·30	0·28	5·61	5·11	Rangpur.		
...	0·70	...	...	...	...	...	...	...	...	...	4	2·36	2·17	1·93	0·70	3·42	4·07	Kurigram.		
...	...	...	...	...	...	...	...	...	...	...	3	1·50	0·96	1·18	0·63	3·32	3·59	Bagdogra. (*Nilphamari.*)		
...	...	...	...	...	...	...	...	...	...	...	3	?	0·88	?	0·45	1·94	?	*Ulipur.*		
...	...	...	...	...	...	..	...	...	...	...	4	2·11	2·04	1·80	0·76	4·80	5·57	Jalpaiguri ..	Jalpaiguri.	
...	...	...	...	...	...	...	...	0·46	...	..	4	?	2·47	?	0·92	5·34	?	*Alipore Duar.*		
...	...	...	...	...	...	...	...	...	...	...	1	?	0·78	?	0·78	3·23	?	*Falacotta.*		
...	...	...	...	...	..	...	...	...	...	...	3	?	1·01	?	0·70	3·00	?	*Debiganj.*		
...	...	..	...	...	...	...	...	...	0·07	...	6	?	1·45	?	0·43	10·28	?	*Bhagatpur (Nagrakatta).*		
...	...	...	...	...	...	...	...	...	...	...	4	2·73	3·70	1·70	1·86	5·55	4·68	Dinhatta ...	Kuch Bihar.	
0·12	...	...	...	...	...	...	...	...	...	...	5	2·50	2·85	1·03	1·48	5·41	4·51	Kuch Bihar.		
...	...	...	...	...	...	...	...	...	...	...	3	2·45	1·06	1·43	0·51	3·56	4·25	Mickliganj.		
...	...	...	..	...	...	...	...	...	...	...	3	2·82	1·65	2·31	0·73	3·99	4·93	Mataohanga.		
																?	?	Peltong ...	British Bhutan	
...	...	...	...	...	...	0·17	0·37	0·03	...	...	12	?	5·37	?	1·09	?	?	Gnatong ...	Sikkim.	
0·70	...	...	...	..	...	...	...	0·84	...	...	7	4·35	3·02	3·25	0·84	18·48	10·31	Buxa ..	Darjeeling.	
...	..	...	..	...	...	...	...	...	...	...	3	2·14	0·80	1·71	0·49	4·63	3·75	Siliguri.		
...	...	...	...	...	...	...	...	...	...	..	3	3·90	1·28	1·8[illegible]	0·61	4·07	7·86	Darjeeling.		
..	...	...	...	...	...	...	0·05	...	...	...	4	3·11	1·02	1·76	0·38	4·67	4·52	Kalimpong.		
...	...	...	...	..	...	...	0·04	...	...	...	5	?	1·32	?	0·35	6·16	?	Kurseong.		
...	...	...	...	..	...	...	0·04	...	...	...	3	?	0·98	?	0·35	?	?	Mongpoo.		
...	...	0·29	0·50	...	...	...	...	...	...	...	2	2·26	0·83	1·82	0·50	14·13	9·38	Cox's Bazar	Chittagong ..	EAST BENGAL.
0·07	0·08	0·98	0·69	...	...	..	...	...	...	...	3	2·90	1·56	2·31	0·98	15·52	7·92	Chittagong.		
...	...	1·12	0·83	...	...	...	...	...	...	...	2	?	1·98	?	1·12	21·77	?	*Kutubdia.*		
...	...	1·28	1·05	...	...	...	...	...	..	...	2	?	2·33	?	1·28	11·74	?	*Satkanya.*		
0·05	0·60	0·60		...	..	...	...	...	...	...	4					?		Kodala.		
0·22	0·28	0·65	0·36	...	..	...	...	...	...	...	5					?		Fenoa.		
0·16	0·37	0·88	0·18	...	...	...	...	...	..	..	6		2·19		0·88	?		Mirsarai.		
...		.	0·54	...	...	...	..	...	...	...	4					?		Chandpore.		
0·13	...	0·88	0·39	..	.	...	..	...	...	...	4	4·00	1·60	3·02	0·88	11·79	9·30	Rangamati ...	Chittagong Hill Tracts.	
0·05	...	1·20	0·41	..	...	...	..	...	...	...	4	?	2·11	?	1·29	11·27	?	*Bandarban* ...		
0·84	0·25	4·43	0·10	...	...	..	...	...	...	...	7		6·17	?	1·43	?	?	Demagiri.		
0·12	0·02	0·53	0·20	...	...	...	..	...	...	...	5	2·71	3·89	1·81	1·82	16·05	7·75	Patuakhali ...	Backergunge.	
0·41	0·06	0·65	0·27	...	...	..	...	...	...	..	6	2·47	3·01	1·61	2·20	16·60	7·15	Pirojpur.		
0·22	...	0·35	...	...	...	...	...	...	...	...	4	3·30	0·99	2·72	0·55	11·35	7·99	Barisal.		
0·26	0·33	0·13	..	...	...	...	...	...	..	...	7	?	3·40	?	1·98	12·02	?	*Gournaddi.*		
0·11	...	0·44	0·12	...	...	...	...	...	...	...	7	3·54	1·19	2·52	0·44	12·82	7·61	Bhola		
0·13	...	0·46	.	...	...	...	...	...	..	..	4	?	1·91	?	1·12	10·45	?	*Doulatkhan.*		
0·19	0·04	...	0·28	...	...	...	...	...	...	...	3	?	2·37	?	1·79	14·06	?	*Bauphal.*		
0·05	0·02	1·10	0·03	...	...	...	..	0·81	...	...	3	3·65	3·47	3·55	1·38	22·03	9·49	Noakhali ...	Noakhali.	
0·30	0·70	3·65	..	...	...	...	...	...	...	...	7	5·15	7·22	4·00	3·65	24·57	11·68	Fenny.		
0·17	0·09	0·95	0·21	...	...	...	..	..	...	...	5	?	2·86	?	1·26	24·98	?	*Harishpur.*		
...	0·54	1·26	...	...	...	...	...	...	...	...	4	?	3·71	?	1·62	18·21	?	*Ramganj.*		
...	0·23	0·27	0·88	...	...	...	...	...	...	...	6	4·37	2·35	2·83	0·88	11·96	6·34	Madaripur ...	Faridpur.	
1·26	0·14	0·68	...	...	...	...	...	...	...	...	7	3·85	3·52	2·[illegible]3	1·26	20·04	7·05	Faridpur.		
1·77	0·63	0·27	...	...	...	...	...	...	...	...	6	3·22	3·87	2·33	1·77	14·12	6·18	Goalundo.		
1·10	0·42	0·28	...	...	...	...	...	0·67	...	...	5	4·59	4·21	4·08	1·40	15·57	9·10	Munshiganj ...	Dacca.	
0·82	0·77	2·80	...	...	...	...	...	...	...	...	6	3·55	5·04	3·01	2·80	21·38	6·29	Dacca.		
1·48	0·46	0·71	..	...	...	...	...	0·02	...	...	6	3·14	5·00	3·11	1·75	18·57	8·23	Narainganj.		
0·83	0·82	0·39	...	...	...	...	..	...	...	...	4	2·94	2·79	2·04	0·83	14·50	5·78	Manikganj		
0·62	0·24	0·10	...	...	...	...	..	...	..	...	6	?	2·52	?	0·82	9·72	?	*Joydebpur.*		
1·93	1·18	1·14	...	...	...	...	...	0·19	...	...	7	5·00	7·26	4·44	1·93	16·94	9·53	Agartola ...	Hill Tippera.	
0·65	0·25	0·47	...	...	...	...	...	0·03	...	...	7	4·41	3·16	3·76	1·20	14·71	7·86	Comilla ..	Tippera.	
0·20	1·20	0·59	...	...	...	...	...	1·80	...	...	7	3·82	4·71	3·27	1·80	15·76	7·08	Chandpur.		
2·03	0·10	0·58	...	...	...	...	...	...	..	..	5	4·58	4·30	4·71	2·03	17·89	9·21	Brahmanbaria.		
...	...	2·20	...	...	...	...	...	..	...	...	3	?	3·80	?	2·20	12·51	?	*Ramchandrapur.*		
1·12	...	...	...	...	...	...	...	0·50	...	...	6	?	3·58	?	1·12	17·20	?	*Nasirnagar.*		
0·95	0·20	..	...	...	...	...	...	0·50	...	...	6	?	3·41	?	0·95	11·24	?	*Dandkandi.*		
1·40	0·60	1·70	0·10	...	...	...	...	...	...	...	6	?	4·60	?	1·70	18·64	?	*Kasba.*		
0·70	2·00	0·25	...	...	...	...	...	...	...	...	5	?	5·05	?	2·00	17·06	?	*Laksham.*		
0·61	0·51	0·40	...	...	...	...	...	0·19	...	...	10	4·79	4·02	3·01	0·63	12·56	6·55	Kishoreganj.	Mymensingh.	
0·33	0·24	...	..	...	...	...	...	...	...	...	5	2·11	3·65	1·45	1·09	9·82	5·30	Atia (*Tangail*).		
0·47	0·57	...	..	...	..	...	0·13	...	...	...	6	3·65	2·41	2·21	0·57	6·83	6·27	Mymensingh.		
0·33	..	...	...	...	.	...	...	...	...	...	3	2·32	0·67	1·46	0·53	5·44	5·33	Jamalpur.		
1·10	1·01	...	0·85	...	...	...	0·21	...	...	...	7	3·75	5·09	2·57	1·31	12·40	5·89	Netrokona.		
0·41	...	...	...	...	...	...	...	...	..	...	4	?	1·91	?	1·06	6·13	?	*Subornakhali.*		
...	...	...	...	...	...	...	...	...	.	...	3	?	1·79	?	1·00	6·11	?	*Durgapur.*		
0·08	...	...	...	...	...	...	...	..	...	...	2	?	0·64	?	0·26	6·89	?	*Sheropur Town*		
...	...	...	...	...	...	...	...	...	...	...	2	?	0·96	?	0·74	3·35	?	*Dewanganj.*		
...	...	...	...	...	...	...	...	...	...	...	4	1·11	1·81	0·66	0·75	4·14	3·08	Kishanganj ...	Purnea ..	NORTH BIHAR.
...	...	...	...	...	..	...	...	...	...	...	2	1·06	1·94	0·62	1·50	3·90	2·99	Araria.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·74	0·08	0·40	0·07	2·48	3·28	Purnea.		
...	...	...	...	...	...	...	...	...	...	...	2	?	0·33	?	0·17	3·02	?	*Gondwara (Korah).*		
...	...	...	...	...	...	...	...	...	...	...	1	?	0·35	?	0·35	1·51	?	*Barsoe.*		
					...	...	...	...	...	...	3	?	1·09	?	0·65	3·14	?	*Forbesganj.*		
...	...	...	...	...	...	...	...	...	...	...	4	?	1·76	?	0·70	2·42	?	*Kaliaganj.*		
...	...	...	...	...	...	...	...	...	...	...	2	0·84	0·45	0·30	0·25	3·05	2·95	Madhipura .	Bhagalpur.	
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	2·27	?	Bongaon. (Syfibad).		
...	...	...	...	...	...	...	...	...	...	...	2	0·78	0·56	0·49	0·12	2·88	2·42	Supaul.		
...	...	...	...	...	...	...	...	...	...	...	2	?	0·52	?	0·30	2·63	?	*Protabganj.*		
0·08	...	...	...	...	...	...	...	...	...	...	Nil	0·65	0·12	0·33	0·08	4·14	2·54	Bhagalpur.		
0·06	...	...	...	...	...	...	...	...	...	...	2	0·84	0·81	0·34	0·60	5·70	3·11	Banka.		
0·10	...	..	...	...	...	...	...	...	...	...	1	?	0·12	?	0·10	5·04	?	*Kuljong.*		

Table of Rainfall recorded at Stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
NORTH BIHAR —concld.	Darbhanga ...	Tajpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·12	...
		Darbhanga ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·69	...	...	0·07	0·03
		Madhubani ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bahera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Roshera ...	...	...	...	...	...	...	...	...	...	...	0·30	...	...	...	...	...	...	...	0·20	...
	Muzaffarpur	Sitamarhi ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·14	...	...	0·12	...
		Muzaffarpur	...	...	...	...	...	0·03	...	...	...	...	...	...	...	...	...	...	...	...	0·07	0·10
		Hajipur ...	...	...	...	...	...	0·03	...	...	...	...	...	...	...	...	...	...	...	...	0·08	...
		Paru ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mahua (Chitwarra).	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·02	...
		Siuhar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	...	...	0·12	...
		Pupri ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Champaran ...	Motihari ...	...	...	...	...	...	0·02	...	...	...	...	...	0·05	...	...	...	0·02	...	...	0·04	0·07
		Bettiah ...	...	...	...	...	...	...	...	...	...	...	...	0·05	...	...	...	...	...	...	0·15	...
		Bagaha ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·13	...	...	0·17	...
		Burhurwa ...	...	...	...	...	...	0·02	...	...	...	...	...	0·09	...	...	...	0·09	...	...	0·21	...
	Saran ...	Gopalganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·28	...
		Siwan ...	...	...	...	...	...	...	...	...	...	...	...	0·11	...	...	...	...	...	...	0·03	...
		Chapra ..	...	...	...	...	...	...	...	...	...	...	...	0·09	...	...	...	...	...	...	0·09	...
SOUTH BIHAR	Shahabad ...	Buxar ..	...	...	...	...	...	0·10	...	...	...	...	...	0·58	...	...	...	...	...	...	0·20	...
		Dehri ..	...	...	...	...	...	0·12	...	...	...	...	...	...	...	...	...	...	...	...	0·31	...
		Bhabhua ...	...	...	...	...	...	0·27	...	...	...	...	...	0·03	...	...	...	...	...	...	0·25	...
		Sasaram ...	...	...	...	...	...	0·21	...	...	...	...	...	...	...	...	...	...	...	...	0·34	...
		Arrah ...	...	...	...	...	...	0·08	...	...	...	...	0·03	0·18	...	...	...	...	...	...	0·09	...
		Mohaniah ..	...	...	...	...	...	0·15	...	...	...	...	...	...	...	...	...	...	...	...	0·03	...
		Khiri ...	...	...	...	...	...	0·20	0·70	...	...	...	...	0·50	...	...	...	...	...	...	0·15	...
		Ageaon ...	...	...	...	...	...	...	0·21	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ramnagar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Koath ...	...	...	...	...	...	0·11	0·81	...	...	...	...	0·35	...	...	...	...	...	...	...	...
		Sikroul ...	...	...	...	...	0·18	0·08	...	...	...	...	0·10	...	...	...	...	...	...	...	0·20	...
		Bassawan ...	...	...	...	...	0·25	...	...	...	...	...	...	...	...	...	...	...	...	...	0·20	...
		Manaharpur	...	...	...	...	...	0·15	0·70	...	...	...	0·02	...	...	...	...	...	...	...	0·19	...
	Gaya ...	Aurungabad...	...	...	...	...	...	0·10	...	...	...	...	0·04	0·18	...	...	...	...	...	...	0·31	...
		Gaya ...	...	...	...	...	...	0·08	...	...	...	...	...	0·19	...	...	...	...	...	...	0·32	...
		Nawada ...	...	...	...	...	...	0·08	0·13	...	...	...	...	0·09	...	...	...	...	...	...	0·16	...
		Jahanabad ...	...	...	...	...	...	0·12	0·15	...	...	...	0·01	...	...	...	...	...	...	...	0·13	...
		Arwal ...	...	...	...	...	...	...	0·30	...	...	...	...	...	...	...	...	...	...	...	0·10	...
		Daudnagar ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·40	...
		Sherghati ..	...	...	...	...	...	...	0·15	...	...	...	...	0·33	...	...	...	...	...	...	...	...
		Rajauli ...	...	...	...	...	...	...	0·10	...	...	...	...	0·70	...	...	...	...	...	...	0·30	...
		Pakri Barawan.	...	...	...	...	...	...	0·29	...	...	...	...	...	...	...	...	...	...	...	...	...
	Patna ...	Patna ..	...	...	...	...	...	...	...	...	...	...	0·01	...	...	...	...	...	...	...	0·10	...
		Dinapore ...	...	...	...	...	...	...	...	...	...	...	0·02	...	...	...	...	...	...	...	0·08	...
		Bihar ...	...	...	...	...	...	0·15	0·05	...	...	...	...	0·15	...	...	...	...	...	...	0·07	...
		Barh ...	...	...	...	...	...	...	...	...	...	...	0·02	...	...	...	...	...	...	...	0·02	...
		Bickram ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Hilsa ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Monghyr ...	Begusarai ...	...	...	...	...	...	...	...	...	...	...	0·09	...	...	...	...	...	...	...	...	...
		Monghyr ...	...	...	...	...	...	...	...	...	...	...	...	0·05	...	...	...	...	...	...	...	...
		Jamui ...	...	...	...	...	...	...	0·08	...	...	...	...	...	...	...	...	...	...	...	0·09	...
		Gogri ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sheikpura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chahai Bamda	...	...	...	...	...	...	0·05	...	0·07	...	0·03	0·15	...	...	...	...	...	...	0·10	...
	Southal Parganas.	Rajmahal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·25	...	...	0·06	...
		Godda ...	...	...	...	...	...	...	0·26	0·04	0·05	...	...	0·10	...	...	...	...	...	...	0·41	...
		Pakour .	...	...	...	...	...	...	...	...	0·16	...	...	...	...	1·28	...	...	...	...	0·64	0·51
		Naya Dumka	...	...	...	...	...	...	...	...	0·29	...	0·01	0·36	...	...	0·13	...	...	...	1·70	...
		Deoghur ..	...	...	...	...	...	...	...	...	...	...	0·07	0·25	...	...	...	...	...	...	0·08	...
		Jamtara ...	...	...	...	...	...	...	...	...	0·11	...	...	0·15	0·03	...	...	...	...	...	...	...
		Belbadda ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·60	...
		Nanihat ...	...	...	...	...	...	...	...	0·28	...	...	...	...	0·10	0·62	...	...	...	...	...	...
CHOTA NAGPUR.	Hazaribagh ...	Pachamba (*Giridi*).	...	...	...	...	...	0·05	...	...	...	...	0·60	0·66	0·03	...	...	...	...	...	...	...
		Hazaribagh ...	...	...	...	...	...	0·24	...	...	0·07	...	0·20	0·08	0·14	0·25	...	...	...	...	0·19	...
		Semtagurah ...	...	...	...	...	...	0·19	...	...	...	0·19	0·46	0·42	0·28	...	...	...	...	...	...	0·24
		Mahudi Hills	...	...	...	...	...	...	...	...	0·31	...	0·80	...	...	...	...	...	...	...	...	0·21
		Jhoomrah Hills	...	...	...	...	...	0·10	...	...	0·10	...	0·90	...	1·30	...	...	...	...	...	...	...
		Barhi ...	...	...	...	...	...	0·17	...	...	...	...	0·06	0·23	...	0·65	...	...	...	...	0·19	...
		Chatra ..	...	...	...	...	...	0·15	...	...	0·13	...	0·11	0·40	...	0·25	...	...	...	...	0·14	...
		Karagdeha ...	...	...	...	...	...	0·06	...	...	...	...	0·07	1·41	...	...	...	...	...	...	0·40	...
		Ramghar ...	...	...	...	...	...	...	...	...	0·39	...	0·50	...	...	0·25	...	...	...	...	...	0·77
	Lohardaga ...	Lohardaga ...	...	...	...	...	...	0·33	...	...	...	...	0·27	...	...	0·38	...	...	...	...	0·10	...
		Ranchi ...	...	...	...	...	...	0·15	...	...	0·34	...	0·10	...	0·06	0·72	...	...	...	...	...	1·11
		Silli ...	...	...	...	...	...	...	...	...	0·20	...	...	...	...	...	...	...	...	...	0·10	2·20
		Sirguja ...	...	...	...	...	...	...	...	0·20	0·05	...	...	...	...	0·15	...	...	...	...	1·03	...
		Jashpur ...	...	...	...	...	0·35	...	0·22	0·55	0·12	0·09	0·14	0·16	0·38	0·30	...	...	...	...	0·01	0·95
		Gangpur ...	...	0·07	...	...	...	...	0·58	0·15	...	...	0·48	...	...	...	...	...	...	...	...	0·20
	Palamau ...	Palamau (*Daltonganj*).	...	...	...	...	...	0·18	...	...	...	...	0·07	0·50	0·12	...	...	...	...	...	...	...
		Balumat ...	...	...	...	...	...	0·54	...	...	0·15	...	0·16	0·04	0·01	0·11	...	...	...	...	...	...
		Hoseinabad...	...	...	...	...	...	0·21	...	...	...	...	0·15	0·21	...	...	...	...	...	...	0·16	...
		Garwah ...	...	...	...	...	...	0·40	...	...	...	...	0·06	0·56	...	0·05	...	...	...	...	0·10	...
	Singhbhum ..	Chaibassa ...	...	...	...	...	...	...	...	...	1·08	...	0·16	0·01	0·10	0·27	...	...	...	...	...	...
		Chakradharpur.	...	...	...	...	...	...	...	...	0·55	...	...								...	...
		Ghatsila ...	...	...	...	...	...	...	...	...	2·00	...	0·10	...	...	0·30	...	...	...	...	...	...
		Baharagura	...	...	...	...	...	...	...	...	1·45	...	...	...	0·05	...	...	...	...	...	...	...
	Manbhum ...	Purulia ...	...	...	...	...	...	...	...	0·45	0·37	...	0·08	0·15	1·12	0·02	...	...	...	...	...	0·77
		Gobindpur ...	...	...	...	...	...	...	...	...	0·12	...	...	0·10	...	...	...	...	...	...	...	...
		Raghunathpur.	...	...	...	...	...	...	...	...	0·12	...	0·16	...	0·43	...	0·20	...	...	...	...	...
		Barrabhum ...	...	...	...	...	...	...	...	0·60	...	...	0·10	...	0·35	...	...	...	...	...	...	0·09
		Jhalda ...	...	...	...	...	...	...	...	...	0·41	...	...	0·15	0·07	0·27	...	...	...	...	...	0·38
		Chas ...	...	...	...	...	...	...	...	...	0·35	...	0·12	...	1·16	...	...	...	...	...	...	0·10
	Orissa Tributary Mahals.	*Pandra* ...	...	...	...	...	...	...	...	...	0·16	...	...	0·08	...	...	0·21	...	...	...	...	...
		Keonjher ...																				
		Anandpur ...																				
		Talcher ...	...	...	...	...	0·75	...	0·35	0·15	...	...	0·30	0·40	0·04	...	...	...	...	...	...	...
		Narsingpur ...	...	...	...	...	0·15	...	0·30	0·10	...	0·16	...	0·84	0·25	...	...	...	...	...	0·30	...
		Angul ...	...	...	...	...	2·00	0·03	...	0·23	0·08	...	0·34	0·53	0·48	0·03	...	...	...	...	...	...
		Dhenkanal ...	...	...	...	...	0·08	...	0·08	0·21	...	...	0·24	0·06	0·40	...	...	...	...	...	...	0·50
		Bispara ...	...	...	...	...	...	...	...	...	...	0·56	2·10	...	0·25	0·50	...	...	...	...	...	...
		Kunjabongar																				
		Baramba ...																				

in Bengal in March 1893—*concluded.*

21	22	23	24	25	26	27	28	29	30	31	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 16th October 1892 to 31st March 1893.	Average rainfall from 16th October to 31st March.	Station.	District.	Meteorological Division.
...	...	...	...	...	...	...	...	...	...	...	1	0·63	0·12	0·23	0·12	2·10	2·23	Tajpur ...	Darbhanga.	NORTH BIHAR —*concluded.*
...	...	...	...	...	...	...	...	...	...	...	Nil	0·68	0·19	0·29	0·09	2·92	2·31	Darbhanga.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·71	Nil	0·39	Nil	3·42	2·38	Madhubaani.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	2·39	?	*Bahera.*		
...	...	...	...	...	...	...	...	...	...	...	2	?	0·50	?	0·30	1·92	?	*Roshera.*		
...	...	...	...	...	...	...	...	...	...	...	2	0·79	0·26	0·65	0·14	3·66	2·25	Sitamarhi ...	Muzaffarpur	
...	...	...	...	...	...	...	...	...	...	...	1	1·05	0·20	0·42	0·10	2·29	3·11	Muzaffarpur.		
0·55	...	...	...	...	...	...	...	...	...	...	1	0·94	0·66	0·38	0·55	3·25	2·47	Hajipur.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	1·70	?	*Paru.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	0·02	?	0·02	2·42	?	*Mahua* (Chitwarra.)		
...	...	...	...	...	...	...	...	...	...	...	2	?	0·22	?	0·12	0·63	?	*Siuhar.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	3·79	?	*Pupri.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·82	0·20	0·37	0·07	2·78	1·94	Motihari ...	Champaran.	
...	...	...	...	...	...	...	...	...	...	...	1	0·78	0·20	0·36	0·15	2·23	1·94	Bettia.		
...	...	...	...	...	...	...	...	...	...	...	2	?	0·30	?	0·17	2·93	?	*Bagaha.*		
...	...	...	...	...	...	...	...	...	...	...	1	?	0·41	?	0·21	2·19	?	*Burhurwa.*		
...	...	...	...	...	...	...	...	...	...	...	1	0·54	0·28	0·14	0·28	2·62	1·93	Gopalganj ...	Saran.	
0·04	...	...	...	...	...	...	...	...	...	...	1	0·89	0·18	0·23	0·11	2·85	2·80	Siwan.		
0·80	...	...	...	...	...	...	...	...	...	...	1	0·75	0·98	0·29	0·80	3·83	2·59	Chapra.		
...	...	...	...	...	...	...	...	...	...	...	3	0·85	0·88	0·28	0·58	3·78	2·94	Buxar ...	Shahabad ...	SOUTH BIHAR.
0·76	...	...	...	...	...	...	...	...	...	...	3	1·14	1·19	0·70	0·76	4·33	3·28	Dehri.		
0·02	...	...	...	...	...	...	...	...	...	...	2	1·16	0·57	0·56	0·27	3·49	3·61	Bhabhua.		
0·25	...	...	...	...	...	...	...	...	...	...	3	0·75	0·80	0·27	0·34	3·09	2·92	Sasaram.		
...	...	...	...	...	...	...	...	...	...	...	1	0·95	0·38	0·34	0·18	3·67	2·73	Arrah.		
...	...	...	...	...	...	...	...	...	...	...	1	?	0·18	?	0·15	1·51	?	*Mohaniah.*		
...	...	...	...	...	...	...	...	...	...	...	4	?	1·55	?	0·70	4·02	?	*Khiri.*		
...	...	...	...	...	...	...	...	...	...	...	1	?	0·21	?	0·21	1·51	?	*Ageaon.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	3·33	?	*Ramnagar.*		
...	...	...	...	...	...	...	...	...	...	...	3	?	1·27	?	0·81	4·28	?	*Koath.*		
...	...	...	...	...	...	...	...	...	...	...	3	?	0·56	?	0·18	2·93	?	*Sikroul.*		
...	...	...	...	...	...	...	...	...	...	...	2	?	0·45	?	0·25	4·11	?	*Bussawan.*		
...	...	...	...	...	...	...	...	...	...	...	3	?	1·06	?	0·70	3·96	?	*Manaharpur.*		
0·05	...	...	...	...	...	...	...	...	...	...	3	1·05	0·68	0·38	0·31	4·57	2·34	Aurungabad ...	Gaya.	
...	...	...	...	...	...	...	...	...	...	...	2	0·95	0·59	0·35	0·32	4·16	2·82	Gaya.		
...	...	...	...	...	...	...	...	...	...	...	2	1·00	0·46	0·47	0·16	5·43	2·80	Nawada.		
...	...	...	...	...	...	...	...	...	...	...	3	0·82	0·41	0·35	0·15	3·71	2·57	Jahánabad.		
...	...	...	...	...	...	...	...	...	...	...	2	?	0·40	?	0·30	2·94	?	*Arwal.*		
...	...	...	...	...	...	...	...	...	...	...	1	?	0·46	?	0·46	2·31	?	*Daudnagar.*		
0·61	...	...	...	...	...	...	...	...	...	...	3	?	1·09	?	0·61	7·05	?	*Sherghati.*		
...	...	...	...	...	...	...	...	...	...	...	3	?	1·10	?	0·70	8·34	?	*Rajauli.*		
...	...	...	...	...	...	...	...	...	...	...	1	?	0·29	?	0·29	4·03	?	*Pakri Barawan.*		
0·23	...	...	...	...	...	...	...	...	...	...	2	0·75	0·34	0·33	0·23	2·94	2·71	Patna ...	Patna.	
0·39	...	...	...	...	...	...	...	...	...	...	1	0·95	0·49	0·18	0·39	2·69	2·40	Dinapore.		
...	...	...	...	...	...	...	...	...	...	...	2	0·80	0·42	0·34	0·15	4·00	3·05	Bihar.		
0·25	...	...	...	...	...	...	...	...	...	...	1	1·05	0·29	0·34	0·25	[illegible]	2·73	Barh.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	3·35	?	*Bickram.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	3·92	?	*Hilsa.*		
0·74	...	...	...	...	...	...	...	...	...	...	1	0·79	0·83	0·24	0·74	6·56	2·95	Begusarai ..	Monghyr.	
0·24	...	...	...	...	...	...	...	...	...	...	1	0·75	0·29	0·31	0·24	5·39	2·77	Monghyr.		
...	...	...	...	...	...	...	...	...	...	...	Nil	0·79	0·17	0·43	0·09	4·96	2·67	Jamui.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	10·86	?	*Gogri.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	4·62	?	*Sheikpura.*		
0·05	...	...	...	...	...	...	...	...	...	...	2	?	0·45	?	0·15	6·22	?	*Chahai Bamda.*		
...	...	...	...	...	...	...	...	...	...	...	1	0·63	0·25	0·33	0·25	4·01	2·07	Rajmahal ...	Sonthal Parganas.	
0·04	...	...	...	...	...	...	...	...	...	...	2	0·88	0·55	0·40	0·26	4·75	2·50	Godda.		
0·11	...	...	...	...	...	...	...	...	...	...	4	1·23	1·96	0·55	1·28	9·41	2·27	Pakour.		
0·01	0·04	...	...	...	...	...	...	...	...	...	5	1·28	1·99	0·70	0·64	7·22	3·74	Naya Dumka.		
0·36	...	...	...	...	...	...	...	...	...	...	3	1·40	2·38	0·63	1·70	6·34	3·79	Deoghur.		
1·15	...	...	...	...	...	...	...	...	...	...	3	0·94	1·52	0·72	1·15	8·89	2·75	Jamtara.		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	3·67	?	*Belbadda.*		
...	...	...	...	...	...	...	...	...	...	...	4	?	2·60	?	1·60	5·55	?	*Nanihat*		
0·43	...	...	...	...	...	...	...	...	...	...	3	1·29	1·77	0·64	0·66	9·23	3·12	Pachamba ... (*Giridi*).	Hazaribagh ...	CHOTA NAGPUR.
...	...	...	...	...	...	...	...	...	...	...	6	1·75	1·77	0·70	0·68	9·57	3·45	Hazaribágh.		
...	...	...	...	...	...	...	...	...	...	...	6	1·72	1·78	1·18	0·46	9·37	3·16	Semtagurah.		
...	...	...	...	...	...	...	...	...	...	...	3	1·27	1·32	0·74	0·80	10·33	3·18	Mahudi Hills.		
0·30	...	...	...	...	...	...	...	...	...	...	5	1·25	2·70	0·73	1·30	12·20	[illegible]	Jhoomrah Hills		
0·20	...	...	...	...	...	...	...	...	...	...	5	?	1·50	?	0·65	6·86	?	*Barhi.*		
0·05	...	...	...	...	...	...	...	...	...	...	6	?	1·23	?	0·40	8·03	?	*Chatra.*		
...	...	...	...	...	...	...	...	...	...	...	2	?	1·94	?	1·41	6·22	?	*Karagdeha.*		
...	...	...	...	...	...	...	...	...	...	...	4	?	1·91	?	0·77	10·97	?	*Ramghar.*		
...	...	...	...	...	...	...	...	...	...	...	4	2·00	1·08	0·63	0·38	12·11	3·80	Lohardaga ...	Lohardaga.	
0·29	...	...	...	...	...	...	...	...	...	...	6	2·32	2·77	1·09	1·11	15·43	4·40	Ranchi.		
...	...	...	...	0·50	...	...	...	...	...	...		?		?			?	*Silli.*		
...	...	...	...	...	...	...	...	...	...	...	5		2·28		1·03	?		Sirguja.		
...	0·02	...	...	...	...	...	...	...	...	...	8		2·92		0·95	?		Jashpur.		
...	...	...	...	...	...	...	...	...	...	...	4		1·50		0·58	?		Gangpur.		
0·08	...	...	...	...	...	...	...	...	...	...	3	1·53	0·95	0·65	0·50	4·43	3·43	Palamau. (*Daltongunj*).	Palamau.	
0·15	...	...	...	...	...	...	...	...	...	...	5	?	1·16	?	0·54	10·33	?	*Balumat.*		
...	...	...	...	...	...	...	...	...	...	...	4	?	0·73	?	0·21	4·99	?	*Hosseinabad.*		
0·70	0·03	0·39	...	...	...	...	...	...	...	...	3	?	1·17	?	0·56	6·16	?	*Garwah.*		
0·75	0·22	...	...	...	...	...	...	...	...	...	6	2·20	2·74	1·21	1·08	15·28	4·65	Chaibassa ...	Singhbhum.	
												?		?			?	*Chakradharpur.*		
0·40	...	...	...	...	...	...	...	...	...	...	4	?	2·80	?	2·00	14·95	?	*Ghatsila.*		
0·55	...	...	...	...	...	...	...	...	...	...		?		?			?	*Baharagura.*		
0·54	...	...	...	...	...	...	...	...	...	...	6	2·05	3·51	1·03	1·12	14·64	3·90	Purulia ...	Manbhum.	
0·24	...	...	...	...	...	...	...	...	...	...	3	0·94	0·76	0·50	0·54	7·34	3·26	Gobindpur.		
0·15	...	0·04	...	...	...	...	...	...	...	...	5	?	1·15	?	0·43	5·87	?	*Raghunathpur.*		
1·33	...	...	...	...	...	...	...	...	...	...	4	?	1·33	?	0·60	12·13	?	*Barrabhum.*		
0·11	...	...	...	...	...	...	...	...	...	...	5	?	2·61	?	1·33	8·55	?	*Jhalda.*		
0·20	...	...	...	...	...	...	...	...	...	...	5	?	1·84	?	1·16	8·45	?	*Chas.*		
	...	...	...	...	...	...	...	...	...	...	3	?	0·65	?	0·21	6·67	?	*Pandra.*		
																		Keoujher ...	Orissa Tributary Mahals.	
																		Anandapur.		
...	0·95	...	...	...	...	...	...	...	...	...	6	?	2·94	?	0·95	?	?	Talcher.		
...	0·46	...	...	...	...	...	...	...	...	...	8	?	2·56	?	0·84	?	?	Narsingpur.		
0·10	1·77	...	...	...	...	...	...	...	...	...	7	?	5·59	?	2·00	?	?	Angul.		
0·07	0·42	0·25	...	...	...	...	...	...	...	...	6	?	2·31	?	0·50	?	?	Dhenkanal.		
...	...	0·80	...	...	...	...	...	...	...	...	5	?	4·21	?	2·10	?	?	Bispara.		
																		Kunjabongar.		
																		Baramba.		

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVATIONS TAKEN IN ASSAM, FOR THE MONTH OF MARCH 1893.

THE principal features in the meteorology of March 1893 have been—

1. The mean pressure for the month has been in excess of the normal over the whole province, except, perhaps, at Darjeeling. The usual excess has varied from 0·03″ to 0·05″, and it has been fairly equally distributed in all districts, except, perhaps, at the extreme western stations, such as Dehri, Hazaribagh and Ranchi, and at Chittagong, where it has varied from only 0·01″ to 0·02″, and at Darjeeling, where apparently a defect has been registered.

2. The mean temperature for the month has been largely in defect of the normal, the defect usually varying from 4° to 7°. The smallest defects are recorded at the eastern and northern stations, and the largest of 5° and 6° and upwards at the central and western stations. At Silchar and Sibsagar in Assam, indeed, the defect has only equalled from 2° to 3°. The defect generally has been larger in the day than in the night temperatures; for while the mean of the day or maximum temperatures has been usually from 5° to 10° in defect, the average of the night or minimum temperatures has only shown a defect of about 3° to 4°.

3. Humidity and cloud proportion have been very decidedly in excess of the normal for March in all districts of the province.

4. The southerly element in the wind directions, which is generally rather strongly developed in March, has been less prominent than usual in the month under review, and the general wind directions have been westerly to south-westerly, except in the extreme east and north of the province of Bengal and in Assam, where winds have been usually easterly. Indeed, the hot weather system of winds can be scarcely said to have properly established itself in Bengal until about March 20th.

5. The weather in March has been most abnormal, and the hot season conditions did not establish themselves in Bengal even to a moderate extent until about the 20th instant. The weather conditions have also been much more disturbed than usual. Disturbed conditions acccompanied by rain occurred from the 6th to the 8th instant, owing to the passage of a feeble barometric depression from North-Western India in an easterly direction. Disturbed conditions again existed from the 8th or 9th up till about the 17th in connection apparently with certain changes in the pressure distribution, which about this time passed from the cold weather to the hot season system of pressure in Bengal; and again from the 19th to the 23rd a series of hot-weather storms or nor'-westers visited Bengal in connection with a low pressure area which developed to the west of the province, and which gradually drifted across it in an easterly direction. Hence it will be seen that the duration of fine settled weather during March was unusually short, and it was confined to the first four or five days, when ordinary cold season conditions obtained, and to the last week of the month when the conditions were of ordinary settled hot season character.

6. Owing to the very prolonged periods of disturbance the rainfall during March has been unusually heavy, and except in Bihar, where the fall is rather less than an inch, it has varied from about two to four inches. The rainfall for March has hence been very considerably in excess of the normal in all districts, and the number of rainy days has been about twice as large as usual during the month.

The following summary will give a short description of the more important changes which have happened during the month.

During the last week of February a rather influential barometric depression had passed through the province, and in its rear the usual wave of cool air had swept over Bengal, and a steady dry north-westerly air current was blowing during the early part of March, while temperature was in many cases nearly 10° below the normal during the first day or two of the month. This defect of temperature steadily decreased, though weather remained fine up till about the 5th or 6th instant. On the former date, however, a well-defined barometric depression entered North-Western India, moving in an easterly direction, and a secondary depression appeared near Peshawar, and on the 6th an area of low pressure existed between Sutna and Nowgong, while pressure remained relatively low over a large part of Western India. The low pressure areas then apparently moved in an easterly direction slowly filling up in their advance, and though no definite barometric depression could be traced to have passed over Bengal, nevertheless from the 6th to the 9th weather was very disturbed over the province, and very numerous rain showers were reported. The effect of the general rainfall accompanied by the heavily clouded skies was to cause a considerable fall of temperature, which again became very low, the defects being largest at the western stations when they ranged up to 14°. The depression disappeared about the 7th, and on the 8th and 9th of March pressure had been rising in Bengal, and on the latter date it had become in excess of the normal by about a sixth of an inch, and the pressure conditions and distribution were those which usually exist during the cold season, for the highest pressures were registered in the western districts. From this date up to about the 18th, however, these pressure conditions changed steadily. A fairly rapid fall of pressure took place during this period, and by the 18th instant pressure had become decidedly lower in Bihar and Chota Nagpur than in East Bengal, and thus the hot weather distribution of pressure had established itself. Indeed, these conditions were rather more marked than usual, for at Dehri on the 18th pressure was below the normal of the day by 0·16″, while in the east of the province the defect equalled only about half this amount. Accompanying this change in the pressure conditions, there was a steady increase in the temperature, and thus while on the 12th the mean temperature was from 6° to 9° in defect, on the 18th the defect had been reduced to about 2° or 3.° During

these considerable changes also conditions remained somewhat disturbed, and numerous rain showers, frequently accompanied by local storms, occurred, and particularly on the 13th and 14th rainfall was very widely distributed.

The fall of pressure which had occurred up to the 18th was succeeded by somewhat irregular changes on the 19th, and, indeed, these irregular changes of pressure existed over the whole of Northern India, while a feeble area of low pressure was shown in North-West India near the hills. A series of the hot weather local storms called nor'-westers then set in, and fairly general rain was received in all divisions of Bengal except Orissa. On the 20th as the result of the pressure changes which has occurred, a feeble barometric depression appeared over Chota Nagpur, South Bihar, and the neighbouring districts of the North-West Provinces. Again, therefore, conditions continued disturbed, and numerous local storms occurred, and on the 21st the majority of stations, except in Orissa and parts of Bihar, reported rain. On the 21st this low pressure area had advanced slowly in an easterly direction, and a very shallow depression covered the western half of the Provinces. Frequent local storms therefore again occurred, and on the 22nd very numerous rain showers were reported. On the 22nd the shallow depression had again advanced in an easterly direction, and two feeble residual low pressure areas existed—one in Orissa and one in North Bengal and Assam. Disturbed conditions therefore continued in Bengal, local storms occurred in several districts, and on the 23rd rainfall was reported in Orissa and in South-West and East Bengal. On the 23rd, however, a rapid increase of pressure took place, and the low pressure areas disappeared, and from this date fine settled weather of ordinary hot season character set in and continued practically without interruption up to the close of the month.

Pressure.—The variations of pressure during the month have been large. Thus at the beginning of the month it was in excess of the normal by about a tenth of an inch. For the week ending the 11th instant it was in excess of the normal by about 0·12″ or 0·13″. At the close of the following week pressure was largely in defect of the normal, the defect equalling about a sixth of an inch. For the week ending the 25th instant the defect equalled from 0·05″ to 0·07″, and at the close of the month it was in excess of the normal by amounts ranging from 0·02″ in the extreme south-west of the province up to nearly a tenth of an inch at the north-eastern stations. The mean pressure for the whole month has thus been in excess of the normal by from about 0·03″ to 0·05″, the excess being smallest at the extreme western and south-eastern stations. The actual average pressure for the month of April varies from about 29·95″ at Silchar to 29·90″ at Dehri.

Temperature—Has been below the normal throughout practically the whole of March. At the beginning of the month it was from 4° to 6° below the normal. For the week ending the 11th the mean temperature was 4·8° in defect, for the week ending the 18th 5·4° in defect, and for the following week 5° in defect. For the last few days of the month, however, temperature rose decidedly, and on the 31st the defect was not much larger than 3° to 5°. Hence for the whole month the mean temperature for all Bengal has been 5·2° in defect of the normal, while in Assam the defect has only equalled 3·3°. The largest defects, indeed, have been registered in the western divisions, where Chota Nagpur shows a defect of 7·1°, and South Bihar and South-West Bengal defects of nearly 6°, and on the other hand the defect in East Bengal is only 4·1°. The averages of the maximum temperatures for the month show defects ranging from about 10° at Ranchi and Chaibassa to from 2° to 4° at Sibsagar, Silchar, Noakhali, Barisal, and Chittagong, and the minimum temperatures of the province have been in defect by from 5° at Gaya and Saugor Island to about 2° in North-East Bengal.

The following table shows the variation of temperature from the normal week by week for the month at nine typical stations in different districts of the province, and from this table it will also be seen that the largest defects have been recorded in the maximum or day temperatures. The figures, indeed, in this table represent a most extraordinary deficiency from the normal condition of things in March :—

Stations.	Week ending 4th March 1893.			Week ending 11th March 1893.			Week ending 18th March 1893.			Week ending 25th March 1893.			Week ending 1st April 1893.		
	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.	Variation of actual mean maximum temperature of week from normal mean.	Variation of actual mean minimum temperature of week from normal mean.	Variation of actual mean daily temperature of week from normal mean.
Cuttack	−13·2	−3·8	−8·4	−11·7	−1·1	−6·4	−12·5	−5·3	−8·9	−5·8	−1·7	−3·8	−3·2	−3·8	−3·5
Calcutta	−10·6	−7·1	−8·8	−7·4	−3·8	−5·6	−9·4	−3·8	−6·5	−5·9	−3·8	−4·8	−3·0	−3·9	−3·5
Dacca	−9·3	−6·0	−7·6	−5·8	−3·9	−4·9	−9·1	−4·2	−6·6	−7·6	−2·8	−5·2	−2·4	−2·8	−2·6
Burdwan ...	12·5	−6·1	−9·2	−9·4	−2·1	−6·7	−12·8	−2·5	−7·6	−8·4	−1·9	−5·2	−5·3	−5·8	−5·6
Patna	−10·4	−6·1	−8·2	−7·3	+0·9	−3·2	−7·1	−2·5	−4·9	−6·3	−3·7	−5·0	−5·2	−6·8	−5·9
Gaya	−12·2	−7·4	−9·8	−10·5	−1·9	−6·1	−9·0	−3·1	−5·9	−7·2	−6·8	−6·9	−4·9	−8·5	−6·7
Purnea	−8·4	−2·1	−5·3	−7·5	+0·9	−3·3	−8·4	+0·1	−4·1	−5·0	−2·7	−3·8	−4·3	−5·7	−5·0
Hazaribagh ...	−11·3	−6·7	−8·9	−10·0	−3·5	−6·7	−10·2	−4·1	−7·1	−5·2	−5·9	−5·6	−5·1	−5·7	−5·3
Darjeeling ...	−3·5	−4·9	−4·2	−6·6	−2·8	−4·8	−5·4	−5·5	−5·4	−4·4	−5·5	−5·0	−4·9	−4·4	−4·7

Rainfall.—An average fall of three-and-a-half inches has occurred in East Bengal, of two to three inches in South-West Bengal and Orissa, of nearly two inches in Chota Nagpur and North Bengal, and of nearly an inch in Bihar. The actual falls in these divisions in March represent the following percentages of the normal falls—Orissa 238 per cent., Chota Nagpur 225 per cent., South Bihar 188 per cent., South-West Bengal 160 per cent., North Bengal 145 per cent., North Bihar 132 per cent., and East Bengal 123 per cent. The number of rainy days in March has also been generally about twice as large as usual.

Notwithstanding the general heaviness of the falls and the general excess above the normal, the falls in March have been smaller than the normal amounts in the districts of Rangpur, Darjeeling, Chittagong, Chittagong Hill Tracts, Darbhanga, Muzaffarpur, and Champaran, while in the districts of Malda, Dinajpur, Bhagalpur, Gaya, Patna, and Monghyr the falls have been only about normal in amount.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the month of March 1893 :—

Meteorological Divisions.	Temperature.						Rainfall.							
	Highest observed during month.	Lowest observed during month.	Averages for month.			Average mean of month above or below normal mean of month.	Of month.			Rainy days.			Since 16th Oct. 1892.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in month.	Normal average number in month.	Variation.	Average.	Normal average.
Orissa	98·1	54·5	84·5	69·6	77·1	—4·3	2·62	1·10	+1·52	5·20	1·84	+3·36	13·54	6·76
South-West Bengal	99·7	54·4	84·7	65·2	74·9	—5·8	2·33	1·46	+0·87	4·48	2·17	+2·31	13·30	5·22
North Bengal	95·6	48·6	82·6	59·5	71·1	—4·7	1·77	1·22	+0·55	3·36	1·80	+1·56	5·24	4·02
East Bengal	92·1	51·0	83·1	63·6	73·4	—4·1	3·52	2·86	+0·66	5·12	3·60	+1·52	14·93	7·65
North Bihar	94·3	47·9	83·8	58·5	71·2	—4·7	0·50	0·38	+0·12	1·17	0·80	+0·37	3·25	2·57
South Bihar	97·3	50·3	84·9	60·7	72·8	—5·6	0·79	0·42	+0·37	2·50	0·93	+1·57	4·87	2·83
Chota Nagpur	94·8	51·3	81·5	60·6	71·1	—7·1	1·92	0·85	+1·07	4·64	1·66	+2·98	10·90	3·60
Assam	88·0	52·2	79·8	60·1	70·0	—3·3								

METEOROLOGICAL OFFICE, BENGAL ;
The 10*th April* 1893.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

Abstract of the results of Meteorological Observations taken at the Alipore Observatory in the month of March 1893.

	Inches.	Date.	Hour.
The mean pressure of the month	29·895		
The average pressure of March from 24 years' registers ...	29·869		
The highest pressure in the month	30·156	9th	10
The lowest pressure in the month	29·661	20th	4
The range of pressure	0·495		
	Hours.		
The total number of hours of bright sunshine during the month	230·9		
The maximum possible number of hours of sunshine ...	371·3		
	⊖		
The mean temperature of the month	74·5		
The average temperature of March from 24 years' registers ...	80·6		
The highest temperature in the month	92·8	28th.	
The lowest temperature in the month	57·5	2nd.	
The range of temperature during the month	35·3		
The mean daily range of temperature	18·6		
The greatest range of temperature in one day	25·2	25th & 31st.	
	Per cent.		
The mean humidity of the month	75		
The average humidity of March from 24 years' registers ...	66		
	Inches.		
The mean vapour tension of the month	0·629		
The average vapour tension of March from 9 years' registers ...	0·702		
The mean cloud proportion of the month	3·79		
The average cloud proportion of March from 16 years' registers ...	2·55		
The total rainfall of the month	1·85		
The total rainfall indicated by a Beckley's self-registering rain-gauge (mouth of the gauge about 52 feet above the ground)	1·80		
The average fall of March from 48 years' registers ...	1·34		
The greatest fall in 24 hours	0·72	21st.	
	Days.		
The number of rainy days in the month	7		
The average number of rainy days in March from 24 years' registers	4		
	⊖		
The mean maximum equilibrium temperature of solar radiation during the month	139·0		
The mean difference of sun and air temperatures	54·8		
The greatest sun temperature	147·1	31st.	
The greatest excess of sun over air temperature	62·5	12th.	
The mean temperature of the nocturnal radiation thermometer on woollen cloth	60·8		
The mean depression of the nocturnal radiation thermometer below the minimum air temperature at 4 feet above the ground	5·0		
The greatest depression of the nocturnal radiation thermometer below the minimum air temperature	7·6	27th.	
	Miles.		
The mean movement of the wind per day	68·1		
The greatest movement of the wind in one day	198·0	21st.	
The greatest movement of the wind in one hour	18·0	19th, 7 to 8 P.M.	

The number of hours with winds from each of the 8 points—

N. 38, N.E. 33, E. 21, S.E. 23, S. 122, S.W. 144, W. 85, N.W. 48, Calm 230.

The results of observations at the Alipore Observatory are not rigorously comparable with the registers of past years (at the Park Street Observatory). The barometer is about 3 feet higher at Alipore, and, other things being equal, reads therefore ·003 lower. The diurnal range of temperature is also greater at Alipore, and the mean temperature apparently about 1·0 lower; and, finally, the thermometer which furnished the record of temperature at the Surveyor-General's Office during 20 years and upwards is found to read 0·6 higher than the Kew standard thermometer, which is the standard of reference at the present Observatory.

C. Little,
For Meteorological Reporter to the Govt. of India.

Meteorological Office, India;
Calcutta, the 10th April 1893.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	Station Observations. — Air Pressure. — Mean barometric height, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. — Prevailing direction.	Mean wind velocity.	Temperature. — Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri ...	29·895	29·844	—	SW	278	87·2	3rd Apl.	76·6	3rd Apl.	86·1	77·5	81·8
		Gopalpore ...	29·899	29·860	+·062	SSW	398	87·2	3rd ,,	70·9	3rd ,,	85·4	73 2	79·3
		False Point ...	29·906	29·869	+·068	SWly	353	87·4	2nd ,,	73·6	2nd ,,	86·5	70·8	81·7
	Cuttack	Cuttack ...	29·833	29·856	+·068	SWly	102	102·1	2nd ,,	73 8	2nd ,,	93·3	76·1	87·2
	Balasore	Balasore ...	29·852	29 855	+·066	SWly	174	95·4	8th ,,	71·8	6th ,,	92·4	74 3	83·4
South-West Bengal.	Midnapore	Midnapore ...	29·760	29·857	+·075	S	202	100·3	6 & 8 ,,	72·2	8th ,,	97 2	74·4	85·8
	24-Parganas	Calcutta ...	29·888	29·855	+·073	SW	89	93 6	7th ,,	73·2	5 & 8 ,,	91·5	74·3	82·9
		Saugor Island	29·890	29·859	+·068	SSW	398	88 2	4th ,,	78·0	2nd ,,	87·4	78 9	83 2
	Howrah ... ... Hooghly													
	Nadia	Krishnagar ...	29·856	29·852	+·087	Sly	121	95·8	8th ,,	69·4	5th ,,	93·4	73·3	83·4
	Khulna ... ... Jessore	Jessore ...	29 886	29 865	+·079	SSE	87	95·0	8th ,,	69·5	5th ,,	91·5	73·3	82·4
	Burdwan ...	Burdwan ...	29·808	29 853	+·077	Calm & Sly	40	97·7	8th ,,	71·2	2nd	94 7	74·1	84·4
		Raniganj ...	29·558	29·857	+·065	Variable	65	100·7	8th ,,	63·9	6 to 8 ,,	97·5	71 9	84·9
	Bankura	Bankura ...	29 801	29·824	+·065	Variable	65	100·1	8th ,,	63 1	7th ,,	97·1	72·3	84·8
	Birbhum ... ... Murshidabad	Berhampore...	29·832	29 848	+·079	Variable	81	97·7	8th ,,	72·3	2 & 5 ,,	92·8	73·0	82·9
North Bengal.	Pabna	Sirajganj ...	29·876	29·872	+·098	SSE	61	91·2	8th ,,	67·9	5th ,,	90·0	71·3	80·7
	Bogra	Bogra ...	29·850	29·864	+·118	E	80	92·2	2, 3, 4 & 8,,	69·2	6th ,,	90·5	71·3*	81·2*
	Rajshahi	Rampur Boalia.	29·827	29·847	+·086	Sly	86	94·6	8th ,,	68·5	5th ,,	90·1	71·4	80·8
	Malda	Malda ...	29·812	29·845	—	SW	97	94·7	8th ,,	65 3	8th ,,	92·5	69·0	80·8
	Dinajpur	Dinajpur ...	29·798	29·871	+·083	ENE	113	94·1	3 & 4 ,,	67·3	5th ,,	89 8	70·2	80·0
	Rangpur	Rangpur ...	29·893	29·882	+·109	ENE	82	92·7	3 & 4 ,,	65·3	5th ,,	87 1	68·4	77·8
	Jalpaiguri ... ... Kuch Bihar	Jalpaiguri ..	29·654	29·898	+·121	Ely	79	91·4	3 & 4 ,,	64 6	2nd ,,	84·9	67·2	76·1?
	Darjeeling	Darjeeling ...	23·025	—	+·090	Variable	221	63·3	3rd ,,	43·8	5th ,,	59·5	47·3	53·4
	Sikkim	Gnatong ...	19·257	—	—	SEly	70	45·0	2nd ,,	18·4	2nd ,,	42·7	21·8	32·3
East Bengal.	Chittagong	Chittagong ...	29·853	29·919	+·078	Sly	112*	67·7	4th ,,	70·1	4th ,,	86·9	62·0	74·5
	Chittagong Hill Tracts	Demagiri ...						Observations not received.						
	Backergunge	Barisal ...	29·722	29 880	+·090	Calm	93	91·3	7th Apl.	68·9	5th ,,	89·2	72·9	81·0
	Noakhali	Noakhali ...	29·912	29·902	+·079	S Wly	142	87·4	7th ,,	69 0	5th ,,	86·3	72·4	79·4
	Faridpur	Faridpur ...	29·894	29·888	+·083	Sly	109	89·5	7 & 8 ,,	67·9	5th ,,	87·6	72·4	80·0
	Dacca	Dacca ...	29·910	29·880	+·089	Sly	179	90·6	8th ,,	69·7	6th ,,	89·1	73·1	81·4
	Tippera	Comilla ...	29·917	29·900	+·092	SE	136	90·4	2, 4 & 7 ,,	67·8	8th ,,	89·5	70·5	80·1
	Mymensingh	Mymensingh	29·874	29·889	+·098	ESE	134	89·2	3rd ,,	67·8	5th ,,	86 6	70·7	78·7
North Bihar.	Purnea	Purnea ...	29·767	29·848	+·092	E	55	96·2	3rd ,,	66·2	8th ,,	93·1	69·5	81·3
	Bhagalpur	Bhagalpur ...	29·714	29·823	+·083	Calm	18	101·3	5th ,,	67·0	8th ,,	96 9	70·1	83·6
	Darbhanga	Darbhanga ...	29·728	29 850	+·092	ESE	94	98·2	5th ,,	66 4	2nd ,,	93 6	69 0	81·3
	Muzaffarpur	Muzaffarpur	29·708	29·842	—	ESE	76	98·7	5th ,,	66·3	8th ,,	94 4	69·0	81·7
	Champaran	Motihari ...	29·698	29·832	+·091	ESE	113	99·0	5th ,,	64·8	7 & 8 ,,	94·3	66·8	80·6
	Saran	Chapra ...	29·692	29 829	+·091	Variable	95	101·3	5th ,,	64·4	6th ,,	96 5	68·7	82·6
South Bihar.	Shahabad	Dehri ...	29·515	29·822	+·069	Sly	42	104·4	5th ,,	68 0	6th ,,	98·1	71·5	84·8
		Buxar ...	29·623	29 821	+·069	Wly	99	102·5	5th ,,	63·8	6th ,,	97·9	69·6	83·8
		Arrah ...	29·683	29·826	+·088	Variable	69	103·2	5th ,,	65·1	6th ,,	98·0	68·9	83·5
	Gaya	Gaya ...	29·498	29·827	+·055	S	124	102·9	5th ,,	69·4	6th ,,	98·1	72·2	85·2
	Patna	Bankipore ...	29·695	29·832	+·073	Ely	97	101·6	5th ,,	65·7	6th ,,	96·8	69·8	83·4
	Monghyr													
	Sonthal Parganas ...	Naya Dumka	29·385	29·832	+·082	Sly	18	98·7	8th ,,	67·4	7th ,,	95 2	70·6	82·9
Chota Nagpur.	Hazaribagh	Hazaribagh	27·882	29 824	+·048	Variable	182	97·2	5th ,,	65·3	6th ,,	93·2	68·5	80·8
	Lohardaga	Ranchi ...	27·707	29 830	+·052	Sly	155	95·2	5th ,,	66·4	2 & 6 ,,	92·0	67·6	79·7
	Palamau ... ... Singhbhum	Chaibassa ...	29·141	29·855	+·086	Wly	31	99·1	5th ,,	66·2	6th ,,	97·1	69 2	83·2
	Manbhum													

* Mean of 6 days.

Explanation.—*Summary.*—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01 rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station district, *i.e.*, from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one of

for the week ending Saturday, the 8th of April 1893.

Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	DISTRICT OBSERVATIONS.											DISTRICT.
					OF WEEK.				RAINFALL.							
									Since 1st of month.			Since 1st April 1893.				
					Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.		
—	79·5	86	2·9	Nil	Nil	0·11	0·00	0·15	Nil	0·13	—0·13	Nil	0·13	—0·13		Puri.
—1·5	77·6	89	0	Nil												
—1·9	81·7	83	5·3	Nil												
—2·0	81·4	75	3·7	0·14	0·01	0·16	0·00	0·34	0·01	0·17	—0·16	0·01	0·17	—0·16		Cuttack.
—1·1	80·2	87	0	Nil	Nil	0·23	0·00	0·42	Nil	0·27	—0·27	Nil	0·27	—0·27		Balasore.
—1·4	80·5	77	0·4	Nil	Nil	0·12	0·00	0·30	Nil	0·16	—0·16	Nil	0·16	—0·16		Midnapore.
—2·4	80·4	83	2·7	Nil	0·10	0·21	0·14	0·41	0·10	0·23	—0·13	0·10	0·23	—0·13		24-Parganas.
—1·5	81·7	82	4·9	0·04												
					Nil	0·29	Nil	0·41	Nil	0·31	—0·31	Nil	0·31	—0·31		Howrah.
					Nil	0·31	Nil	0·38	Nil	0·34	—0·34	Nil	0 34	—0·34		Hooghly.
+1·0	79·2	63	5·3	1·14	1·07	0·45	1·20	0·67	1·07	0·49	+0·58	1·07	0·49	+0·58		Nadia.
					1·32	0·30	1·67	0·39	1·32	0·33	+0·99	1·32	0·33	+0·99		Khulna.
—3·7	78·8	89	8·4	0·24	0 63	0·50	1·20	0·72	0·63	0·56	+0 07	0·63	0·56	+0·07		Jessore.
—2·9	78·5	81	3·3	0·09	0·20	0·28	0·31	0·48	0·20	0·28	—0·08	0·20	0·28	—0·08		Burdwan.
—2·0	78·3	65	0	Nil												
?	79·4	60	1·0	Nil	0·04	0·05	0·25	0·14	0·04	0·05	—0·01	0·04	0·05	—0·01		Bankura.
					Nil	0·18	0·00	0·26	Nil	0·18	—0·18	Nil	0·18	—0·18		Birbhum.
—3·8	76·3	93	5·1	Nil	0·08	0·24	0·33	0·40	0·08	0·24	—0·16	0·08	0·24	—0·16		Murshidabad.
—2·0	75·9	90	7·6	0·02	0·84	0·49	1·00	0·77	0·84	0 51	+0·33	0·84	0·51	+0·33		Pabna.
—0·7*	76·6	83	3·7	0·20	0·24	0·12	0·50	0·25	0·24	0·13	+0·11	0·24	0·13	+0·11		Bogra.
—2·0	77·6	89	3·7	0·22	0·27	0·25	1·00	0·32	0·27	0·25	+0·02	0·27	0·25	+0·02		Rajshahi.
—	77·1	85	4·0	0·20	0·18	0·07	1·00	0·20	0·18	0·07	+0·11	0·18	0·07	+0·11		Malda.
—1·9	74·9	80	5·7	0·55	0·19	0·07	0·60	0·14	0·19	0·08	+0·11	0·19	0·08	+0·11		Dinajpur.
—1·7	73·0	84	2·1	1·73	2·03	0·38	1·50	0·57	2·03	0·39	+1·64	2·03	0·39	+1·64		Rangpur.
—0·2?	72·7	79	4·9	0·44	0·38	0·60	2·00	0·89	0·38	0·62	—0·24	0·38	0·62	—0·24		Jalpaiguri.
					2·86	0·53	3·50	0·63	2·86	0·56	+2·30	2·86	0·56	+2·30		Kuch Bihar.
—0·1	51·7	89	6·7	2 60	2·78	0·58	2·50	0·97	2·78	0 66	+2·12	2·78	0·66	+2·12		Darjeeling.
—	36·7	81	3·6	4 23												Sikkim.
—1·2	77·5	86	2·6	Nil	Nil	0·18	0·00	0·39	Nil	0·20	—0·20	Nil	0·20	—0·20		Chittagong.
					2·90	0·61	1·00	0·95	2·90	0·65	+2·25	2·90	0·65	+2 25		Chittagong Hill Tracts.
+0·1	79 3	86	5·3	0·74	0·63	0·28	1·00	0·35	0·63	0·33	+0·30	0.63	0·33	+0·30		Backergunge.
—0·9	79·9	92	5·3	Nil	Nil	0·50	0·00	0·73	Nil	0·56	—0·56	Nil	0·56	— 0·56		Noakhali.
—2·2	77·5	90	5·7	0·62	0 73	0·43	1·67	0·77	0·73	0·46	+0·27	0·73	0·46	+0·27		Faridpur.
—2·5	78·1	88	8·7	1·12	0·27	0·57	0·50	0·83	0·35	0·60	—0·25	0·35	0 60	—0·25		Dacca.
—0·9	77·3	86	5·3	0·12	0·49	0·59	0·25	0 79	0·49	0·66	—0·17	0·49	0 66	—0·17		Tippera.
—1·7	73·6	88	7·3	0·85	0·83	0·40	1·40	0·87	0·90	0·46	+0·44	0·90	0·46	+0·44		Mymensingh.
—1·7	76·5	81	1·3	0·61	0·59	0·14	1·00	0·27	0·59	0·16	+0·43	0·59	0 16	+0·43		Purnea.
+0·2	78·7	67	0	Nil	Nil	0·06	0·00	0·18	Nil	0·06	—0·06	Nil	0·06	—0·06		Bhagalpur.
—1·1	77·1	69	0	Nil	Nil	0·03	0·00	0·14	Nil	0·03	—0·03	Nil	0·03	—0·03		Darbhanga.
—	75·9	78	0·4	Nil	Nil	0·05	0·00	0·16	Nil	0·06	—0·06	Nil	0·06	—0·06		Muzaffarpur.
+0·8	77·0	67	0·4	Nil	Nil	0·12	0·00	0·26	Nil	0·13	—0·13	Nil	0·13	—0·13		Champaran.
+0·5	78·3	59	0	Nil	Nil	0·01	Nil	0·07	Nil	0·02	—0·02	Nil	0·02	—0·02		Saran.
+0·6	79·6	46	0	Nil												
+0·9	80·0	46	0·1	Nil	Nil	0·07	Nil	0·16	Nil	0·08	- 0·08	Nil	0·08	—0·08		Shahabad.
+0·3	79·5	49	0	Nil												
—1·7	80·8	68	0	Nil	Nil	0·06	Nil	0·16	Nil	0·07	—0·07	Nil	0·07	—0·07		Gaya.
—2·4	80·2	55	0	Nil	Nil	0·04	Nil	0·13	Nil	0·05	—0·05	Nil	0·05	—0·05		Patna.
					Nil	0·04	Nil	0·14	Nil	0·04	—0·04	Nil	0·04	—0·04		Monghyr.
—2·5	81·8	61	0	0·03	0·01	0·08	0·00	0·22	0·01	0·08	—0·07	0·01	0·08	—0·07		Sonthal Parganas.
—2·2	79·8	39	0	Nil	Nil	0·03	0·00	0·12	Nil	0·03	—0·03	Nil	0·03	—0·03		Hazaribagh.
—1·4	78·1	47	0	Nil	Nil	0·09	0·00	0·22	Nil	0·10	—0·10	Nil	0·10	—0·10		Lohardaga.
					Nil	0·06	0·00	0·16	Nil	0·12	—0·12	Nil	0·12	—0·12		Palamau.
—4·1	77·6	59	0·3	0·35	0·35	0·13	1·00	0·25	0·35	0·24	+0·11	0·35	0·24	+0·11		Singhbhum.
					Nil	0·06	0	0·26	Nil	0·07	—0·07	Nil	0·07	—0·07		Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 8th of April 1893.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 2nd.	Monday, 3rd.	Tuesday, 4th.	Wednesday, 5th.	Thursday, 6th.	Friday, 7th.	Saturday, 8th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April to date.
ORISSA ...	Puri ...	Puri ...	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·14	Nil	0·14
		Khurda ...	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·11	Nil	0·11
		Banpur ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	Nil	Nil	Nil
		False Point ...	...	...	...	...	...	...	...	Nil	Nil	0·23	Nil	0·28	Nil	0·28
		Gop ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Satpara ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pipli ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Cuttack ...	Jagatsingpore	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·09	Nil	0·09
		Banki ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·09	Nil	0·09
		Cuttack ...	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·15	Nil	0·15
		Kendrapara ...	...	...	...	0·02	...	...	...	Nil	0·02	0·14	0·02	0·15	0·02	0·15
		Jajpur ...	...	...	...	0·02	...	...	...	Nil	0·02	0·37	0·02	0·39	0·02	0·39
		Dharmsala ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Salipore ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pal Lahara ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Balasore ..	*Akhyapada* ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Chandbali ...	...	...	...	...	...	...	...	Nil	Nil	0·26	Nil	0·26	Nil	0·26
		Bhadrak ...	...	...	...	...	...	...	...	Nil	Nil	0·38	Nil	0·42	Nil	0·42
		Soro ...	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·17	Nil	0·17
		Balasore ..	...	...	...	...	...	...	...	Nil	Nil	0·27	Nil	0·29	Nil	0·29
		Jellasore ...	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·18	Nil	0·18
		Baripodah ..	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·27	Nil	0·27
SOUTH-WEST BENGAL.	Midnapore	Contai ...	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·16	Nil	0·16
		Tamluk ..	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·24	Nil	0·24
		Midnapore ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·17	Nil	0·17
		Ghatal ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	Nil	0·05
		Kukrahaty ...	...	0·17	...	...	...	...	...	1	0·17	?	0·17	?	0·17	?
		Garhbeta ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Panskura ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	24-Parganas .	Saugor Island	...	...	...	0·04	...	...	...	Nil	0·04	0·05	0·04	0·06	0·04	0·06
		Diamond Harbour ...	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·13	Nil	0·13
		Canning Town	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Alipore (Observatory.)	...	...	...	...	...	...	...	Nil	Nil	0·36	Nil	0·38	Nil	0·38
		Barrackpore...	...	...	...	...	...	...	...	Nil	Nil	0·28	Nil	0·33	Nil	0·33
		Dum-Dum ...	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	0·33	Nil	0·33
		Barasat .	...	...	...	0·65	...	...	...	1	0·65	0·25	0·65	0·29	0·65	0·29
		Basirhat ...	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·14	Nil	0·14
	Howrah ...	Howrah .	...	...	...	...	...	...	...	Nil	Nil	0·48	Nil	0·50	Nil	0·50
		Mohesreka ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·11	Nil	0·11
		Ulubaria ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Hooghly ...	Serampore ...	...	...	...	...	...	...	...	Nil	Nil	0·43	Nil	0·48	Nil	0·48
		Hooghly ...	...	...	...	...	...	...	...	Nil	Nil	0·23	Nil	0·23	Nil	0·23
		Jahanabad ...	...	...	...	...	...	...	...	Nil	Nil	0·26	Nil	0·26	Nil	0·26
	Nadia ...	Ranaghat .	...	...	...	0·44	...	...	...	1	0·44	0·35	0·44	0·37	0·44	0·37
		Krishnagar ...	...	...	...	1·14	...	...	...	1	1·14	0·44	1·14	0·45	1·14	0·45
		Chuadanga .	0·22	...	...	0·32	0·02	...	...	2	0·56	0·46	0·56	0·53	0·56	0·53
		Meherpore ...	...	...	...	1·86	...	...	...	1	1·86	0·60	1·86	0·66	1·86	0·66
		Kushtia ...	...	...	...	1·30	0·07	...	...	1	1·37	0·38	1·37	0·41	1·37	0·41
	Khulna ..	Satkhira	0·45	...	...	2·00	...	...	...	2	2·45	0·23	2·45	0·29	2·45	0·29
		Bagerhat .	...	...	...	0·25	...	...	...	1	0·25	0·34	0·25	0·35	0·25	0·35
		Khulna ...	...	...	...	1·01	...	0·25	...	2	1·26	0·32	1·26	0·35	1·26	0·35
		Nakipur ...	0·26	1·00								?		?		?
		Rampal ...										?		?		?
	Jessore ...	Narail .	...	...	...	0·20	0·05	...	...	1	0·25	0·45	0·25	0·40	0·25	0·40
		Jessore ...	...	...	...	0·24	...	...	...	1	0·24	0·52	0·24	0·55	0·24	0·55
		Jhenidah .	...	...	...	1·07	0·14	...	...	2	1·21	0·72	1·21	0·85	1·21	0·85
		Magura .	...	...	...	0·21	0·03	...	...	1	0·24	0·56	0·24	0·68	0·24	0·68
		Bangaon ...	...	...	...	1·22	...	...	...	1	1·22	0·26	1·22	0·26	1·22	0·26
	Burdwan .	Kalna ..	...	...	...	...	...	...	...	Nil	Nil	0·23	Nil	0·23	Nil	0·23
		Burdwan ...	...	...	...	0·09	...	...	...	Nil	0·09	0·25	0·09	0·25	0·09	0·25
		Katwa ..	...	...	0·51	...	...	...	...	1	0·51	0·37	0·51	0·38	0·51	0·38
		Raniganj ...	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·11	Nil	0·11
		Mankur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Bankura	Bankura ..	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·17	Nil	0·17
		Vishnupur ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·04	Nil	0·04
		Maliara ..	...	...	...	0·17	...	...	...	1	0·17	Nil	0·17	Nil	0·17	Nil
		Khatra ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	Nil	Nil	Nil
		Indas ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Kotalpur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Onda ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Gangajalghati	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Raipur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	N	?
		Sonamukhi ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Birbhum ...	Suri ..	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·11	Nil	0·11
		Hetampore ...	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·17	Nil	0·17
		Rampur Hat...	...	...	...	...	...	...	...	Nil	Nil	0·32	Nil	0·32	Nil	0·32
		Bolpur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Murari ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Murshidabad	Kandi ...	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	0·31	Nil	0·31
		Berhampore ...	...	...	...	...	...	...	...	Nil	Nil	0·27	Nil	0·27	Nil	0·27
		Lalbagh ...	...	...	...	...	0·23	...	...	1	0·23	0·02	0·23	0·02	0·23	0·02
		Azimganj ...	...	...	...	...	0·23	...	...	1	0·23	0·34	0·23	0·34	0·23	0·34
		Jangipur ..	...	...	...	...	...	...	...	Nil	Nil	0·27	Nil	0·27	Nil	0·27
		Lalgola ...	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·20	Nil	0·20
		Akhriganj ...	...	...	0·04	0·90	...	...	...	1	0·94	?	0·94	?	0·94	?
		Putkabari ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
NORTH BENGAL	Pabna ...	Pabna ...	...	...	...	1·35	0·31	...	...	2	1·66	0·50	1·66	0·53	1·66	0·53
		Sirajganj ...	...	...	...	...	0·02	...	...	Nil	0·02	0·49	0·02	0·49	0·02	0·49
	Bogra ...	Sherepore ...	...	...	...	0·75	...	...	...	1	0·75	0·08	0·75	0·08	0·75	0·08
		Nowkhilla ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·04	Nil	0·04
		Bogra ...	0·20	...	...	...	...	...	...	1	0·20	0·38	0·20	0·39	0·20	0·39
		Panchbibi ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·02	Nil	0·02
	Rajshahi ...	Boalia ...	...	...	...	0·28	...	...	...	1	0·28	0·37	0·28	0·37	0·28	0·37
		Nator ...	...	...	...	0·13	...	...	...	1	0·13	0·39	0·13	0·39	0·13	0·39
		Naugaon ...	...	...	...	0·40	...	...	...	1	0·40	Nil	0·40	Nil	0·40	Nil
		Lalpore ...	...	...	0·90	...	...	...	...	1	0·90	?	0·90	?	0·90	?
		Manda ...	...	...	0·90	...	...	...	...	1	0·90	?	0·90	?	0·90	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 8th of April 1893—contd.

Meteorological Division.	District.	Station.	Rainfall.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April.
			Sunday, 2nd.	Monday, 3rd.	Tuesday, 4th.	Wednesday, 5th.	Thursday, 6th.	Friday, 7th.	Saturday, 8th.							
NORTH BENGAL—contd.	Malda ...	Malda ...	...	...	...	0·20	...	...	...	1	0·20	0·10	0·20	0·10	0·20	0·10
		Chanchal ...	...	...	...	0·15	...	...	...	1	0·15	0·03	0·15	0·03	0·15	0·03
		Gajol ...	...	...	...	0·70	...	...	...	1	0·70	?	0·70	?	0·70	?
		Sibganj	...	...	...	0·60	...	...	...	1	0·60	?	0·60	?	0·60	?
	Dinajpur ...	Mohadebpore	...	...	...	0·30	...	...	...	1	0·30	Nil	0·30	Nil	0·30	Nil
		Churaman ...	...	...	...	...	...	...	...	Nil	Nil	Nil		Nil		Nil
		Raiganj ...	...	...	...	0·16	...	...	...	1	0·16	0·16	0·16	0·22	0·16	0·22
		Dinajpur ...	...	...	...	0·48	...	...	...	1	0·48	0·17	0·48	0·17	0·48	0·17
		Balurghat ...	...	...	...	...	...	...	...	Nil	Nil	Nil		Nil	Nil	Nil
		Thakurgaon ...	...	...	...	0·34	0·42	...	...	2	0·76	?	0·76	?	0·76	?
	Rangpur ...	Bhawanigunge (*Gyabanda*)	...	...	...	0·21	...	...	...	1	0·21	0·37	0·21	0·38	0·21	0·38
		Rangpur ...	...	...	...	1·75	...	...	...	1	1·75	0·35	1·75	0·37	1·75	0·37
		Kurigaon ...	...	...	...	3·35	0·03	1·37	...	2	4·75	0·55	4·75	0·56	4·75	0·56
		Bagdogra (*Nilphamari*)	...	...	...	1·27	0·10	0·03	...	2	1·40	0·23	1·40	0·23	1·40	0·23
		Ulipore ...	...	...	...	2·65	...	...	...	1	2·65	?	2·65	?	2·65	?
	Jalpaiguri ...	Jalpaiguri	...	...	...	0·28	0·10	...	...	2	0·38	0·60	0·38	0·62	0·38	0·62
		Alipore Duoar	...	...	3·54	0·23	...	...	0·31	3	4·08	?	4·08	?	4·08	?
		Fallacotta ...	...	...	1·05	0·19	...	0·18	0·12	4	2·44	?	2·44	?	2·44	?
		Debiganj ...	...	...	...	0·58	0·19	...	...	2	0·77	?	0·77	?	0·77	?
		Bhagatpore (*Nagrakatta*)	...	...	0·28	0·80	2·60	...	0·44	4	4·12	?	4·12	?	4·12	?
	Kuch Bihar	Dinhatta ...	...	...	0·81	1·17	0·03	0·14	...	3	2·15	0·19	2·15	0·20	2·15	0·20
		Kuch Bihar ...	...	...	2·62	1·31	0·25	0·40	...	4	4·58	1·05	4·58	1·15	4·58	1·15
		Mickliganj ...	...	...	0·15	0·75	0·63	...	...	3	1·53	0·26	1·53	0·26	1·53	0·26
		Mathabhanga	...	...	1·40	1·56	0·10	0·13	...	4	3·19	0·60	3·19	0·60	3·19	0·60
	Darjeeling ...	Buxa ...	...	...	1·81	1·12	...	1·03	1·30	4	5·26	1·18	5·26	1·35	5·26	1·35
		Siliguri ...	...	...	0·08	0·68	0·06	1·05	0·02	2	1·89	0·15	1·89	0·15	1·89	0·15
		Darjeeling ...	...	...	...	0·30	0·03	0·22	2·05	3	2·60	0·83	2·60	0·97	2·60	0·97
		Kalimpong ...	...	...	...	0·31	...	0·77	0·30	3	1·38	0·16*	1·38	0·18	1·38	0·18
		Kurseong ...	...	...	0·15	0·07	...	0·55	0·53	3	1·30	?	1·30	?	1·30	?
EAST BENGAL	Chittagong ..	Cox's Bazar ...	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·19	Nil	0·19
		Chittagong ...	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·21	Nil	0·21
		Kutubdia ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Satkanya ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Kodala ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Fenoa ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Mirsarai ...	...	...	...	...	0·64	...	...	1	0·64	?	Nil	?	0·64	?
		Chandpur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Chittagong Hill Tracts.	Rangamati ...	...	...	...	2·90	...	...	...	1	2·90	0·61	2·90	0·65	2·90	0·65
		Bundarban ...										?		?		?
	Backergunge	Patuakhali ...	...	...	0·48	0·08	...	...	...	1	0·56	0·16	0·56	0·17	0·56	0·17
		Pirojpur ...	...	...	...	0·69	...	...	...	1	0·69	0·23	0·69	0·29	0·69	0·29
		Barisal ...	...	0·85	...	0·35	...	...	...	2	1·20	0·54	1·20	0·68	1·20	0·68
		Gournaddi ...	...	0·52	...	0·68	...	...	...	2	1·20	?	1·20	?	1·20	?
		Bhola ...	...	...	...	0·06	...	...	...	Nil	0·06	0·19	0·06	0·20	0·06	0·20
		Daulatkhan ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Bauphal ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Noakhali ...	Noakhali ...	...	...	...	...	...	...	...	Nil	Nil	0·45	Nil	0·46	Nil	0·46
		Fenny ...										0·56		0·67		0·67
		Harishpore ...										?		?		?
		Ramganj ...	...	...	...	0·13	...	...	...	1	0·13	?	0·13	?	0·13	?
	Faridpur ...	Madaripur ...	...	...	...	0·83	0·13	...	...	2	0·96	0·44	0·96	0·45	0·96	0·45
		Faridpur ...	...	...	...	0·37	0·20	0·05	...	2	0·62	0·45	0·62	0·52	0·62	0·52
		Goalundo ...	...	...	...	0·60	...	...	...	1	0·60	0·40	0·60	0·42	0·60	0·42
	Dacca ...	Munshiganj ...	...	...	...	...	...	...	...	Nil	Nil	0·99	Nil	1·05	Nil	1·05
		Dacca ...	...	...	...	...	0·88	...	...	1	0·88	0·65	0·88	0·69	0·88	0·69
		Narayanganj...	...	...	...	...	0·11	...	...	1	0·11	0·14	0·11	0·14	0·11	0·14
		Manikganj ...	...	...	...	0·01	0·03	0·05	...	Nil	0·09	0·51	0·41	0·51	0·41	0·51
		Joydebpore ...	...	0·05	...	...	1·17	0·09	...	1	1·31	?	1·73	?	1·73	?
	Hill Tippera Tippera ...	Agartola ...	...	...	...	...	...	0·10	...	1	0·10	0·55	0·10	0·68	0·10	0·68
		Comilla ...	...	...	...	...	...	0·16	...	1	0·61	0·80	0·16	0·88	0·16	0·88
		Chandpore ...	...	...	...	0·90	...	...	...	1	0·90	0·33	0·90	0·33	0·90	0·33
		Brahmanbaria	...	...	...	...	0·15	...	...	1	0·15	0·68	0·15	0·75	0·15	0·75
		Ramchandrapore	...	...	...	0·60	...	...	...	1	0·60	?	0·60	?	0·60	?
		Nasirnagar ...										?		?		?
		Daudkandi ...	...	0·10	...	...	...	...	...	1	0·10	?	0·10	?	0·10	?
		Kasba ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Laksham ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Mymensingh...	Kishorganj ...	...	...	...	...	0·21	...	0·34	2	0·55	0·84	0·55	0·97	0·55	0·97
		Atia (*Tangail*)	...	...	...	...	0·21	...	...	1	0·21	0·22	0·21	0·22	0·21	0·22
		Mymensingh ...	...	...	...	0·81	0·04	...	...	1	0·85	0·47	1·18	0·59	1·18	0·59
		Jamalpur ..	...	...	...	0·41	...	...	...	1	0·41	0·33	0·41	0·38	0·41	0·38
		Netrakona ...	...	...	...	0·21	...	...	1·93	2	2·14	0·12	2·14	0·12	2·14	0·12
		Subornakhalty	...	...	...	...	...	0·10	...	1	0·10	?	0·10	?	0·10	?
		Durgapore ...	...	...	...	1·70	...	0·70	...	1	2·40	?	2·40	?	2·40	?
		Sherepore Town	...	...	...	0·55	...	...	...	1	0·55	?	0·55	?	0·55	?
		Dewanganj ...	...	...	...	0·64	...	...	...	1	0·64	?	0·64	?	0·64	?
NORTH BIHAR	Purnea ...	Kishanganj ...	...	...	...	0·49	...	...	...	1	0·49	0·06	0·49	0·11	0·49	0·11
		Araria ...	...	...	...	0·68	...	...	...	1	0·68	0·17	0·68	0·18	0·68	0·18
		Purnea ...	...	...	...	0·61	...	...	...	1	0·61	0·19	0·61	0·19	0·61	0·19
		Gondwara (*Korah*)	...	...	...	0·25	...	...	...	1	0·25	?	0·25	?	0·25	?
		Barsoe ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Forbesganj ...	...	...	...	0·53	...	...	...	1	0·53	?	0·53	?	0·53	?
		Kaliaganj ...	...	...	...	0·08	0·27	...	...	1	0·35	?	0·35	?	0·35	?
	Bhagalpur ...	Madhipura ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	Nil	0·05
		Bongaon (*Syfabad*).	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Supaul ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	Nil	0·06
		Protabganj ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Bhagalpur ...	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·09	Nil	0·09
		Banka ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	Nil	0·06
		Colgong ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Darbhanga ...	Tajpur ...	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·02	Nil	0·02
		Darbhanga ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·02	Nil	0·02
		Madhubani ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	Nil	0·06
		Bahera ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Roshera ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 8th of April 1893—concld.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 2nd.	Monday, 3rd.	Tuesday, 4th.	Wednesday, 5th.	Thursday, 6th.	Friday, 7th.	Saturday, 8th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April.
NORTH BIHAR—concluded.	Muzaffarpur...	Sitamarhi ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	Nil	Nil	Nil
		Muzaffarpur	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·04	Nil	0·04
		Hajipur ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·06	Nil	0·06
		Paru	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Mahwa (Chitwarra.)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Siuhar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pupri	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Champaran ..	Motihari ...	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·13	Nil	0·13
		Bettiah	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·12	Nil	0·12
		Bagaha ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Burhurwa	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Saran ...	Gopalganj ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	Nil	Nil	Nil
		Siwan ...	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·01	Nil	0·01
		Chapra ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·05	Nil	0·05
SOUTH BIHAR	Shahabad ...	Buxar ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·08	Nil	0·08
		Dehri ...	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·07	Nil	0·07
		Bhabhua ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·04	Nil	0·04
		Sasaram ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·11	Nil	0·11
		Arrah ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·11	Nil	0·11
		Mohanea	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Khiri ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Ageaon ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Ramagar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Koath ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sikroul ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Bassowan ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Monaharpur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Gaya ...	Aurangabad ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	Nil	0·06
		Gaya ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·06	Nil	0·06
		Nawadah ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·07	Nil	0·07
		Jahanabad ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·10	Nil	0·10
		Arwal	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Daudnagar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sherghati ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Rajauli ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pakri Barawan	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Patna ...	Patna ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·05	Nil	0·05
		Dinapore ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·04	Nil	0·04
		Bihar ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	Nil	0·05
		Barh ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·02	Nil	0·02
		Bickram ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Hilsa ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Monghyr ...	Begusarai ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·03	Nil	0·03
		Monghyr ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	Nil	0·06
		Jamui ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	Nil	0·05
		Gogri ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Shaikpura ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Chahai Bamda	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Sonthal Parganas.	Rajmahal ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·02	Nil	0·02
		Godda ..	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·06	Nil	0·06
		Pakour ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·10	Nil	0·10
		Naya Dumka	...	...	0·03	...	...	...	...	Nil	0·03	0·20	0·03	0·20	0·03	0·20
		Deoghur .	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·04	Nil	0·04
		Jamtara ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·05	Nil	0·05
		Belbodda ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Nanihat ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
CHOTA NAGPUR.	Hazaribagh ...	Pachamba (*Giridih*). ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·04	Nil	0·04
		Hazaribagh	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·10	Nil	0·10
		Semtaguran	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·01	Nil	0·01
		Mahudi Hills	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·03	Nil	0·03
		Jhumra Hill	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	Nil	Nil	Nil
		Parhi ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Chatra ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Karagdeha ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Ramgar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Lohardaga	Lohardaga ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·04	Nil	0.04
		Ranchi ...	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·15	Nil	0·15
		Silli ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Palamau ..	Palamau (Daltonganj).	...	..	...	...	...	...	...	Nil	Nil	0·06	Nil	0·12	Nil	0·12
		Balumath ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Husainabad	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Garhwa .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Singhbhum ...	Chaibassa ...	...	...	...	0·35	...	...	...	1	0·35	0·13	0·35	0·24	0·35	0·24
		Chakardharpur.	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Ghatsila ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Baharagura	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Manbhum ...	Gailkeira ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Purulia ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·09	Nil	0·09
		Gobindpur ..	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·13	Nil	0·13
		Raghunathpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Barahabhum	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Jhalda ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Chas ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pandra ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the* 11*th April* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 8TH OF APRIL 1893.

At the close of the previous week conditions were fairly normal for the hot season, except that temperature was decidedly lower than usual, and that there was a feeble tendency to disturbance over the south-west of the province in connection with a feeble low pressure area. On the 2nd of April, or the first day of the present week, the changes of meteorological conditions were small, and at the majority of stations there had been a slight fall of pressure only, while the feeble depression over Lower Bengal had disappeared and weather was fine over practically the whole province. In North-Western India, over the Punjab, however, there was still a distinct low pressure area, which was giving rise to decidedly disturbed weather. On the 3rd of April again the changes in Bengal were small, and pressure was generally rising slowly. Weather therefore continued fair in Bengal, but on this day a barometric depression was shown over part of the North-West Provinces, and the disturbed weather in connection with it had advanced in an easterly direction. On the 4th instant pressure was falling rapidly in Bihar, and moderately over the remainder of the province, and the low pressure area existed on this day over Bihar and the east of the North-West Provinces, while on the 5th, it had again advanced eastward over Bengal, though on the 6th it had filled up and disappeared. Hence the disturbed conditions accompanying the depression again advanced in an easterly direction, and numerous local storms or nor'-westers, usually accompanied by rain, occurred in Bengal, and on the 4th and 5th, and in some districts on the 6th also, numerous stations reported rain, the rainfall being largest in amount in North and East Bengal and in comparatively small amount in South-West Bengal and North Bihar. On the 7th the pressure changes in Bengal were small, and though the barometer had usually fallen, pressure was still in excess of the normal by moderate amounts. The barometric depression having however disappeared, weather had again become fine over the greater part of the province and the local storms practically ceased, except in and near the hills. On the 8th a slow to moderate fall of pressure had taken place in the west of the province, but the general condition remained unchanged, and weather continued fine over the greater part of the province except in and near the hills, where conditions were again decidedly disturbed. Winds have to a great extent remained unchanged during the week, and over the western and south-western districts they have been westerly and south-westerly and at the eastern and northern stations they have been south-easterly and easterly. The usual strengthening of the southerly winds blowing at the head of the Bay noticeable in the hot season has taken place and rather strong southerly winds have been generally reported, particularly in the second half of the week.

Pressure.—The mean pressure for the week has been in rather large excess of the normal. The general excess over the province has been from 0·07" to 0·09", but comparatively small excess pressures of about 0·05" are reported in Chota Nagpur, while in parts of North Bengal the excess has equalled a tenth of an inch.

Temperature.—The general temperature for the week has again been in defect of the normal, the defect for the whole province equalling 1·5°. During the week, however, there has been a considerable increase in the temperature, and the defects at the close of the week were much smaller than they had been for some time. Indeed on the first day of the week the mean temperature of the province was from about 2° to 4°, or 5° below the normal, while on the 8th the defect generally equalled from 1° to 2° only, and in certain parts of Chota Nagpur, Bihar, and North Bengal temperature was even in slight excess of the normal.

The distribution of temperature for the week and its variation from the normal value are best seen in the table below, where the average maximum, minimum and mean temperatures for the week at nine typical stations in different districts of the province are compared with the normal values for the period. It will be seen that the principal defects from the normal have again occurred in the maximum or day temperatures :—

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 8th April 1893.

	Normal mean maximum temperature for the week ending 8th April.	Actual mean maximum temperature for the week ending 8th April 1893.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 8th April.	Actual mean minimum temperature for the week ending 8th April 1893.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 8th April.	Actual mean daily temperature for the week ending 8th April 1893.	Variation of actual mean from the normal.
Cuttack	101·7	98·3	—3·4	76·6	76·1	—0·5	89·2	87·2	—2·0
Calcutta	95·9	91·5	—4·4	74·7	74·3	—0·4	85·3	82·9	—2·4
Dacca	93·7	89·1	—4·6	74·1	73·1	—1·0	83·9	81·4	—2·5
Burdwan	100·4	94·7	—5·7	74·3	74·1	—0·2	87·4	84·4	—3·0
Patna	99·5	96·8	—2·7	71·9	69·8	—2·1	85·7	83·4	—2·3
Gaya	101·3	98·1	—3·2	72·5	72·2	—0·3	86·9	85·2	—1·7
Purnea	97·6	93·1	—4·5	68·3	69·5	+1·2	83·0	81·3	—1·7
Hazaribagh	95·7	93·2	—2·5	70·3	68·5	—1·8	83·0	80·8	—2·2
Darjeeling	60·6	59·5	—1·1	46·4	47·3	+0·9	53·5	53·4	—0·1

Rainfall.—A general fall of about one inch has occurred in North Bengal, or nearly four times as much as usual. A fall of nearly half an inch is reported in East Bengal, or practically a normal amount, and a fall of about a third of an inch in South-West Bengal, or again practically a normal fall. In North Bihar the fall has equalled only a tenth of an inch, and the remainder of the province has been nearly rainless. In North Bengal the heaviest falls are reported from the districts of Kuch Bihar, Darjiling and Rangpur; in South-West Bengal the heaviest falls have been in the Nadia and Khulna districts, while moderately heavy falls have occurred also in the following districts:—Jessore, Pabna, Backergange, Faridpur, and Purnea.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 8th of April 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 1st April 1893.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	102·1	70·9	89·7	75·4	82 7	—1·6	Nil	0·17	—0·17	0·00	0·32	—0·32	Nil	0·19	Nil	0·19
South-West Bengal ...	100·7	68·9	93·7	73·9	83·9	—2·1	0·31	0·27	+0·04	0·48	0·44	+0·04	0·31	0 29	0·31	0·29
North Bengal	94·7	64·6	89·3	69·8	79 6	—1·4	0·99	0·28	+0·71	1·36	0·41	+0·95	0·99	0·30	0·99	0·30
East Bengal	91·3	67 8	88 2	70 3	79·3	—1·3	0·59	0·44	+0·15	0·76	0·71	+0·05	0·62	0·49	0·62	0·49
North Bihar	101·3	64·4	94·8	68·9	81·9	—0·3	0·19	0·07	+0·03	0·17	0·17	0	0·10	0·08	0·10	0·08
South Bihar	104·4	65·1	97·4	70·4	83 9	—0 8	Nil	0·06	—0·06	0·00	0·17	—0·17	Nil	0·07	Nil	0·07
Chota Nagpur	99·1	65 3	94·1	68·4	81·2	—2·6	0 03	0·07	—0·04	0·09	0·18	—0 09	0·03	0·09	0·03	0·09

METEOROLOGICAL OFFICE, BENGAL,
The 11th April 1893.

A. PEDLER,
Meteorological Reporter to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 2nd to 8th April 1893.

Mouth.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature.				Hygrometry.				Wind.		Rain.	Weather.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
April	2nd	150 4	5·0	29·848	81·4	89·6	14 9	74·7	75·9	0·820	73·2	78	Calm and variable	35	Nil	Partially cloudy. ⌒, ═.
"	3rd	150·0	8·8	·868	82·0	90·8	17·2	73·6	76·6	·846	74·2	79	ESE and calm ...	38	"	Partially cloudy.
"	4th	150·2	9·4	·826	82 2	91 6	17·6	74 0	77·1	·862	74·7	79	SSW and calm ...	115	"	Partially cloudy, ⌒, t.
"	5th	147·5	9·7	·818	82·6	90·6	17·4	73·2	77·3	·871	75·0	79	SSW and S ...	160	"	Partially cloudy.
"	6th	147·8	8·6	·846	83·7	93·4	18·2	75·2	77·8	·873	75·1	77	SSW and calm ...	67	"	Partially cloudy, ⌒.
"	7th	146 8	10·4	·828	82·3	92·9	17·4	75·5	76·8	·849	74·3	77	SW and SSW ...	160	"	Chiefly clear, ⌒.
"	8th	147 5	10·2	·802	82·0	92·1	18·9	73·2	76·1	·822	73·3	75	SSW ...	189	,	Cear, ⌒.

	Inches.
The mean pressure of the seven days	29·834
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	29·780
	Hours.
The total number of hours of bright sunshine	62·1
The maximum possible number of hours of sunshine	86·9
	°
The mean temperature of the seven days	82 3
The average temperature of the corresponding period for 24 years, S.-G.'s Office	84·4
The extreme variation of temperature	20·2
The maximum temperature	93·4
	Miles.
The highest velocity of the wind in one hour	14
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	78
The average relative humidity of the corresponding perit d for 24 years, S.-G.'s Office	67
	Inches.
The total fall of rain from 2nd to 8th April 1893	Nil
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·40
The total fall from 1st January to 8th April 1893	6·85
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	3·20

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

⌒, dew; ═, fog; t, thunder.

C. Little,

For Meteorological Reporter to the Gort. of India.

Meteorological Office, Govt. of India;

Calcutta, the 10th April 1893.

Abstract of the Results of the Barometric and Thermometric Observations taken at 10 a.m. at the Meteorological Office, Chowringhee, in the month of March 1893.

		Inches.	Date.
The mean pressure at 10 A.M. during the month	... ...	29·967	
The mean temperature at 10 A.M. during the month	... ...	79·5°	
The highest temperature during the month	... ...	95·0	31st.
The lowest temperature during the month	... ...	57·9	1st.
The absolute range of temperature during the month	... ...	37·1	
The mean daily range of temperature during the month	...	19·8	
The greatest range of temperature in one day during the month	...	26·1	31st.
		%	
The mean 10 A.M. humidity during the month	... ...	66	
		Inches.	
The mean 10 A.M. vapour tension during the month	... ...	·663	
The total rainfall of the month	... ...	2·21	
The greatest fall in 24 hours	... ...	0·74	21st.
The number of rainy days in the month	... ...	5	

C. LITTLE,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 10th April 1893.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 2nd to 8th April 1893

MONTH	Date.	Pressure at 10 A.M. corrected and reduced to 32° Fahr.	TEMPERATURE.				HYGROMETRY.					Rainfall at 10 A.M. for past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
April ...	2nd ...	29·907	83·1	91·5	16 9	74·6	84·6	77·5	·850	74·3	72	Nil
" ...	3rd ...	·928	83·0	92·0	18·0	74·0	86·6	79·5	·914	76·5	72	...
" ...	4th ...	·871	83 7	93·0	18·7	74·3	87·0	79·5	·908	76·3	71	...
" ...	5th ...	·869	83 0	93·0	20·0	73·0	88·1	79·5	·893	75·8	68	...
" ...	6th ...	·909	85·7	96·0	20·7	75·3	87·1	79·5	·906	76 3	71	...
" ...	7th ...	·892	84·6	94 0	18·8	75·2	87·0	79·5	·907	76·3	71	...
" ...	8th ...	·879	83·9	94·0	20·2	73·8	88·4	79·5	·887	75·6	66	...

		Inches.
The mean 10 A.M. pressure of the seven days	... ...	29·894
		°
The mean temperature of the seven days	... ...	83·9
The extreme variation of temperature	... .	23 0
The maximum temperature	... ...	96·0
		%
The mean 10 A.M. relative humidity of the seven days	... ...	70
The total fall of rain from 2nd to 8th April 1893	... ...	Nil

The daily mean temperatures are the crude means of maximum and minimum temperatures.

C. LITTLE,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 10th April 1893.

IRRIGATION DEPARTMENT,—BENGAL.

Statement showing heights over mean sea-level and low-water in the Rivers Ganges, Bhagirathi, Jalangi, and Brahmaputra, for the month of March 1 93.

Date.	River Ganges.																River Bhagirathi.		River Jalangi.		River Brahmaputra.	
	Mirzapur.		Benares.		Buxar.		Dinapore.		Monghyr.		Sahibganj.		Rampur Boalia.		Goalundo.		Berhampore.		Sarupganj.		Gowhatty.	
Distance. Miles.	86 From Allahabad		134 From Allahabad	48 From Mirzapur	90 From Benares		177 From Benares	87 From Buxar ...	287 From Benares	110 From Dinapore	381 From Benares	94 From Monghyr	471 From Benares	90 From Sahibganj ...	591 From Benares	120 From Rampur Boalia ...						
	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.
									Below zero.		Below zero.		Below zero.								Below zero.	
1st	3·08	209·30	1·00	197·80	1·42	170·47	7·50	141·73	0·50	101·35	2·58	65·42	0·21	41·79	0 75	9·69	2·75	36·49	2·83	7·13	0·65	148·11
2nd	3·08	209·30	1·00	197·80	1·42	170·47	7 50	141·73	0·33	101·52	2·67	65·33	0·19	41·81	0·75	9·69	2·75	36·49	2·75	7·05	0·65	148·11
3rd	3·08	209·30	1·08	197·88	1·42	170·47	7·50	141·73	0·25	101 60	2·75	65·25	0·19	41·81	0 75	9·69	2·75	36·49	2·75	7·05	0·70	148·06
4th	3·08	209·30	1·25	198·05	1·42	170·47	7·50	141·73	0·17	101·68	2·83	65·17	0·17	41·83	0·92	9·86	2·73	36 47	2·75	7·05	0·70	148·06
5th	3·83	209·32	1·42	198·22	1·50	170·55	7·60	141·83	0·17	101·68	2·92	65·08	0·17	41·83	1·00	9·94	2·73	36·47	2·50	6·80	0·70	148·06
6th	4·58	210·80	2·17	198·97	1·50	170·55	8·00	142·23	0·12	101·73	3·00	65·00	0·14	41 86	1·08	10·02	2·73	36·47	2·42	6·72	0·70	148·06
7th	4·92	211·14	2·83	199·63	1·75	170·80	8·10	142·33	0·04	101·81	3·08	64·92	0·14	41·86	1·00	9·94	2·71	36·45	2·42	6·72	0·75	147·91
									Above zero.													
8th	5·00	211·22	2·92	199·72	2·25	171·30	8·20	142·43	0·12	101·97	3·17	64·83	0·17	41·83	1·00	9·94	2·71	36·45	2·42	6·72	0·85	147·91
9th	5·00	211·22	3·00	199·80	2·83	171·88	8·20	142·43	0·33	102·18	3·25	64·75	0·19	41·81	1 00	9 94	2·71	36·45	2·33	6 63	0·85	147·91
10th	5·00	211 22	3·00	199·80	2·92	171·97	8·40	142·63	0·42	102·27	3 25	64·75	0·21	41·79	0·83	9·77	2·71	36·45	2·21	6·51	0·85	147·91
11th	5·17	211·39	3·00	199·80	2 92	171·97	8·50	142·73	0·67	102·52	3·33	64·67	0·23	41·77	0·83	9·77	2·69	36·43	2·25	6·55	0·90	147 86
12th	4·92	211·14	3·00	199·80	3·00	172·05	8·50	142·73	0·75	102·60	3·42	64·58	0·25	41 75	0·75	9·69	2·69	36·43	2·25	6·55	0·90	147·86
13th	4·92	211·14	3·00	199·80	3·00	172·05	8·65	142·88	0·83	102·68	3·42	64·58	0·25	41 75	0·75	9 69	2 67	36 42	2·26	6·55	0·90	147·86
14th	4·92	211·14	2·92	199·72	3·00	172·05	8·65	142·88	1·00	102·85	3·50	64·50	0·23	41·77	0·75	9·69	2·67	36·41	2·17	6·47	0·85	147·91
15th	4·67	210·89	2·75	199·55	3·00	172·05	8·80	143·03	1·08	102·93	3·50	64·50	0·21	41·79	0·75	9·69	2·67	36·41	2·17	6·47	0·85	147·91
16th	4·67	210·89	2·58	199·38	3·00	172·05	8·70	142·93	1·08	102·93	3·58	64·42	0·19	41·81	0·75	9·69	2·64	36 38	2·42	6·72	0·80	147·96
17th	4·58	210·80	2·50	199·30	2·92	171·97	8·65	142·88	1·33	103·18	3·67	64·33	0·12	41·88	0·83	9·77	2·64	36·38	2·62	6·72	0·75	148·01
18th	4·58	210·80	2·50	199·30	2·75	171·80	8·60	142·83	1·42	103·27	3·67	64·33	0 08	41·92	1·00	9·94	2·64	36·38	3·33	7·63	0·70	148·06
19th	4·50	210·72	2·50	199·30	2·75	171·80	8·40	142·63	1·50	103·35	3·75	64·25	0 02	41·98	1·33	10·27	2·85	36·59	3·50	7·80	0·65	148·11
													Above zero.									
20th	4·42	210·64	2·46	199·26	2·67	171·72	8·30	142·53	1·50	103·35	3·83	64·17	0·06	42·06	1·75	10·69	3·08	36·82	3 33	7·63	0·65	148·11
21st	4·42	210·64	2·42	199·22	2·58	171·63	8·25	142·48	1·46	103·31	3·92	64·08	0·10	42·10	2·00	10·94	3·08	36·83	3·75	8·05	0·65	148·11
22nd	4·42	210·64	2·33	199·13	2·58	171·63	8·10	142·33	1·37	103·22	3·92	64·08	0·12	42·12	2·25	11·19	3 08	36·82	3·58	7·88	0·70	148·06
23rd	4·42	210·64	2·37	199·17	2·58	171·63	8·00	142·23	1·25	103·10	3·83	64·17	0·12	42·12	2·17	11·11	3·25	36·99	3·42	7·72	0·70	148·06
24th	4·33	210·55	2·17	198·97	2·50	171·55	7·90	142·13	1·17	103·02	3·83	64·17	0·14	42·14	1·75	10·69	3·25	36·99	3·00	7·30	0·60	148·16
25th	4·08	210·30	2·12	198·92	2·50	171·55	7·80	142·03	1·00	102·85	3·92	64·08	0·14	42·14	1·50	10·44	3·17	36·91	2·83	7·13	0·55	148·21
																					Above zero.	
26th	4·00	210·22	2·08	198·88	2·42	171·47	7·70	141·93	1·83	103·68	3·92	64·08	0·08	42·08	1·25	10·19	3·17	36·91	2·67	6·97	0·50	149·26
27th	4·00	210·22	2·04	198·84	2·33	171·38	7·50	141·73	0·67	103·52	3·00	65·00	0·00	42·00	1·08	10·02	3·08	36·82	2·67	6·97	1·10	149·86
													Below zero.									
28th	3·67	209·89	2·00	198·80	2·25	171·30	7·50	141·73	0·58	102·43	3·00	65·00	0·06	41·94	1·00	9·94	3·08	36·82	2·67	6·97	1·30	150·06
29th	3·92	210·14	1·83	198·63	2·17	171 22	7·50	141·73	0·54	102·39	4·08	63·92	0·19	41·81	1·00	9·94	3·00	36·74	2·67	6·97	1·10	149·86
30th	3·92	210·14	1·71	198·51	2·25	171·30	7·50	141·73	0·42	102·27	4·08	63·92	0·29	41·71	1·17	10·11	3·00	36·74	2·67	6·97	0·70	149·46
31st	3·83	210·05	1·58	198·38	2·17	171·22	7·40	141·63	0·33	102·18	4·08	63·92	0·40	41·60	1·50	10·44	3·00	36·74	2·50	6·80	0·20	148·96

CALCUTTA,
The 11th April 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

IRRIGATION DEPARTMENT, BENGAL.

Abstract statement showing Tollage on Canals in Bengal classed as Major Works for the month of February 1893, as compared with that of the corresponding month of the previous year.

Canals.	Tollage, 1892-93.						Tollage, 1891-92.					
	During the month.			To end of the month.			During the month.			To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Orissa Circle.												
Taldanda Canal System	506	3	3	6,209	2	11	363	2	2	3,833	15	9
Kendrapara ditto ...	8,685	15	4	63,394	4	7	9,043	10	3	85,753	2	8
High Level, Range I	1,959	10	6	13,234	13	0	1,779	6	2	11,109	14	2
Ditto " II	385	4	0	2,632	8	9	365	15	9	2,495	5	0
Ditto " III	176	7	4	1,403	1	8	170	2	0	1,550	10	4
Jajpur Canal ...	39	5	6	253	7	6	35	8	6	237	12	6
Total Orissa Circle ...	11,752	13	11	87,127	6	5	11,757	12	10	1,04,980	12	5
South-Western Circle.												
Midnapore Canal ...	7,726	0	6	1,01,872	6	6	15,049	11	0	1,10,598	3	3
Hijili Tidal Canal ...	4,576	6	6	45,467	14	9	5,200	0	3	30,523	1	3
Total South-Western Circle	12,302	7	0	1,47,340	5	3	20,249	11	3	1,41,121	4	6
Sone Circle.												
Patna Canal System ...	1,180	4	0	18,295	8	9	1,896	3	0	22,318	5	0
Arrah ditto ...	1,242	15	9	15,708	12	6	1,377	12	0	18,535	1	0
Buxar ditto ...	1,045	9	3	9,300	1	0	796	11	0	9,482	8	9
Total Sone Circle ...	3,468	13	0	43,304	6	3	4,070	10	.0	50,335	14	9
Grand Total ...	27,524	1	11	2,77,772	1	11	36,078	2	1	2,96,437	15	8

Government Transport Service.

Canal.	Tollage, 1892-93.										Tollage, 1891-92.									
	During the month.					To end of the month.					During the month.					To end of the month.				
	Passengers.	Goods.	Total receipts.			Passengers.	Goods.	Total receipts.			Passengers.	Goods.	Total receipts.			Passengers.	Goods.	Total receipts.		
	No.	Mds.	Rs.	A.	P.	No.	Mds.	Rs.	A.	P.	No.	Mds.	Rs.	A.	P.	No.	Mds.	Rs.	A.	P.
Orissa Circle.																				
High Level ...	2,353	1,312	2,184	3	7	16,420	13,476	16,661	8	5	1,385	1,517	1,788	0	3	11,662	11,311	12,063	9	4
Total Orissa Circle	2,353	1,312	2,184	3	7	16,420	13,476	16,661	8	5	1,385	1,517	1,788	0	3	11,662	11,311	12,063	9	4

Total Navigation Receipts.

Canals.	Earnings, 1892-93.						Earnings, 1891-92.					
	During the month.			To end of the month.			During the month.			To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Orissa Canals ...	13,937	1	6	1,03,788	14	10	13,545	13	1	1,16,974	5	9
Midnapore Canal ...	7,726	0	6	1,01,872	6	6	15,049	11	0	1,10,598	3	3
Hijili Tidal Canal ...	4,576	6	6	45,467	14	9	5,200	0	3	30,523	1	3
Sone Canals ...	3,468	13	0	43,304	6	3	4,070	10	0	50,335	14	9
Total ...	29,708	5	6	2,94,433	10	4	37,866	2	4	3,08,501	9	0

CALCUTTA,
The 11th April 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

IRRIGATION DEPARTMENT, BENGAL.

Abstract statement showing Tollage on Canals in Bengal classed as Minor Works and Navigation for the month of February 1893, as compared with that of the corresponding month of the previous year.

CANALS.	TOLLAGE, 1892-93.						TOLLAGE, 1891-92.					
	During the month.			To end of the month.			During the month.			To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Calcutta and Eastern Canals ...	42,124	8	3	3,25,970	2	9	49,813	9	3	3,58,008	12	3
Tolly's Nala ...	9,207	0	9	81,411	2	0	11,350	14	9	1,04,047	5	9
Total ...	51,331	9	0	4,07,381	4	9	61,164	8	0	4,62,056	2	0
Orissa Coast Canal ...	5,884	3	3	46,329	8	0	7,339	12	0	51,071	2	9
Nadia Rivers ...	7,829	8	0	1,56,330	0	3	9,200	15	0	1,86,095	5	6
GRAND TOTAL ...	65,045	4	3	6,10,040	13	0	77,705	3	0	6,99,222	10	3

CALCUTTA,
The 11*th April* 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

EAST INDIAN RAILWAY.

Statement of Goods Traffic in Staples carried during the four weeks ending 28th January 1893, *as compared with the same period of* 1892.

STAPLES.	1892.		1893.		INCREASE.		DECREASE.	
	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.
	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds	Rs.
Cotton, raw ...	70,594	49,016	88,773	56,499	18,179	7,483	...	...
Cotton twist and yarn—								
1.—European ...	8,754	9,183	7,032	6,673	...	...	1,722	2,510
2.—Indian ...	19,234	9,668	16,474	8,476	...	...	2,760	1,192
Cotton piece-goods—								
1.—European ...	1,56,118	2,11,289	162,737	1,82,156	6,619	...	...	29,133
2.—Indian ...	8,806	4,914	11,599	7,755	2,793	2,841	...	...
Drugs and chemicals—								
1.—Intoxicating other than opium ...	583	149	1,078	316	495	167	...	...
2.—Non-intoxicating ...	13,646	10,034	9,202	8,359	...	...	4,444	1,675
Dyes and tans—								
1.—Indigo ...	2,697	1,785	965	827	...	...	1,732	958
2.—Myrabolams ...	29,823	6,837	54,039	11,833	24,216	4,996	...	...
3.—Aniline dyes ...	317	347	387	343	70	...	...	4
4.—Cutch ...	1,188	460	1,412	507	224	47	...	...
5.—Paints and colours ...	15,935	6,092	15,825	5,238	...	...	110	854
6.—Others ...	4,404	2,280	2,670	1,078	...	...	1,734	1,202
Grains—								
1.—Wheat ...	2,46,172	77,053	2,66,609	1,09,344	20,437	32,291	...	...
2.—Rice ...	8,51,550	1,41,993	7,83,251	1,28,381	...	...	68,299	13,612
3.—Jawar and bajra ...	57,572	8,361	58,175	7,430	603	...	...	928
4.—Gram ...	82,830	22,290	1,11,369	48,219	28,539	25,929	...	...
5.—Indigo seed ...	98,584	39,618	88,233	32,514	...	...	10,351	7,104
6.—Seeds other than oil-seeds ...	70,014	25,389	76,699	21,101	6,685	...	...	4,288
7.—Others ...	3,29,017	79,143	3,19,617	83,826	...	4,683	9,400	...
Hides and skins—								
1.—Hides of cattle ...	42,901	30,824	61,818	42,348	18,917	11,524	...	...
2.—Skins of sheep, &c. ...	15,827	9,407	16,689	7,393	862	...	...	2,014
Horns ...	2,026	1,046	948	623	...	...	1,078	423
Jute—								
1.—Raw ...	44,962	9,782	55,491	16,673	10,529	6,891	...	...
2.—Gunny bags and cloth ...	75,693	35,116	1,04,246	57,419	28,553	22,303	...	...
Lac—								
1.—Stick ...	25,986	7,113	17,030	5,784	...	...	8,956	1,329
2.—Shell lac ...	19,133	14,718	15,659	12,364	...	...	3,474	2,354
Leather—								
1.—Unmanufactured ...	1,824	3,312	1,926	3,966	102	654	...	...
2.—Manufactured ...	5,271	5,714	7,989	7,984	2,718	2,270	...	...
Liquors—								
1.—Beer ...	8,155	5,266	6,466	3,586	...	...	1,689	1,680
2.—Wines ...	2,067	3,741	3,949	5,575	1,882	1,834	...	...
3.—Spirits ...	1,112	1,347	3,457	3,828	2,395	2,481	...	...
Metals—								
1.—Copper, unwrought ...	8,667	10,036	2,805	3,229	...	...	5,862	6,807
2.—Brass, unwrought ...	3,712	1,847	3,763	2,215	51	368	...	...
3.—Brass and copper, wrought ...	17,615	8,932	16,154	8,328	...	...	1,461	604
4.—Iron ...	2,17,514	83,046	2,26,252	1,13,383	8,738	29,337	...	...
5.—Tin ...	4,691	3,521	3,563	2,677	...	...	1,128	844
6.—Others ...	12,135	8,733	12,092	8,375	...	...	43	358
Oils—								
1.—Castor ...	3,407	938	3,683	1,148	276	210	...	...
2.—Kerosine ...	1,18,207	61,912	1,48,873	65,763	30,666	3,851	...	...
3.—Others ...	9,440	3,993	10,715	4,344	1,275	351	...	...
Oil-seeds—								
1.—Linseed ...	70,166	22,457	12,546	3,557	...	...	57,620	18,900
2.—Rape and mustard ...	1,69,800	39,485	2,51,736	54,113	81,936	14,628	...	...
3.—Til or jinjili ...	53,674	13,260	68,905	15,423	15,231	2,163	...	...
4.—Castor ...	70,946	18,029	55,430	14,449	...	...	15,516	3,580
5.—Poppy ...	12,572	3,675	1,599	302	...	...	10,973	3,373
6.—Others ...	19,672	5,445	22,797	3,065	3,125	...	...	2,380
Opium ...	716	693	243	185	...	...	473	418
Paper and pasteboard ...	7,755	4,251	10,261	6,223	2,506	1,972	...	...
Provisions—								
1.—Ghee ...	30,891	20,457	34,141	18,495	3,250	...	...	1,962
2.—Dried fruits and nuts ...	33,453	24,037	33,200	24,845	...	808	253	...
3.—Cocoanuts ...	6,997	2,818	5,144	1,373	...	...	1,853	1,445
4.—Turmeric ...	15,007	8,616	17,381	13,962	2,374	5,346	...	...
5.—Others ...	94,247	23,257	98,610	36,399	4,363	13,142	...	...
Salt ...	3,81,349	83,202	3,92,296	92,085	10,947	8,883	...	...
Saltpetre, &c.—								
1.—Saltpetre ...	82,173	40,154	55,003	24,988	...	...	27,170	15,166
2.—Borax ...	482	248	3,455	2,703	2,973	2,455	...	...
3.—Other saline substances ...	40,551	12,187	19,397	7,514	...	...	21,154	4,67
Silk, raw—								
1.—Foreign ...	...	...	4	1	4	1	...	...
2.—Indian ...	2,108	1,101	3,830	1,743	1,722	642	...	...
Silk piece-goods—								
1.—Foreign ...	34	93	1	1	...	...	33,	92
2.—Indian ...	572	681	559	800	...	119	13	...
Spices—								
1.—Pepper ...	4,076	4,069	2,261	1,928	...	...	1,815	2,141
2.—Other ...	44,607	29,002	35,700	24,385	...	...	8,907	4,617
Sugar—								
1.—Drained ...	24,593	10,973	19,822	10,341	...	...	4,771	632
2.—Undrained ...	5,44,426	1,07,372	5,89,541	1,46,752	45,115	39,380	...	...
Stone and lime ...	3,06,288	38,003	2,54,597	47,369	...	9,366	51,691	...
Tea—								
1.—Foreign ...	...	...	...	...	...	...	...	...
2.—Indian ...	1,082	518	1,825	1,053	743	535	...	...
Timber, &c.—								
1.—Timber ...	1,26,886	20,676	91,604	14,918	...	...	34,882	5,758
2.—Firewood ...	30,027	3,756	27,291	2,179	...	...	2,736	1,577
Tobacco ...	29,203	12,820	25,144	11,850	...	...	4,859	970
Umbrellas ...	1,050	1,382	859	934	...	...	191	448
Wool—								
1.—Raw ...	2,525	2,519	1,209	1,037	...	...	1,316	1,482
2.—Piece-goods—								
a.—European ...	998	1,309	386	442	...	...	612	867
b.—Indian ...	3,361	3,023	1,574	1,846	...	...	1,787	1,177
3.—Shawls ...	...	...	...	...	...	...	...	...
All other articles of merchandise ...	6,38,269	1,93,597	4,90,865	1,38,147	...	...	1,47,404	55,450
Total ...	55,58,239	17,69,323	54,28,760	18,22,293	...	52,970	1,29,479	...
Military stores ...	22,611	25,068	22,494	42,954	...	17,886	117	...
Coal—								
1.—For public ...	48,01,255	7,31,229	48,18,397	6,51,307	17,142	...	...	79,922
2.— " Railway ...	3,77,703	48,531	4,21,035	39,861	43,332	...	...	8,670
Railway Materials—								
1.—For construction and revenue ...	8,05,457	26,497	11,60,657	50,022	3,55,200	23,525	...	...
Live-stock ...	...	14,211	...	9,094	...	...	...	5,117
Total ...	1,15,65,265	26,14,859	1,18,51,343	26,15,531	2,86,078	672	...	...

T. SIMPSON, *Assistant Auditor.*

TRAFFIC AUDIT OFFICE, GOODS DIVISION, JAMALPUR, *the 7th April* 1893.

EASTERN BENGAL STATE RAILWAY.

Abstract of principal commodities carried over the Eastern Bengal State Railway during the month of January 1893, as compared with the same month of the previous year.

Staples.	1892.		1891.		Total.		Increase.	Decrease.
	Up.	Down.	Up.	Down.	1892.	1891.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal	7,101	14,039	8,129	11,717	26,887*	23,093*	3,794	......
Cotton, raw	8	235	42	356	243	398	......	155
Cotton twist and yarn—								
1.—European								
2.—Indian								
Cotton piece-goods—								
1.—European—								
a.—In bales and bundles	2,533	91	2,960	202	2,624	3,162	......	538
b.—In boxes								
2.—Indian—								
a.—In bales and bundles								
b.—In boxes								
Grains—								
2.—Rice	2,451	2,240	8,678	2,055	4,691	10,733	......	6,042
5.—Others	1,906	6,595	2,824	4,467	8,501	7,291	1,210	......
Hides and skins—								
1.—Hides of cattle—								
a.—Dressed								
b.—Undressed								
2.—Skins of sheep, &c.—	12	721	7	368	733	375	358	......
a.—Dressed								
b.—Undressed								
Jute—								
1.—Raw—								
a.—Screwed	9	10,925	......	3,758	10,934	3,758	7 176	
b.—Unscrewed	7	12,531	1	8,563	12,538	8,564	3,974	......
2.—Gunny bags and cloth	227	1,030	397	1,040	1,257	1,347	... ..	... 90
Metals—								
1.—Copper, unwrought								
2.—Brass, unwrought								
3.—Brass and copper, wrought	1,652	153	1,309	105	1,805	1,414	391	......
4.—Iron								
5.—Tin								
6.—Others								
Oils—								
2.—Kerosine	5,560	202	958	9	5,662	967	4,695	......
3.—Others	402	62	234	41	464	275	189	......
Oil-seeds—								
1.—Linseed								
2.—Rape and mustard								
3.—Til or gingelly								
4.—Niger	138	332	164	2,114	470	2,278	......	1,808
5.—Castor								
6.—Poppy								
7.—Others								
Provisions—								
2.—Betel-nuts	134	1,169	89	1,022	1,303	1,111	192	......
3.—Others	722	423	641	396	1,145†	1,037†	108	... ..
Railway plant and rolling-stock	......	......	......	......	9,492	5,050	4,442	......
Salt	2,822	18	3,467	27	2,840	3,494	......	654
Sugar—								
1.—Drained	1,003	898	1,352	740	1,901	2,092	......	191
2.—Undrained								
Tea—								
1.—Foreign	... ..	826	1	768	826	769	57	.. ...
2.—Indian								
Wood—								
1.—Timber	228	236	270	285	464	555	......	91
2.—Firewood	966	......	1,452	.	966	1,452	.....	486
Tobacco	40	522	59	556	562	615	......	53
All other articles of merchandise—								
1.—Unmanufactured	4,056	1,850	4,040	1,965	5,906	6,005	......	99
2.—Manufactured								
Hay, straw, and wooloo (C. & S.-E. Sections)...	1,033	......	861	8	1,033	869	164	......
Total ...	32,910	55,098	37,845	40,562	103,247	86,704	26,750	10,207

* Includes 5,747 tons and 3,247 tons of coal during 1893 and 1892, respectively, carried for Revenue, for which no "Up" and "Down" register maintained.

† Railway plant and rolling-stock, 9,492 tons and 5,050 tons for the years 1893 and 1892, respectively, for which no "Up" and "Down" register maintained.

Comparative Statement of principal commodities carried on the Eastern Bengal State Railway during the month of January 1893.

INCREASES.

	Tons.
Coal	3,794
For railway and Flotilla consumption and for brick burning..	
Jute, screwed	7,176
The principal increase was in despatches from Haldibari, Rangpur and Jalpaiguri.	
Jute, unscrewed	3,974
Mymensingh, Rangpur, Forbesganj, Domar, Jalpaiguri and other stations on the Northern Section show increases under this head. The crop of 1892 was larger than that of 1891.	

	Tons.
Kerosine oil	4,694
Due to the prohibition of carriage by boats within certain limits of the port of Calcutta.	
Railway plant and rolling-stock	4,442
Due to construction of connected railways.	

DECREASES.

	Tons.
Cotton twist and yarn } ,, piece-goods }	538
Ordinary fluctuation.	
Rice	6,042
The chief decrease was in despatches from Jaypurhat, Nowabganj and Hilli. Local stocks were low.	

	Tons.
Oil-seeds	1,808
Due to short crops.	
Salt	654
Mostly in the upward despatches from Chitpore.	

JAMES SHAW,
for Examiner of Accounts.

CALCUTTA, *the 6th April* 1893.

BENGAL CENTRAL RAILWAY.

Abstract of principal commodities carried over the Bengal Central Railway during the month of January 1893, as compared with the same month of the previous year.

Staples.	1893. Up.	1893. Down.	1892. Up.	1892. Down.	Total. 1893.	Total. 1892.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal	3,123	......	2,614	......	3,632*	3,033*	599	......
Cotton, raw	......	1	......	......	1	......	1	......
Cotton twist and yarn—								
1.—European								
2.—Indian								
Cotton piece-goods—								
1.—European—								
a.—In bales and bundles	325	......	313	......	325	313	12	......
b.—In boxes								
2.—Indian—								
a.—In bales and bundles								
b.—In boxes								
Grains—								
2.—Rice	6	634	6	1,797	640	1,803	......	1,163
5.—Others	51	120	48	143	171	191	......	20
Hides and skins—								
1.—Hides of cattle—								
a.—Dressed								
b.—Undressed								
2.—Skins of sheep, &c.—	......	33	......	31	33	31	2	......
a.—Dressed								
b.—Undressed								
Jute—								
1.—Raw—								
b.—Unscrewed	1	442	......	100	443	103	343	......
2.—Gunny bags and cloth	15	1	18	......	16	18	......	2
Metals—								
1.—Copper, unwrought								
2.—Brass, unwrought								
3.—Brass and copper, wrought	126	13	56	4	139	60	79	......
4.—Iron								
5.—Tin								
6.—Others								
Oils—								
2.—Kerosine	118	2	119	......	120	119	1	......
3.—Others	127	......	90	......	127	90	37	......
Oil-seeds—								
1.—Linseed								
2.—Rape and mustard								
3.—Til or gingelly								
4.—Niger	19	......	39	231	19	270	......	251
5.—Castor								
6.—Poppy								
7.—Others								
Provisions—								
2.—Betel-nuts	......	1,298	......	1,068	1,298	1,068	230	......
3.—Others	149	204	143	101	253	244	109	......
Railway plant and rolling-stock	......	......	......	......	150†	539†	......	389
Salt	156	......	223	......	156	223	......	67
Sugar—								
1.—Drained	628	190	106	572	818	678	140	......
2.—Undrained								
Tobacco	20	22	28	5	42	33	9	......
All other articles of merchandise—								
1.—Unmanufactured	324	167	464	291	491	755	......	264
2.—Manufactured								
Total ...	5,188	3,127	4,267	4,343	8,974	9,568	1,562	2,156

* Includes 509 tons and 419 tons of coal during 1893 and 1892 respectively carried for Revenue, for which no "Up" and "Down" register maintained.

† Railway plant and rolling-stock 150 tons and 539 tons for the years 1893 and 1892, respectively, for which no "Up" and "Down" register maintained.

Comparative Statement of principal commodities carried on the Bengal Central Railway during the month of January 1893.

INCREASES.

	Tons.
Coal	599

For brick burning.

Betel-nuts	230

Nearly the whole of the increase was contributed by the Bengal Central Flotilla stations *viâ* Khulna.

Sugar	140

Jhikargacha contributed about 14,000 maunds, or nearly one-half of the increase.

DECREASES.

	Tons.
Rice	1,163

The principal decrease was in despatches from Khulna station. Prices were not sufficiently high to induce dealers to choose the quicker mode of transit by rail.

JAMES SHAW,
for Examiner of Accounts.

CALCUTTA, *the* 6*th April* 1893.

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 1st April 1893, on 1,610⅓ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*275,826	*2,98,635 9 0	33,55,300 10	7,59,975 10 0	19,085 8 0	10,77,696 11 0	81,474	124,502¾	205,976¾
Or per mile of railway	......	185 6 11	......	471 14 2	11 13 7	669 2 8	......	......	......
For previous 12 weeks of half-year	3,649,599	41,21,741 7 0	3,47,42,960 0	78,55,414 9 0	2,21,563 9 0	1,21,98,719 9 0	942,021¼	1,309,871¼	2,251,892½
Total for 13 weeks ...	3,925,425	44,20,377 0 0	3,80,98,260 10	86,15,390 3 0	2,40,649 1 0	1,32,76,416 4 0	1,023,495¼	1,434,374	2,457,869¼
Comparison.									
Total for corresponding week of previous year	349,017½	4,23,716 3 1	27,36,547 10	6,98,638 4 9	19,098 14 9	11,41,453 6 7	93,402	108,925	202,327
Per mile of railway corresponding week of previous year ...	......	266 6 6	......	439 4 1	12 0 2	717 10 9	......	......	......
Total for corresponding 13¾ weeks of previous year	3,942,393	44,02,822 1 4	3,70,33,807 0	86,09,572 5 11	2,45,606 1 6	1,32,58,000 8 9	1,046,293	1,394,848	2,441,141

* The heavy decrease is due to figures for the corresponding period 1892 having included exceptional traffic on account of "Moha Moha Barooni."

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 1st April 1893, on 22¼ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P	Mds. S.	Rs. A. P	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	19,811	5,151 9 0	9,250 20	320 14 0	10 0 0	5,482 7 0	871	97	968
Or per mile of railway	......	231 8 6	......	14 6 9	0 7 2	246 6 5	......	......	......
For previous 12 weeks of half-year	*261,735	*67,760 9 0	†1,53,028 20	†5,130 12 0	‡129 0 0	73,020 5 0	10,562	1,302	11,864
Total for 13 weeks ..	281,546	72,912 2 0	1,62,279 0	5,451 10 0	139 0 0	78,502 12 0	11,433	1,399	12,832
Comparison.									
Total for corresponding week of previous year	21,354	5,412 10 0	15,652 20	653 3 0	11 14 6	6,077 11 0	850	118	968
Per mile of railway corresponding week of previous year	......	243 4 3	......	29 5 8	0 8 7	273 2 6	......	......	......
Total for corresponding 13¾ weeks of previous year ...	297,482½	75,475 14 5	2,68,054 10	8,931 7 9	147 0 6	84,554 6 8	11,628	1,579	13,207

* Added number of passengers 776 and Rs. 218 }
† Ditto Mds. 1,937 and " 15 } on account of difference between the approximate and audited figures for the week ended 25th February 1893.
‡ Deducted " 3 }

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 1st April 1893, on 161⅜ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*19,438	*12,691 12 0	54,283 30	10,323 1 0	50 0 0	23,064 13 0	5,666¾	3,568½	9,235¼
Or per mile of railway	......	78 10 2	......	63 15 4	0 5 0	142 14 6	......	......	......
For previous 12 weeks of half-year	†224,667	†1,48,485 4 0	‡6,45,508 0	‡97,118 11 0	§486 0 0	2,46,089 15 0	62,182¼	40,115¾	102,298
Total for 13 weeks ...	224,105	1,61,177 0 0	6,99,791 30	1,07,441 12 0	536 0 0	2,69,154 12 0	67,849	43,684¼	111,533¼
Comparison.									
Total for corresponding week of previous year	25,158½	23,267 15 7	47,442 20	10,900 1 0	108 10 6	34,276 11 1	6,910	2,738	9,645
Per mile of railway corresponding week of previous year ...	......	144 2 7	......	67 8 7	0 10 9	212 5 11	......	......	... ..
Total for corresponding 13¾ weeks of previous year	222,953	1,67,683 8 5	5,93,754 10	1,13,674 7 0	960 0 6	2,82,517 15 11	79,726	29,2[illegible]5	108,931

* The heavy decrease is due to figures for the corresponding period of 1892 having included exceptional traffic on account of "Moha Moha Barooni."
† Added number of passengers 931 and Rs. 1,845 }
‡ Ditto Mds. 2,342 and " 733 } on account of difference between the approximate and audited figures for the week ended 25th February 1893.
§ Ditto " 21 }

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for the week ended 1st April 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	163,206	80,760 0 0	7,27,331 0	90,230 0 0	12,390 0 0	1,83,380 0 0	27,468	29,368	56,836
Or per mile of railway ...	210	104 0 0	936 0	116 0 0	†1 0 0	221 0 0	......	......	......
For previous 12 weeks of half-year* ...	2,243,812	10,84,659 0 0	88,83,920 0	11,83,345 0 0	1,82,151 0 0	24,50,455 0 0	339,025	337,555	676,580
Total for 13 weeks ..	2,407,018	11,65,419 0 0	96,11,250 0	12,73,575 0 0	1,94,541 0 0	26,33,835 0 0	366,493	366,923	733,416
Comparison.									
Total for corresponding week of previous year ...	155,213	74,066 0 0	5,13,752 0	62,640 0 0	13,007 0 0	1,49,713 0 0	27,387	29,254	56,641
Per mile of railway corresponding period of previous year ...	200	95 0 0	661 0	81 0 0	†1 0 0	177 0 0	......	......	......
Total to corresponding date of previous year ...	2,250,956	11,32,536 0 0	79,60,591 0	10,58,442 0 0	2,03,260 0 0	23,91,238 0 0	363,291	388,086	751,377

* Audited up to week ending 11th February 1893.
† Excluding steamer earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 1st April 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	29,206	10,830 0 0	69,014 0	3,950 0 0	40 0 0	11,820 0 0	3,757	1,933	5,690
Or per mile of railway ..	234	87 0 0	552 0	32 0 0	.....	119 0 0	..	.....	......
For previous 12 weeks of half-year* ...	376,887	1,36,192 0 0	8,14,491 0	49,829 0 0	1,843 0 0	1,87,864 0 0	44,454	23,700	68,154
Total for 13 weeks ...	406,093	1,47,022 0 0	8,83,505 0	53,779 0 0	1,883 0 0	2,02,684 0 0	48,211	25,633	73,844
Comparison.									
Total for corresponding week of previous year ...	28,177	10,169 0 0	60,648 0	3,585 0 0	53 0 0	13,747 0 0	3,757	1,915	5,672
Per mile of railway corresponding week of previous year ..	225	81 0 0	485 0	29 0 0	......	110 0 0	..	....	......
Total to corresponding date of previous year ...	396,024	1,45,629 0 0	8,12,332 0	49,591 0 0	1,175 0 0	1,96,395 0 0	48,723	26,668	75,391

* Audited up to week ending 11th February 1893.

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 1st April 1893, on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	18,376	5,550 0 0	11,449 0	1,110 0 0	100 0 0	6,760 0 0	2,547	1,020	3,567
Or per mile of railway ...	214	65 0 0	133 0	13 0 0	1 0 0	79 0 0	......	......	......
For previous 12 weeks of half-year* ...	238,690	73,214 0 0	2,03,123 0	21,050 0 0	1,876 0 0	96,140 0 0	29,995	8,793	38,788
Total for 13 weeks ...	257,066	78,764 0 0	2,14,572 0	22,160 0 0	1,976 0 0	1,02,900 0 0	32,542	9,813	42,355
Comparison.									
Total for corresponding week of previous year ...	16,345	5,361 0 0	11,096 0	757 0 0	78 0 0	6,196 0 0	2,499	725	3,224
Per mile of railway corresponding week of previous year ...	190	62 0 0	129 0	9 0 0	1 0 0	72 0 0	......	.....	......
Total to corresponding date of [illegible] year ...	227,579	75,630 0 0	1,90,225 0	14,679 0 0	2,133 0 0	92,342 0 0	33,187	9,587	42,774

* Audited up to week ending 11th February 1893.

BENGAL AND NORTH-WESTERN RAILWAY.

(Includes the Tirhut State Railway.)

Approximate return of traffic for the week ending 1st April 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	134,400	*59,290	4,81,300	*74,600	12,330	1,46,220	14,727	18,333	33,060
Or per mile of railway	177·78	78·42	636·64	98·68	16·31	193·41	......	......	......
For previous 12 weeks of half-year†	1,150,387	4,93,754	51,64,443	7,67,576	1,38,070	13,99,400	158,712	218,299	377,011
Total for 13 weeks ...	1,284,787	5,53,044	56,45,743	8,42,176	1,50,400	15,45,620	173,439	236,632	410,071
Comparison.									
Total for corresponding period of previous year on 755 miles open	138,191	61,516	2,91,262	60,755	11,628	1,40,899	14,143	20,735	34,878
Per mile of corresponding week of previous year	183·03	90·75	385·78	80·47	15·40	186·62	......	......	......
Total to corresponding date of previous year	1,216,437	5,48,337	43,43,852	8,36,262	1,41,282	13,25,881	160,783	232,066	393,449

* Decrease in coaching traffic is due to Barunibathing mela which took place in this week last year, and increase in goods traffic to general development of traffic this year.

† Includes audited figures up to 4th February 1893.

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 1st April 1893	12,046	0	0
Corresponding period of 1892	11,906	0	0
Increase	140	0	0
Receipts per mile for the week ending 1st April 1893	236	3	2
Corresponding period of 1892	233	7	1
Increase	2	12	1
Receipts from 1st January to 1st April 1893	1,34,984	0	0
Corresponding period of 1892	1,29,418	0	0
Increase	5,566	0	0

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[REGISTERED No. 29.]

No. 16 of 1893.



SUPPLEMENT TO

The Calcutta Gazette.

WEDNESDAY, APRIL 19, 1893.

OFFICIAL PAPERS.

Non-Subscribers to the GAZETTE *may receive the* SUPPLEMENT *separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

CONTENTS.

LANGUAGE AND CHARACTER TO BE USED IN COURTS AND OFFICES IN BIHAR.

GENERAL DEPARTMENT—MISCELLANEOUS No. 1178.

Calcutta, the 24th March 1893.

RESOLUTION.

READ AGAIN—

This Government's Resolution No. 1079, dated the 12th April 1892, regarding the language and character to be used in the Courts and Offices in Bihar.

Read also the following letters on the same subject:—

Letter from the Secretary to the Bihar Landholders' Association, No. 3, dated the 25th May 1892, and its enclosure.

Letter from the Honorary Secretary to the Central National Muhammadan Association, No. 216, dated the 13th June 1892.

Letter from the Honorary Secretary to the Bhagalpur Landholders' Association, No. 6, dated the 13th June 1892.

Letter from the Secretary, British Indian Association, dated the 6th July 1892.

Letter from the Commissioner of the Bhagalpur Division, No. 1196J., dated the 30th June 1892.

Letter from the Commissioner of the Patna Division, No. 634G., dated the 11th August 1892, and its enclosure.

Letter from the Registrar of the High Court, Calcutta, No. 2276, dated the 27th August 1892.

Letter from the Secretary to the Board of Revenue, Lower Provinces, No. 858A. dated the 22nd September 1892, and its enclosure.

Letter from the Secretary to the Board of Revenue, No. 823B., dated the 24th October 1892, and its enclosure.

Letters Nos. 311-313T.G., dated 26th October 1892, and 118-123, dated 14th January 1893, to the District and Sessions Judges in the Patna and Bhagalpur Divisions, and the Judicial Commissioner of Chota Nagpur, and their replies.

Letters Nos. 314-316T.G., dated 26th October 1892, to the Commissioners of Patna, Bhagalpur, and Chota Nagpur, and their replies.

In the Resolution cited in the preamble, the Lieutenant-Governor discussed the merits of the several proposals submitted to Government on the subject of the language and character to be used in Bihar, and arrived at the conclusion that Kaithi, as the character in use in the Courts, is slow in writing and illegible when written, and that Government might properly substitute the Roman character for Kaithi as far as registers and records are concerned, but that such documents as summonses and proclamations, &c., which are issued to the public, should be in Kaithi. Before, however, passing final orders on the point, the several officers and associations named in the preamble were requested to favour His Honour with an expression of their views on the following questions:—

(1) Whether the Roman character can be substituted for Kaithi in all registers and office records, or whether any exception should be made?

(2) What papers, other than summonses and proclamations, are required by the public to be in the Kaithi character?

(3) Whether, when the depositions of witnesses are not recorded by the presiding officer himself in English, it is desirable that they should be recorded in the Kaithi, the Roman, or the Persian character.

2. After consideration of the replies received from the officers and associations consulted, the Lieutenant-Governor has decided that there should be no change in regard to the use of the Hindi language in Bihar, and no resumption of the use of the Persian character, and that the following orders on the points above referred to may properly be issued:—

(1) The headings of all registers kept up in the Courts and Offices in Bihar are to be bi-lingual, in English and in Roman-Hindi. Entries of words in those registers and in all other office records are to be in English, if the clerk knows English, and in Hindi words and Roman character if he does not know English. If any clerk in charge of a register does not know the English (Roman) character, and is unable to learn it by the time the new registers are issued from the Stationery Office, he will be allowed to prepare a flap for his own use, writen in Nagri, and to paste it on to the register. He will also be allowed to make verbal entries in Nagri. In future no clerks are to be appointed who do not know English. Figures are invariably to be written in English (*i.e.*, Arabic) numerals.

(2)(*a*) All summonses, proclamations, notices, notifications, &c., and in fact all original documents (*i.e.*, not copies) issuing direct from the Courts and Offices to the public, and not passing through the hands of revenue agents or mukhtars, are to be in the Nagri character, whether printed or written, or partly printed and partly written.

(*b*) Copies issuing from the Courts and Offices must necessarily be written in the character as well as in the language of the original documents of which they are copies.

(*c*) Plaints, mukhtarnamas, petitions, &c., addressed to the Courts and Offices may be presented by an applicant or complainant in holograph, *i.e.*, written entirely by himself in any language which he best understands; but, if presented through a revenue agent or mukhtar, they are to be written in the Nagri character, as Hindi is the language of the Courts.

(3) When the presiding officer in Revenue and Criminal Courts does not record depositions in English, he is to record them in whichever character he knows best—Nagri or Persian—the former rather than the latter if he knows both.

3. It will be observed that, in accordance with the views expressed by the British Indian Association and others, it has been decided to adopt the Nagri character instead of Kaithi, as being more easily written and more legible than Kaithi. Printed Nagri is legible to every one who can read printed Kaithi.

4. So far as the Civil Courts are concerned, these orders are to apply to all documents except depositions.

5. These orders will entail considerable alterations in the forms now in use, but before substituting the revised forms the old stock of forms should first be exhausted.

By order of the Lieutenant-Governor of Bengal,

H. H. RISLEY,

Secretary to the Government of Bengal.

IRRIGATION OPERATIONS FOR KHARIF, 1892-93.

No. 484*I*.

GOVERNMENT OF BENGAL—PUBLIC WORKS DEPARTMENT.

Irrigation.

Dated Calcutta, the 18th April 1893.

RESOLUTION.

READ—

Statements Nos. I, II and III of Irrigation Operations of Canals in Bengal during the kharif season of 1892-93.

OBSERVATIONS.—The area irrigated during the kharif season of 1892-93, was 597,985 acres, against 552,282 acres, showing an increase of 8·2 per cent., the increase taking place mainly on the Eden Canal, which has supplied an unusually large area of land in the districts of Burdwan and Hooghly with water.

2. The rainfall on the Orissa and Midnapore Canals was less, and that on the Sone and Saran Canals was more than last year.

3. The increase or decrease in the irrigation from each canal is given in the following statement:—

Canals.		Kharif season.		More.	Less.
		1891-92.	1892-93.		
		Acres.	Acres.	Acres.	Acres.
Orissa ...	Taldunda ...	41,570	34,379	......	7,191
	Kendrapara ...	70,686	67,008	......	3,678
	High Level, Ranges I, II and III.	61,486	55,783	......	5,703
Midnapore Canal		83,905	88,008	4,103	......
Eden "		14,069	77,203	63,134	......
Sone ...	Patna	75,037	67,351	......	7,686
	Arrah	1,29,691	1,23,002	......	6,689
	Buxar	72,413	83,820	11,407	......
Saran Canal		3,425	1,431	......	1,994
Total ...		5,52,282	5,97,985	78,644	32,941

On the Midnapore, Saran, and Eden Canals the only kharif crop irrigated is rice, whilst on the Orissa and Sone Canals there are, in addition, sugarcane and hot-weather crops.

ORDER.—Ordered that a copy of this Resolution and of the statements Nos. I, II, and III, be submitted to the Government of India, Public Works Department, for information.

Order also that copies of this Resolution and of the statements be forwarded to the Commissioners of the Orissa, Burdwan and the Patna Divisions; the Collectors of Cuttack, Midnapore, Patna, Shahabad, Gaya and Saran; the Superintending Engineers, Orissa, South-Western and Sone Circles; and the Examiner of Public Works Accounts, Bengal, for information.

By order of the Lieutenant-Governor of Bengal,

C. W. ODLING,

Secretary to the Government of Bengal.

No. I.—KHARIF STATEMENT.

GOVERNMENT OF BENGAL, PUBLIC WORKS DEPARTMENT, IRRIGATION BRANCH.

IRRIGATION OPERATIONS FOR THE KHARIF SEASON, 1892-93.

Comparative Statement of Irrigation and Rainfall in Canal Districts of Bengal.

Districts.	Area in acres.	Culturable acres.	Area irrigated.		1892-93 as compared with 1891-92.		Rainfall for four months.										Remarks.
							July.		August.		September.		October.		Total.		
			1891-92.	1892-93.	Increase.	Decrease.	1891.	1892.	1891.	1892.	1891.	1892.	1891.	1892.	1891.	1892.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
			Acres.*	Acres.	Acres.	Acres.	In.	In.	In.	In.	In.	In.	In.	In.	In.	In.	
Cuttack	Information not available.	Information not available.	137,553	125,722	...	11,831	9·93	12·15	16·90	7·29	20·06	9·51	1·08	5·68	47·97	34·63	Average of 11 stations during 1892.
Balasore			36,189	31,448	...	4,741	12·59	7·98	17·43	9·65	16·13	13·09	1·70	4·23	47·85	34·95	Rainfall at Akhoyapada and Bhadrak stations.
Midnapore			83,529	87,366	3,837	...	8·22	6·71	23·27	5·02	10·44	6·52	0·58	2·52	42·51	20·77	Rainfall at Midnapore station
Burdwan			12,045	40,221	28,176	...	11·52	10·47	15·43	4·19	2·05	3·10	0·85	1·75	29·85	19·51	Ditto at Edilpore.
Hooghly			2,400(a)	37,624(b)	35,224	...	...	...	...	...	...	...	...	...	...	...	No rain-gauge stations on the Tidal Reaches of the Midnapore Canal or in Eden Canal, lower section.
Gaya	3,015,680	2,356,000	33,941	39,071	5,130	...	2·85	8·80	6·67	9·55	2·41	1·69	0·32	...	12·25	20·04	Rainfall at Daudnuggur station.
Patna	1,329,920	1,039,000	41,096	28,280	...	12,816	7·23	11·20	5·77	23·57	3·45	4·69	1·72	0·12	18·17	39·58	Ditto at Patna station.
Shahabad	2,806,400	2,192,500	202,104(c)	206,832	4,718	...	5·15	10·09	5·91	16·56	6·40	6·19	1·21	0·29	18·67	33·13	Ditto at Arrah station.
Saran	1,680,000	1,312,500	3,425	1,431	...	1,994	3·21	8·81	8·47	17·08	6·46	5·25	0·79	...	18·93	31·14	Ditto at Siwan station.
Total ...	......	......	552,282	597,985	77,085	31,382	...	...	...	...	...	...	...	...	...	...	

* As per Revenue Report for 1891-92.
(a) Includes 2,024 acres irrigated by the Eden Canal.
(b) Ditto 36,983 " " " "
(c) Ditto 13,325 " for hot weather crops.

CALCUTTA,
The 18th April 1893.

G. C. MACONCHY,
Under-Secretary to the Government of Bengal.

No. II.—Kharif Statement.

IRRIGATION OPERATIONS OF FASL KHARIF, 1892-93.

Statement in acres of crops irrigated in Canal Districts.

Nature of crops.		Cuttack.	Balasore.	Midnapore.	Burdwan.	Hooghly.	Gaya.	Patna.	Shahabad.	Saran.	Total.
1		2	3	4	5	6	7	8	9	10	11
Garden and orchards ...	...	...	...	...	...	...	...	...	...	...	...
Sugarcane ...	...	90	168	...	...	...	352	...	13,150	...	13,760
Cereals ...	Wheat ...	...	...	...	...	...	...	...	...	...	...
	Barley ...	...	...	...	...	...	...	...	...	...	...
	Rice ...	125,632	31,280	87,366	40,221	37,624	38,683	28,280	183,717	1,239	574,042
	Miscellaneous ...	...	...	...	...	...	36	...	228	62	326
Pulse ...	Gram, &c. ...	...	...	...	...	...	...	...	...	...	...
	Miscellaneous ...	...	...	...	...	...	...	...	...	...	...
Fodder crops ...	Grass, lucerne ...	...	...	...	...	...	...	...	...	...	...
Fibres ...	Cotton ...	...	...	...	...	...	...	...	...	...	...
Dyes ...	Indigo ...	...	...	...	...	...	...	...	...	...	...
	Turmeric, &c. ...	...	...	...	...	...	...	...	...	...	...
Drugs ...	Opium ...	...	...	...	...	...	...	...	...	...	...
	Tobacco, &c. ...	...	...	...	...	...	...	...	...	...	...
Oilseeds ...	Mustard, &c. ...	...	...	...	...	...	...	...	...	...	...
	Castor ...	...	...	...	...	...	...	...	...	...	...
Miscellaneous	...	...	...	...	...	...	...	...	...	...	...
Hot weather	...	...	...	...	...	...	...	...	9,727	130	9,857
Total Kharif, 1892-93 ...		125,722	31,448	87,366	40,221	37,624	39,071	28,280	206,822	1,431	597,985
Total Kharif, 1891-92 ...		137,553	36,189	83,529	12,045	2,400	33,941	41,096	202,104	3,425	552,282

Calcutta,
The 18th April 1893.

G. C. MACONCHY,
Under-Secretary to the Government of Bengal.

No. III.—Kharif Statement.

IRRIGATION OPERATIONS OF FASL KHARIF, 1892-93.

Statement in acres of crops irrigated by Canals in Canal Divisions.

Nature of crops.		Taldunda Canal.	Kendrapara Canal.	High Level Canal, Range II, and High Level Canal, Range I. / High Level Canal, Range III.	Midnapore Canal.	Eden Canal.	Patna Canal.	Arrah Canal.	Buxar Canal.	Saran Canal.	Total.	Remarks.
		Mahanadi.	Brahmini-Byturni.	Acquapadda-Jajpur.	Cossye.	N. D. and Embankment	Eastern Sone.	Arrah.	Buxar.	Gandak.		
1		2	3	4	5	6	7	8	9	10	11	
Garden and orchards ...	...	...	...	...	...	...	...	...	...	...	...	
Sugarcane	...	52	38	168	...	...	352	8,539	4,611	...	13,760	
Cereals ...	Wheat ...	...	...	...	...	...	...	...	...	...	...	
	Barley ...	...	...	...	...	...	...	...	...	...	...	
	Rice ...	34,327	66,970	55,615	88,008	77,203	66,963	109,799	73,918	1,239	574,042	
	Miscellaneous	...	...	...	...	...	36	...	228	62	326	
Pulse ...	Gram, &c.	...	...	...	...	...	...	...	...	...	...	
	Miscellaneous	...	...	...	...	...	...	...	...	...	...	
Fodder crops	Grass, lucerne	...	...	...	...	...	...	...	...	...	...	
Fibres ...	Cotton ...	...	...	...	...	...	...	...	...	...	...	
Dyes ...	Indigo ...	...	...	...	...	...	...	...	...	...	...	
	Turmeric, &c.	...	...	...	...	...	...	...	...	...	...	
Drugs ...	Opium	...	...	...	...	...	...	...	...	...	...	
	Tobacco, &c.	...	...	...	...	...	...	...	...	...	...	
Oilseeds ...	Mustard, &c.	...	...	...	...	...	...	...	...	...	...	
	Castor ...	...	...	...	...	...	...	...	...	...	...	
Miscellaneous ...	...	...	...	...	...	...	...	...	...	...	...	
Hot weather ...	...	...	...	...	...	...	...	4,664	5,063	130	9,857	
Total Kharif, 1892-93 ...		34,379	67,008	55,783	88,008	77,203	67,351	123,002	83,820	1,431	597,985	
Total Kharif, 1891-92 ...		41,570	70,686	61,486	83,905	14,069	75,037	129,691	72,413	3,425	552,282	

Calcutta,
The 18th April 1893.

G. C. MACONCHY,
Under-Secretary to the Government of Bengal.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 15th April 1893.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.				
Burdwan Divn.	1	Burdwan April 15, '93 Kalna ... Katwa ... Raniganj ...	0·17 0·03 0·06 0·36	Weather—hot in day, fairly cool at night. Ploughing going on. Fodder and water sufficient. Prices of common rice:— Srs. Burdwan ... ... 10 to 13 } Kalna ... ... 10 to 13 } per rupee. Katwa ... ... 12¾ } Raniganj ... ... 13½ }
	2	Bankura „ 15, '93 Vishnupur ...	Nil Nil	Weather—hot and fair. Pressing of sugarcane over. Fodder and water plentiful. Common rice selling in the Bankura and Vishnupur bazars at about 11½ seers per rupee.
	3	Birbhum „ 15, '93 Rampur Hát ...	0·38 0·09	Weather—hot. No crops on the ground. Ploughing and sugarcane-pressing going on still. Fodder and water sufficient. Common rice sells at from 12½ to 15 seers per rupee.
	4	Midnapore „ 15, '93	0·27	Weather—warm. Ploughing continues. Prices of common rice:— Srs. Sadar ... ... 12 } Contai ... ... 14 } per rupee. Tamluk ... ... 12 } Garhbeta ... ... 11 to 12 }
	5	Hooghly „ 15, '93 Serampore ... Jahanabad ...	0·93 0·69 Nil	Weather—very hot. There was an exceptionally heavy and violent hail-storm on Monday evening (10th). There is no crop of importance now on the ground. Sugarcane cultivation continues and also cultivation of the *aus* and *aman* crops. There is still some cattle-pox. Difficulty about fodder and water continues in Pandua and Dwarbasini. Prices of common rice:— Srs. Sadar ... ... 11 } Serampore ... ... 10 to 11½ } per rupee. Jahanabad ... ... 12 to 12½ }
	6	Howrah „ 15, '93 Ulubaria ...	0·05 Nil	Weather—hot. Condition of cattle good. Fodder and water-supply sufficient. Price of rice 10 to 11½ seers per rupee.
Presidency Divn.	7	24-Parganas „ 15, '93	0·02	Weather—seasonable. Ploughing going on. Cattle-disease reported from Bistupur. Sufficient fodder and water.
	8	Nadia „ 15, '93 Kushtia ... Meherpur ... Chuadanga ... Ranaghat ...	0·03 0·95 1·87 0·73 0·13	Weather—seasonable. Ploughing for sowing *aus* paddy and plantation of sugarcane going on. General prospects fair. Ample fodder and water for cattle.
	9	Khulna „ 15, '93 Bagerhat ... Satkhira ...	0·09 0·12 0·30	Weather—hot; cool in the early morning. Harvesting of *boro* paddy commenced; outturn expected to be about 12 annas. Common rice sells at 12 or 13 seers in Sadar and Bagerhat and slightly higher in Satkhira.
	10	Jessore „ 15, '93 Jhenida ... Magura ... Narail ... Bangaon ...	0·34 3·16 1·66 0·97 Nil	Weather—mornings cool; days hot. Harvesting of *rabi* crops over. Sowing of *aus* has commenced. Indigo and sugarcane promising well. No cattle-disease. Fodder and water sufficient. Price of rice stationary.
	11	Murshidabad „ 15, '93	0·23	Weather—hot and dry. Harvesting of *rabi* crops almost finished. Sowing of *bhadoi* has commenced. Lands are being ploughed for *aman* paddy. Indigo and mulberry doing well. Common rice sells at 12½ seers per rupee. There is sufficient fodder for cattle.

	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and State and prospects of the crops.
BENGAL—*concld.*					
CHITTAGONG DIVN.	12	Chittagong	April 15, '93	0·07	Weather—seasonable with cloudy mornings. Prospects of crops good. Rain wanted. Prices stationary. Condition of cattle good. Supply of fodder sufficient.
	13	Noakhali	„ 15, '93	0·09	Weather—seasonable. Harvesting of *rabi* crop nearly completed. *Aus* and *aman* are being sown. Cattle-disease reported from Begumganj. Fodder and water available. Price of rice from 11 to 14 seers per rupee.
	14	Tippera	„ 15, '93	0·43	Weather—unusually warm. Sowing of *aman*, *aus*, *til* and jute continues. Sugarcane being planted. Rain required in head-quarters subdivision. Prospects good.
	15	Chittagong Hill Tracts.	„ 14, '93	Nil	Weather—mornings foggy and cool; midday hot; nights cooler. *Jum* burning has been affected and delayed by the recent fall of rain. It is, however, going on here and there. Chilly and other special crops doing well. No cattle-disease reported. Common rice sells at 10 seers per rupee.
DACCA DIVN.	16	Dacca	„ 15, '93	0·26	Weather—hot. *Aman*, *aus* and jute plants thriving. Harvesting of *boro* paddy commenced. Fodder available. No cattle-disease. Common rice selling at from 11 to 12 seers per rupee.
	17	Faridpur	„ 15, '93	0·76	Weather—hot. Harvesting of *boro* paddy commenced. Crops on the ground doing fairly. Common rice sells at from 11½ to 13 seers per rupee. Some cattle-disease reported from thanas Shibchar and Gopalganj in the Madaripur subdivision. Fodder available.
	18	Backergunge	„ 15, '93	0·25	Weather—seasonable. State and prospects of *rabi* crops fair. Common rice selling at from 10 to 13 seers per rupee. Fodder and water sufficient.
		Pirojpur	...	0·15	
		Bhola	...	0·09	
		Patuakhali	...	1·10	
	19	Mymensingh	„ 15, '93	2·12	Weather—getting hot. Prospect of standing *boro* crop good; it is nearly ripe in the Netrakona subdivision; outturn may be expected to be 14 annas. Sowing of jute and *aus* almost over. Common rice selling at from 11 seers 11 chitaks to 13¼ seers per rupee. A tornado reported to have destroyed some villages in Bazitpur police-station in the Kishorganj subdivision. Condition of cattle good and supply of fodder and water sufficient.
RAJSHAHI DIVN.	20	Dinajpur	„ 15, '93	0·55	Weather—hot; mornings still cool. Sowing of *bhadoi* and jute in progress. Outturn of sugarcane reported to be 18 annas. Price of rice unchanged. Condition of cattle good. Supply of fodder and drinking water continue sufficient.
		Thakurgaon	...	0·52	
	21	Rajshahi	„ 15, '93	0·14	Weather—seasonable; dry and hot. Agricultural prospects very favourable. Preparation of land is in full swing. Cold-weather crops have yielded a fair outturn. No cattle-disease anywhere. Fodder and drinking water ample. Price of common rice varies from 11 to 15 seers per rupee.
		Nator	...	0·22	
		Naugaon	...	0·50	
	22	Rangpur	„ 15, '93	0·65	Weather—hot. Jute sowings almost finished. *Aus* paddy being weeded. Tobacco has been cut. Average price of common rice 13 seers per rupee.
		Gaibanda	...	0·40	
		Nilphamari	...	0·15	
		Kurigram	...	2·70	
		Ulipur	...	1·75	
	23	Bogra	„ 15, '93	1·15	Weather—seasonable. Ploughing still goes on. Standing crops benefited by the rain. Hailstones have done harm to mango crop. Common rice sells at 13¼ seers per rupee. Fodder and water sufficient.
		Sherpur	...	1·33	
		Naukhila	...	0·97	
	24	Pabna	„ 15, '93	0·11	Weather—hot and sultry. Ploughing and sowing continue. Condition of cattle good. Fodder and water-supply sufficient. Price of rice at Pabna 12¼ seers per rupee and at Sirajganj Rs. 3-8 to Rs. 4-12 per maund.
	25	Darjeeling	„ 15, '93	0·42	Weather—fair; cloudy and inclined to rain to-day (15th). *In the hills:*—Wheat and barley coming to maturity and will soon be harvested. *Bhutta*, *kangni*, *bhadoi* rice, potatoes, *chhota marua* and *phafar* progressing favourably. *In the terai:*—Ploughing continues. Tobacco has been harvested. Jute sowing begun. Prices of coarse rice:— Hills ... ... 10 Srs. per rupee; Terai ... ... 12 Srs. per rupee.
		Siliguri	...	1·47	
	26	Jalpaiguri	„ 15, '93	0·36	Weather—hot and cloudy. Sowing of jute and *bhadoi* commenced in places. Harvest of tobacco nearly completed; estimated outturn 14 annas. Price of common rice stationary. No want of fodder and water-supply.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.			
Bhagalpur Divn.			
27	Monghyr April 15, '93 Begusarai ... Jamui ...	Nil Nil Nil	Weather—sultry and warm; cool towards morning. Harvesting of *rabi* crops nearly complete; outturn between 10 and 12 annas. Indigo doing well. Fodder and water-supply sufficient. Prices of rice:— Srs. Sadar ... ... 15 per rupee. Begusarai ... ... 15 per rupee. Jamui ... ... 13½ per rupee. Condition of cattle good except stray cases of small-pox in Chakai.
28	Bhagalpur „ 15, '93 Banka ... Madhipura ... Supaul ...	Nil Nil Nil Nil	Weather—hot. *Rabi* crops being reaped. Cultivation for rice crops in progress. Spring sowings of indigo are almost completed, and the prospects of this and of the autumn crops are good.
29	Purnea „ 15, '93 Kishanganj ... Araria ...	0·06 Nil Nil	Weather—getting hotter daily. *Rabi* harvest drawing to a close with favourable result. *Bhadoi* cultivation progressing favourably. No cattle-disease. Fodder and water ample. Prices about the same as before.
30	Malda „ 15, '93 Chanchal ... Shibganj ... Gajole ...	0·23 Nil 0·30 0·29	Weather—hot; westerly wind prevails since yesterday (14th). Harvesting of *rabi* crops continues; outturn 14 annas all round. Ploughing for *bhadoi* crops going on. Prospects of mango unfavourable. Price of coarse rice varies from 12 to 15 seers per rupee. Fodder and water-supply sufficient.
31	Sonthal Parganas „ 15, 93 Deoghur ... Godda ... Jamtara ... Pakur ... Rajmahal ...	Nil Nil Nil Nil 1·02 Nil	Weather—hot and close. Winds varying. *Mahua* crop seems to have suffered very little except by being late, and is now expected to be very good. Wheat and *chaiti* crops reaped; outturn not specified, but fair. Prices still high. Fodder and water-supply sufficient.
Patna Division.			
32	Patna „ 15, '93	Nil	Weather—hot. Harvesting of *rabi* finished; threshing going on. Opium being weighed. Sugarcane and *cheena* doing well. Prices of common rice:— Srs. Sadar ... ... 16 per rupee. Barh ... ... 11½ per rupee. Bihar ... ... 16½ per rupee. Dinapore ... ... 15 per rupee.
33	Gaya „ 15, '93 Aurangabad ... Nawada ... Jahanabad ...	Nil Nil Nil Nil	Weather—warm with little wind; a few clouds about. *Rabi* harvest almost over. *Cheena* sowings going on. Common rice selling at 15 seers per rupee. Water and fodder-supply sufficient.
34	Shahabad „ 15, '93	Nil	Weather—much warmer; light easterly winds prevail. Harvesting of *rabi* progressing; results generally very good in the north and west. Young sugarcane is being irrigated. Foot-and-mouth disease among cattle prevalent. Fodder and water abundant. Prices still very high.
35	Darbhanga „ 15, '93	Nil	Weather—getting hot. Harvesting of *rabi* nearly completed. Paddy and *mung* sowings in progress. Indigo plants are coming on well. Condition of cattle good. Price of common rice varies from 14 to 15 seers per rupee.
36	Muzaffarpur „ 15, '93 Sitamarhi ... Hajipur ...	Nil 0·12 Nil	Weather—seasonable. *Rabi* is nearly all harvested; outturn 8 annas to 12 annas. Paddy is being sown in low lands. Opium weighments progressing; outturn better than expected. No cattle-disease. Fodder and water sufficient.

	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR—*concld.*				
PATNA DIVISION—*concld.*	37	Saran April, 15, '93 Siwan .. Gopalganj ...	Nil Nil Nil	Weather—seasonable. *Rabi* harvesting drawing to a close. Sugarcane coming up well. *Cheena* sowings commenced, as also lowland paddy. Indigo has been attacked by caterpillars. Water and fodder ample. Prices of common rice :— Srs. C. Chapra ... ... 18 0 Siwan ... ... 13 2 } per rupee. Gopalganj 13 7
	38	Champaran „ 15, '93	Nil	Weather—hot. *Rabi* is being gathered and threshed. Sowing of *cheena* and paddy has been put off till the rainy season. Weighment of opium going on. No marked change in prices. No cattle-disease. Water and fodder sufficient.
ORISSA.				
ORISSA DIVN.	39	Cuttack „ 15, '93	Nil	Weather—warm. Supply of fodder and water sufficient. Price of common rice stationary.
	40	Puri „ 13, '93 Khurda ... Banpur ...	Nil Nil Nil	Weather—seasonable. Lands are being ploughed for the ensuing *sarad* crop. *Dalua* paddy being harvested. Miscellaneous crops doing well. Rice sells at from 15 seers 12 chitaks to 17 seers 8 chitaks per rupee.
	41	Balasore „ 15, '93	0·27	Weather—seasonable. Ploughing continues. Prices stationary. Water and fodder sufficient.
CHOTA NAGPUR.				
South-West Frontier Agency.				
CHOTA NAGPUR DIVN.	42	Hazaribagh April, 15, '93 Giridi ...	Nil Nil	Weather—seasonable. Sugarcane doing well. Prospects of mango fair. *Mahua* yielding abundantly. Common rice selling at from 11 to 14 seers per rupee. Fodder and water sufficient.
	43	Lohardaga „ 15, '93	0·02	Weather—getting hot. Ploughing continues. Harvesting of *rabi* nearly finished: what is standing has suffered slightly from the rain. Common rice selling at 13 seers per rupee. Fodder and water sufficient.
	44	Palamau „ 14, '93	Nil	Weather—cool at night and still pleasant during the day. *Rabi* harvesting nearly finished. *Mahua* crop promises to be excellent. Sugarcane being irrigated. Cattle-disease reported. Rice selling at from 16 to 20 seers per rupee. Fodder and water sufficient.
	45	Singhbhum „ 15, '93	Nil	Weather—bright and hot though mornings still cool. *Mahua* crop indifferent. Other crops good. Cattle-disease reported from Kolhan. Water and fodder plentiful. Common rice selling at from 12 to 16 seers per rupee.
	46	Manbhum „ 15, '93 Gobindpur ...	Nil Nil	Weather—bright and very hot during day. *Mahua* being gathered; crop estimated at 10 annas. Rice selling at from 10 to 13 seers per rupee. Fodder and water-supply sufficient.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 18th April, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the

QUANTITIES PER RUPEE IN

Division	Number.	DISTRICTS.	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum. (*Sorghum Vulgare.*) Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
BENGAL.																	
			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Burdwan Division.	1	Burdwan ...	13 8	13 4	11 8	...	...	19 0	10 2	10 8	11 10	12 0	12 0	13 8	...	...	...
	2	Bankura ...	12 0	12 0	12 4	18 0	18 0	17 0	10 0	10 0	12 4	11 8	11 12	15 0	.	...	...
	3	Birbhum ...	10 4	10 4	10 8	9 8	9 0	...	10 8	10 8	11 0	13 8	13 8	13 0	...	...	...
	4	Midnapore ...	11 0	11 0	11 0	...	...	...	10 0	10 0	10 0	12 12	12 12	13 0	...	...	...
	5	Hooghly ...	11 8	11 0	13 0	11 0	11 0	...	8 0	8 0	8 0	10 0	10 0	12 0	...	...	...
	6	Howrah ...	...	...	...	...	...	...	9 0	9 4	10 0	10 8	11 0	12 8	...	...	...
Presidency Division.	•	Calcutta	12 4	12 4	11 3	17 0	17 0	15 3	7 4	7 4	8 0	10 0	10 0	11 5	20 0	20 0	16 0
	7	24-Parganas ...	11 8	11 0	11 8	18 0	16 0	16 0	8 0	8 0	8 0	12 0	12 8	13 0	16 0	16 0	...
	8	Nadia .	14 6	13 1	12 1	17 8	23 0	17 12½	10 3	10 0	10 10⅓	12 2	12 12	12 3	...	...	...
	9	Khulna ...	...	...	...	...	...	...	10 10	10 10	10 10	12 14	12 14	12 12	...	...	...
	10	Jessore ...	10 0	11 0	10 8	...	...	...	10 0	9 0	10 0	13 0	12 8	12 8	...	...	...
	11	Murshidabad ...	13 0	13 0	12 0	...	...	...	10 0	10 0	9 0	13 0	13 0	12 8	...	...	...
Chittagong Division.	12	Chittagong ...	10 0	8 14	9 4	...	...	...	11 0	11 8	8 8	13 0	13 4	10 14	...	...	...
	13	Noakhali ...	...	...	...	...	...	...	9 14	10 6	12 0	12 6	12 0	13 0	...	...	...
	14	Tippera ...	11 0	11 0	14 0	...	...	...	9 8	8 12½	8 0	10 12	11 0	13 14	...	...	...
	15	Chittagong Hill Tracts.*	...	...	...	...	...	...	...	...	...		10 0	8 4	...	...	...
Dacca Division.	16	Dacca ...	11 0	11 0	11 0	26 0	25 0	...	10 0	10 8	10 0	11 0	11 4	13 8	...	...	...
	17	Faridpur ...	16 0	11 4	20 0	20 0	20 0	40 0	8 0	8 0	11 0	12 0	12 0	14 0	...	...	...
	18	Backergunge ...	...	...	...	...	...	...	10 8	10 4	9 12	11 10	11 8	11 4	...	...	...
	19	Mymensingh ...	9 8	9 8	10 0	...	...	...	10 0	10 0	10 8	11 0	11 0	14 0	...	...	...
Rajshahi Division.	20	Dinajpur ...	12 0	9 10	10 13	20 0	15 12	18 0	9 9	10 12	9 8	14 0	13 12	12 0	...	...	...
	21	Rajshahi ...	14 4	15 0	12 12	24 0	26 4	19 8	10 8	10 8	10 8	12 0	12 6	11 10	...	...	...
	22	Rangpur	12 12	12 0	9 1	...	...	...	10 0	10 0	9 1	12 0	12 0	11 5	...	...	...

* Present return not received.

A In the subdivisions the retail prices of salt per rupee are:—Kalna 10 seers, Katwa 11 seers, and Raniganj 10½ seers.
B At Vishnupur the retail price of salt is 11 seers per rupee.
C In the subdivisions the retail prices of salt per rupee are:—Contai 10 seers, Ghatal 10 seers 11 chitaks.
D In the subdivisional marts the retail prices of salt per rupee are:—Bhaddreswar 11 seers and Jahanabad 11 seers 7 chitaks.
E At Ulubaria the retail price of salt is 11 seers per rupee.
F In the mufassal marts the retail prices of salt per rupee are:—Chetla Hát 11 seers 7 chitaks, Barasat 10 seers 10 chitaks, Baduria 10 seers 11 chitaks, and Magrahat 10 seers 10 chitaks.
G In the subdivisions the retail prices of salt per rupee are:— Bahadurkhali 10½ seers, Chuadanga 10 seers, Meherpur 10½ seers, and Ranaghat 10½ seers.
H In the subdivisional marts the retail prices of salt per rupee are:—Bagerhat 8 seers and Satkhira 11 seers.
I In the subdivisions the retail prices of salt per rupee are:—Jhenida 9 seers 9 chitaks, Magura 10 seers, Narail 9 seers 10 chitaks, and Bangaon 10 seers 11 chitaks.

Head-quarters Station Bazars of the Districts of Bengal on the 15th April, 1893.

Indian-corn or Maize. (*Zea Mays.*) Present return.	Indian-corn Next preceding return.	Indian-corn Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus Indicus.*) Present return.	Arhar Next preceding return.	Arhar Corresponding return of last year.	Firewood. Present return.	Firewood Next preceding return.	Firewood Corresponding return of last year.	Salt. Present return.	Salt Next preceding return.	Salt Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt. Present return.	Wholesale Salt Next preceding return.	Wholesale Salt Corresponding return of last year.	Districts	Number.	
															BENGAL.		
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.			
...	...	...	20 0	20 0	17 0	105 0	100 0	100 0	(A) 11 2½	11 2½	11 7	3 6 8	3 6 8	3 6 0	Burdwan	1	Burdwan Division.
17 0	17 0	18 0	12 0	12 0	17 0	320 0	320 0	220 0	(B) 11 0	11 0	11 4	3 10 0	3 10 0	3 9 6	Bankura.	2	
...	...	...	12 0	11 8	11 4	250 0	250 0	200 0	10 12	10 12	10 8	3 12 6	3 12 6	3 10 0	Birbhum.	3	
...	...	...	19 0	19 0	10 0	240 0	240 0	120 0	(C) 11 7	11 7	10 8	3 7 0	3 7 0	3 8 0	Midnapore.	4	
...	...	...	12 0	11 0	11 0	120 0	120 0	120 0	(D) 11 0	11 4	10 0	3 6 0	3 6 0	3 12 0	Hooghly.	5	
...	...	...	12 8	10 4	12 8	95 0	105 0	100 0	(E) 11 0	10 10	10 8	3 8 0	3 8 0	3 6 0	Howrah.	6	
18 4	18 4	16 0	13 1	13 1	14 14	85 0	85 0	93 5	9 8	9 8	11 3	4 0 0	4 0 0	3 4 11	Calcutta.		Presidency Division.
...	...	...	21 0	19 0	17 0	100 0	100 0	100 0	(F) 11 0	11 0	11 0	3 4 6	3 4 6	3 5 0	24-Parganas.	7	
...	...	...	20 8	23 0	18 8	128 0	128 0	128 0	(G) 10 0	10 0	10 10	3 7 0	3 8 0	3 8 0	Nadia.	8	
...	...	...	11 9	9 1½	...	160 0	160 0	160 0	(H) 9 4	9 0	9 0	3 12 0	3 12 0	4 0 0	Khulna.	9	
...	...	...	15 0	12 0	18 8	120 0	120 0	120 0	(I) 9 4	9 14	9 2	3 10 0	3 10 0	3 10 0	Jessore.	10	
...	...	...	20 0	18 0	17 0	200 0	200 0	200 0	(J) 10 8	10 8	10 8	3 7 0	3 7 0	3 12 0	Murshidabad.	11	
...	...	...	...	...	...	106 0	80 0	110 0	(K) 10 0	10 0	10 0	3 12 0	3 13 0	3 12 0	Chittagong.	12	Chittagong Division.
...	...	...	...	...	...	...	...	...	(L) 10 0	10 0	9 0	3 14 0	4 0 0	4 0 0	Noakhali.	13	
...	...	...	11 5	11 5	8 0	...	...	...	(M) 10 13½	10 13½	9 0	3 12 0	3 12 0	4 0 0	Tippera.	14	
...	...	...	...	...	...		240 0	240 0		8 0	8 0		4 8 0	4 8 0	Chittagong Hill Tracts.	15	
...	...	...	16 0	18 0	...	130 0	130 0	120 0	(N) 10 0	10 0	10 0	3 9 0	3 10 0	3 8 0	Dacca.	16	Dacca Division.
...	...	...	...	...	...	...	...	...	(O) 10 12	10 12	10 8	3 12 0	3 12 0	3 12 0	Faridpur.	17	
...	...	...	9	Mug. 10 8	...	80 0	80 0	80 0	(P) 10 8	10 8	10 0	3 8 0	3 8 0	3 9 0	Backergunge.	18	
...	...	...	13 0	13 0	12 8	120 0	120 0	...	(Q) 10 0	10 0	10 8	4 0 0	4 0 0	3 11 6	Mymensingh.	19	
...	...	...	18 13	20 6	16 0	160 0	160 0	160 0	10 0	10 8	10 4	4 0 0	3 12 0	3 14 0	Dinajpur.	20	Rajshahi Division.
...	...	...	21 0	21 5	20 0	240 0	240 0	240 0	(R) 9 9	9 9	9 9	3 10 8	3 10 8	3 10 8	Rajshahi.	21	
...	...	...	8 0	8 0	9 0	160 0	160 0	100 0	(S) 9 0	9 0	10 0	4 0 0	4 0 0	4 0 0	Rangpur.	22	

J In the subdivisions the retail prices of salt per rupee are :—Kandi 11¼ seers and Jangipur 10½ seers.
K At Cox's Bazar the retail price of salt is 8 seers per rupee.
L At Fenny Hát the retail price of salt is 9 seers per rupee.
M In the subdivisions the retail prices of salt per rupee are :—Chandpur 9 seers and Brahmanbaria 9 seers 2 chitaks.
N In the mufassal marts the retail prices of salt per rupee are :—Madanganj 10 seers, Manikganj 9 seers 13 chitaks Mirkadim 10 seers, Munshirhat 10 seers.
O At Madaripur and Goalundo the retail price of salt is 10 seers per rupee.
P In the subdivisions the retail prices of salt per rupee are :—Pirojpur 10½ seers, Patuakhali 9 seers, and Bhola 9 seers.
Q In the Netrakona, Kishorganj, Jamalpur and Tangail subdivisions the retail price of salt is 10 seers per rupee.
R In the subdivisions the retail prices of salt per rupee are :—Nator 9 seers and Naugaon 9 seers 9 chitaks.
S In the subdivisions the retail prices of salt per rupee are :—Gaibanda 10 seers, Kurigram 8 seers.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the Head-quarters

	Number.	DISTRICTS	QUANTITIES PER RUPEE IN														
			WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.			JOWAR OR CHOLUM. (*Sorghum Vulgare.*)		
			Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
BENGAL—*continued.*			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
RAJSHAHI DIVISION—*concld.*	23	Bogra ...	10 0	10 0	10 8	...	...	...	9 12	9 12	9 12	12 12	13 8	12 12	...	...	...
	24	Pabna	15 12	14 4	13 12	22 8	22 8	22 8	6 0	6 4	7 2	12 4	12 8	13 8	...	...	...
	25	Darjeeling	8 0	8 0	8 0	10 0	10 0	8 0	5 0	5 0	5 0	10 0	10 0	10 0	..	...	...
	26	Jalpaiguri	10 0	11 0	10 0	13 0	13 0	15 0	10 0	10 0	7 0	13 4	14 0	11 5	.	...	...
BIHÁR.																	
BHAGALPUR DIVISION.	27	Monghyr*	14 11 to 15 12	11 0 to 15 12	13 12	21 0 to 22 1	16 13 to 17 11	21 0	9 7	8 14 to 10 8	9 0	13 10	14 4	10 4	18 14	16 13 to 18 14½	16 0
	28	Bhágalpur ...	15 2	12 10	13 4	18 15	15 2	17 10	12 10	12 10	10 1	15 2	15 2	11 6	...	..	...
	29	Purnea (Kasba)	(New.) 20 0	8 0	13 0	...	...	16 0	12 0	12 0	10 0	14 0	14 0	11 8	...	...	...
	30	Malda (English Bazar).	14 0	12 8	13 4	...	...	...	10 8	11 0	10 0	14 0	14 0	11 0	...	...	...
	31	Sonthal Parganas.	11 0	9 12	11 0	...	...	...	11 8	11 8	10 0	14 0	14 0	12 0	...	...	...
PATNA DIVISION.	32	Patna ..	14 8 13 4	Red. 13 8 White 12 8	15 0 13 8	22 0	24 0	22 0	10 0	9 8	10 8	16 0	16 8	13 8	24 0	28 0	21 0
	33	Gaya ...	14 8	13 0	13 0	20 0	19 8	19 0	9 8	10 0	9 12	13 4	13 8	11 12	18 4	17 4	...
	34	Shahabad ...	13 0	12 0	13 8	18 0	14 0	20 0	8 0	8 0	8 0	14 0	15 0	12 0	...	...	...
	35	Darbhanga ...	12 1	11 0	13 3	19 0	11 0	17 9	9 14	10 0	9 14	14 5	13 3	12 8	...	...	...
	36	Muzaffarpur	14 0	12 8	11 0	24 0	22 0	19 0	8 0	8 0	10 0	14 0	14 0	11 0	...	...	...
	37	Saran ...	12 10	12 4	13 0	20 0	18 8	20 0	11 0	10 8	9 0	14 8	14 4	11 12	...	...	...
	38	Champaran ...	Old 10 8 New 11 0	10 4	Old 11 0 New 12 0	18 0	17 8	20 0	8 12	8 12	8 0 to 9 0	15 4	15 4	12 0 to 13 0	...	...	...
ORISSA.																	
ORISSA DIVISION.	39	Cuttack ...	13 2	10 8	11 13	...	...	...	10 8	10 8	9 3	14 7	14 7	13 2	...	...	...
	40	Puri* ...		9 3	10 8	...	...	...		9 3	11 13		14 7	13 4	...	...	...
	41	Balasore ...	11 0	11 0	11 0	10 0	10 0	10 0	10 0	10 0	11 0	15 0	15 0	14 0	...	...	...
CHOTA NAGPUR.																	
CHOTA NAGPUR DIVISION.	42	Hazáribágh .	12 0	New 12 0 Old 8 8	12 0	14 0	14 8	15 0	7 0	8 0	8 0	12 8	12 8	13 8	...	...	...
	43	Lohardaga ..	12 0 7 0	Red. 11 0 White 7 0	12 0 7 0 to 8 0	17 0	13 0	13 0	12 0	11 8	12 0	Ordinary rice. 13 8 Coarse rice. 15 0	Ordinary rice. 13 0 Coarse rice. 15 0	Ordinary rice. 13 0 Coarse rice. 15 0	...	...	...
	44	Palámau ...	14 10	15 12	13 8	27 0	27 0	20 4	12 15	10 2	11 14	13 8	12 15	12 15	...	...	...
	45	Singhbhum ..	12 0	12 0	15 0	12 0	...	10 0	10 0	10 0	14 0	13 0	14 0	16 0	...	...	...
	46	Manbhum*	13 0	13 0	11 8	16 0	...	17 0	9 0 to 10 0	9 0 to 10 0	12 0	11 8 to 13 0	11 8 to 13 0	17 0	...	...	...

* Present return not received.

T At Sirajganj the retail price of salt is 11½ seers per rupee.
U At Begusarai and Jamui the retail price of salt is 10 seers per rupee.
V At Banka, Madhipura and Supaul the retail price of salt is 10 seers per rupee.
W In the subdivisions the retail prices of salt per rupee are—Kishanganj 10½ seers and Araria 10 seers.
X In the subdivisions the retail prices of salt per rupee are :—Deoghur 10 seers, Godda 9½ seers, Jamtara 9 seers, Pakur 10½ seers, and Rajmahal 10 seers.
Y In the subdivisions the retail prices of salt per rupee are :—Barh 11 seers 6 chitaks, Bihar 10 seers.

CALCUTTA,

The 18th April, 1893.

Station Bazars of the Districts of Bengal on the 15th April, 1893—(concluded).

Indian-corn or Maize (*Zea Mays.*) — Present return.	Indian-corn or Maize — Next preceding return.	Indian-corn or Maize — Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus indicus.*) — Present return.	Arhar — Next preceding return.	Arhar — Corresponding return of last year.	Firewood. — Present return.	Firewood — Next preceding return.	Firewood — Corresponding return of last year.	Salt. — Present return.	Salt — Next preceding return.	Salt — Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt. — Present return.	Wholesale Salt — Next preceding return.	Wholesale Salt — Corresponding return of last year.	Districts.	Number.	
															BENGAL—*continued*.		
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.			
...	...	...	...	...	...	90 0	90 0	90 0	9 10	9 10	9 12	3 13 4	3 13 4	3 13 4	Bogra.	23	Rajshahi Division—*concld.*
...	...	...	22 8	22 8	16 8	200 0	200 0	200 0	T 10 8	10 8	9 12	3 10 0	3 10 0	3 11 0	Pabna.	24	
11 0	11 0	12 0	8 0	8 0	8 0	120 0	120 0	120 0	8 0	8 0	8 0	4 10 0	4 10 0	5 0 0	Darjeeling	25	
...	...	...	9 0	9 0	8 0	200 0	200 0	200 0	10 0	10 0	10 0	4 0 0	4 0 0	4 0 0	Jalpaiguri	26	
															BIHAR.		
21 0 to 22 5	18 14½ to 22 1	19 12	19 6	15 3 to 18 14½	18 4	127 0 to 168 0	120 0 to 160 0	168 0	U 11 0	10 12	10 8	3 7 6	3 7 6	3 8 0	Monghyr.	27	Bhagalpur Division.
21 7	21 7	17 10	15 12	15 12	17 10	151 8	151 8	164 0	V 10 11	10 11	10 11	3 12 0	3 12 0	3 12 0	Bhagalpur.	28	
...	...	16 4	16 0	12 0	13 8	320 0	320 0	...	W 10 0	10 0	9 0	3 10 2	3 10 2	4 0 0	Purnea.	29	
...	...	...	12 0	12 0	...	140 0	160 0	120 0	10 0	10 0	10 0	4 0 0	4 0 0	3 10 0	Malda	30	
21 0	22 8	13 0	23 0	22 8	13 0	200 0	200 0	200 0	X 10 8	10 8	10 0	3 10 3	3 0 3	3 10 3	Sonthal Parganas	31	
22 0	23 0	22 0	22 8	22 0	22 0	130 0	130 0	120 0	Y 11 8	11 8	11 8	3 8 0	3 8 0	3 8 0	Patna.	32	Patna Division.
19 4	19 0	...	19 4	19 0	18 0	120 0	120 0	160 0	Z 10 0	10 0	10 0	3 12 0	3 12 0	3 14 0	Gaya.	33	
20 0	20 0	...	20 0	21 0	19 0	...	160 0	160 0	a 10 0	11 0	10 0	4 0 0	3 10 0	...	Shahabad.	34	
23 8	24 0	18 11	18 11	16 0	18 0	176 0	176 0	160 0	10 0	10 4	11 0	3 14 0	3 12 0	3 6 0	Darbhanga.	35	
21 0	22 0	20 0	19 0	17 0	21 0	160 0	160 0	160 0	b 11 0	11 0	11 0	3 10 0	3 10 0	3 10 0	Muzaffarpur.	36	
21 6	21 8	20 0	19 0	18 8	21 0	210 0	210 0	160 0	c 10 8	10 8	10 4	3 11 9	3 10 6	3 13 0	Saran.	37	
21 8	21 12	19 0 to 20 0	16 0	16 0	14 0 to 20 0	160 0	160 0	160 0	10 8	10 8	10 8 to 11 0	3 12 0	3 12 0	3 12 0	Champaran.	38	
															ORISSA.		
...	..	...	18 6	19 1	16 9	80 0	80 0	80 0	d 9 4	10 12	11 0	3 10 0	3 6 0	3 12 0	Cuttack.	39	Orissa Division.
...	...	...		15 12	14 0		80 0	80 0		11 8	12 0		3 5 0	3 6 0	Puri.	40	
..	...	...	10 12	10 12	...	160 0	160 0	140 0	e 11 0	11 0	10 8	3 6 0	3 10 0	3 14 0	Balasore.	41	
															CHOTA NAGPUR.		
16 0	17 0	18 0	16 0	15 0	17 0	240 0	240 0	240 0	f 9 0	9 0	9 0	4 4 0	3 15 0	4 0 0	Hazáribágh.	42	Chota Nagpur Division.
20 0 to 21 0	18 0	20 0	Big. 13 0 Small. 18 0	Big. 13 12 Small. 16 0	Big. 14 0 Small. 16 0	140 0	140 0	140 0 to 160 0	9 8	9 4	9 8	4 2 0	4 2 0	4 2 0	Lohardaga.	43	
23 10	22 8	20 4	27 0	...	20 4	...	...	...	9 0	...	9 0	...	...	..	Palámau.	44	
...	...	...	16 0	14 0	16 0	100 0	100 0	160 0	9 0	9 0	9 0	4 6 0	4 6 0	4 3 0	Singhbhum.	45	
18 0	18 0	...	18 0	18 0	17 8	...	...	...	g 10 10	10 10	10 10	3 11 0	3 10 0	3 12 0	Manbhum.	46	

Z In the subdivisions the retail prices of salt per rupee are :—Jahanabad 10 seers, Aurangabad 10¼ seers, and Nawada 9 seers.
a In the subdivisions the retail prices of salt per rupee are :—Buxar 11 seers, Sasaram 10½ seers, and Bhabhua 10 seers.
b In the subdivisions the retail prices of salt per rupee are :—Hajipur 10½ seers and Sitamarhi 11 seers.
c In the subdivisions the retail prices of salt per rupee are—Siwan 11 seers 5 chitaks, Gopalganj (Mirganj) 11 seers 13 chitaks.
d In the subdivisions the retail prices of salt per rupee are :—Jajpur 9 seers, Kendrapara 9 seers, and Banki 11½ seers.
e At Bhadrak the retail price of salt is 7 seers per rupee.
f At Giridih the retail price of salt is 11 seers per rupee.
g At Gobindpur the retail price of salt is 11 seers per rupee.

Published for general information.

H. H. RISLEY,
Secretary to the Govt. of Bengal.

PRICES-CURRENT (*wholesale*) *of Food-grains, Firewood, and Salt*

Number.	MARTS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE COMMON.		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
1	Calcutta ...	3 4 0	3 4 0	3 4 8	2 5 0	2 5 0	2 5 11	5 9 0	5 9 0	4 11 5	4 0 0	4 0 0	3 4 0
2	Sirajganj ...	3 0 0	3 0 0	3 2 0	...	..	...	5 0 0	6 0 0	5 2 0	3 8 0	3 8 0	3 0 0
3	Dacca ...	3 10 0	3 10 0	3 11 0	1 8 0	1 8 0	...	4 0 0	3 11 0	4 0 0	3 8 0	3 7 0	2 15 6
4	Narayanganj	...	...	...	...	...	...	4 4 0	..	3 0 0	3 12 0	...	2 10 0
5	Chittagong	4 0 0	4 8 0	4 2 0	...	...	...	3 6 0	3 6 0	4 8 0	2 15 0	2 15 0	3 9 0
6	Patna ...	2 11 6 3 0 0	Red. 2 15 6 White. 3 5 6	2 10 0 2 15 3	1 13 0	1 10 6	1 13 0	4 0 0	4 3 10	3 13 0	2 8 0	2 8 0	2 15 6
7	Balasore ...	3 8 0	3 8 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 8 0	2 10 0	2 10 0	2 14 0
8	Puri* ...		4 4 0	3 12 9	...	...	...		4 4 0	2 6 0		2 11 0	3 0 3
9	Cuttack ...	3 0 0	3 10 0	3 4 0	...	...	...	3 10 0	3 10 0	4 4 0	2 12 0	2 12 0	3 0 0

* Present return not received.

CALCUTTA,
The 18*th April*, 1893.

in the undermentioned Marts of Bengal on the 15th April 1893.

Gram, Chana, Chhola, Kadalay or Sunaga. (*Cicer Arietinum.*)			Indian-corn or Maize. (*Zea Mays.*)			Arhar or thur, Cadjan Pea. (*Cajanus indicus.*)			Firewood.			Salt.			Marts.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
2 12 0	2 12 0	2 6 1	2 0 0	2 0 0	2 3 11	3 0 0	3 0 0	2 6 10	0 7 0	0 7 0	0 5 11	4 0 0	4 0 0	3 4 11	Calcutta.
2 14 0	3 4 0	2 6 0	...	...	...	...	...	...	0 6 6	0 6 6	0 7 0	3 7 0	3 8 0	3 9 0	Sirajganj.
3 0 0	3 0 0	2 10 0	...	...	...	2 8 0	2 4 0	...	0 5 0	0 5 0	0 5 0	3 9 0	3 10 0	3 8 0	Dacca.
3 8 0	...	3 4 0	...	...	...	3 0 0	...	3 8 0	0 6 0	...	0 8 0	3 10 0	...	3 8 0	Narayanganj.
3 8 0	3 8 0	3 8 0	...	...	...	...	...	...	0 6 0	0 8 0	0 5 0	3 12 0	3 13 0	3 12 0	Chittagong.
1 13 0	1 13 0	1 13 0	1 13 0	1 11 6	1 13 0	1 12 0	1 13 0	1 13 0	0 5 0	0 5 0	0 5 4	3 8 0	3 8 0	3 8 0	Patna.
2 14 6	2 14 0	2 12 0	...	...	...	3 10 0	3 10 0	...	...	...	...	3 6 0	3 10 0	3 14 0	Balasore.
	2 5 0	2 13 6	...	...	...		2 8 0	2 13 6		0 8 0	0 8 0		3 5 0	3 6 0	Puri.
2 0 0	(Kalai.) 2 0 0	2 6 0	...	...	...	2 2 0	2 0 0	2 6 0	0 8 0	0 8 0	0 8 0	3 10 0	3 6 0	3 12 0	Cuttack.

Published for general information.

H. H. RISLEY,
Secretary to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS.											
			Air pressure.			Wind.		Temperature.						
			Mean barometric height, 8 A. M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri	29·890	29·839	—	SW	343	87·7	13 & 14 Apl.	77·1	11 & 12 Apl.	86·6	78·2	82·4
		Gopalpore	29·884	29·845	+·071	SSW	398	87·2	15th „	72 3	13th „	85·6	73·8	79·7
		False Point	29·902	29·865	+·087	SWly	339	87·4	14 & 15 „	74·6	12 & 15 „	86·8	75·5	81·2
	Cuttack	Cuttack	29·824	29·847	+·082	SWly	132	100·6	13th „	74·3	11th „	99·0	76·9	88·0
	Balasore	Balasore	29·842	29 845	+·079	SWly	225	92 4	15th „	72·8	11th „	91·0	74·4	82·7
South-West Bengal.	Midnapore	Midnapore	29·747	29·813	+·085	S	253	100·3	10th „	74·1	9, 10, 11 „	97·7	74·8	86·3
	24-Parganas	Calcutta	29·882	29·849	+·092	SSW	130	95·6	15th „	72·2	11th „	92·0	74·3	83·2
		Saugor Island	29·885	29·854	+·085	S	411	89 2	12, 14 & 15. „	78·0	12th „	88·6	78 6	83·6
	Howrah													
	Hooghly													
	Nadia	Krishnagar	29·855	29·851	+·112	SWly	145	98·4	9th „	67·4	11th „	94·8	73·0	83·9
	Khulna													
	Jessore	Jessore	29 878	29 858	+·094	Calm	84	96·0	15th „	67·5	11th „	93·1	72·7	82·9
	Burdwan	Burdwan	29·809	29 836	+·104	SW	108	99·7	9th „	70·7	11th „	96·5	74·4	85·4
		Raniganj	29 556	29 845	+·090	SE	69	103·7	9, 10 & 15. „	69·9	10th „	100·0	74 5	87·2
	Bankura	Bankura	29 564	29·814	+·084	SEly	119	103·7	10th „	71·6	10th „	99·7	75 0	87·4
	Birbhum													
	Murshidabad	Berhampore	29·829	29 845	+·099	S	95	99·9	9th „	66·7	11th „	94·8	72·9	83·9
North Bengal.	Pabna	Sirajganj	29·875	29·872	+·115	Calm	53	94·5	15th „	63·6	10th „	90·5	68·7	79·7
	Bogra	Bogra	29 858	29 872	+·145	Calm & Ely.	87	95·2	15th „	62·2	10th „	89·9	68·6	79·3
	Rajshahi	Rampur Boalia.	29·827	29·847	+·108	SE & SW	103	97·1	9th „	67·7	11th „	93·1	72·3	82·7
	Malda	Malda	29·815	29·848	—	SE	87	98·8	15th „	65·7	10th „	92·9	71·3	82·1
	Dinajpur	Dinajpur	29·806	29 879	+·111	ENE	115	96·1	15th „	63·8	10th „	89 9	70·8	80·4
	Rangpur	Rangpur	29·806	29·886	+·121	ENE	71	91·6	14th „	62·0	10th „	87 0	68·5	77·7
	Jalpaiguri	Jalpaiguri	29·663	29 906	+·137	Ely	124?	90·4	14th „	62·6	9th „	86·0	67·9	77·0
	Kuch Bihar													
	Darjeeling	Darjeeling	23·032	—	+·088	Variable	203	64·1	15th „	41·0	9 & 10 „	59 1	46·4	52·8
	Sikkim	Gnatong	19·268	—	—	Variable	125	55·6	13th „	15·1	10th „	45·0	22·1	33·6
East Bengal.	Chittagong	Chittagong	29·849	29·884	+·055	SEly	100	92 7	14 & 15 „	60·1	11 & 12 „	89·6	70·9	80·3
	Chittagong Hill Tracts	Demagiri	Observations not received.											
	Backergunge	Barisal	29·906	29·864	+·087	Calm	91	94·3	15th Apl.	66·0	11th „	90·7	72·0	81·4
	Noakhali	Noakhali	29·910	29·900	+·030	Variable	153	94·7	15th „	63·6	11th „	89·6	69·3	79·5
	Faridpur	Faridpur	29·889	29·883	+·101	Variable	92	90·5	9th „	65·0	11th „	88·4	70·6	79·5
	Dacca	Dacca	29·894	29·864	+·091	Calm	123	94·1	15th „	65·7	11th „	90·6	70·8	80·7
	Tippera	Comilla	29·895	29·878	+·088	Ely	108	94·8	15th „	64·4	11th „	91·0	68·5	79·0
	Mymensingh	Mymensingh	29·869	29·885	+·111	ENE	114	92·0	15th „	63·9	9th „	86·4	69·5	78·0
North Bihar.	Purnea	Purnea	29·768	29·848	+·112	NEly	60	99·3	15th „	65·3	10th „	93·4	71·2	82·3
	Bhagalpur	Bhagalpur	29·705	29·819	+·097	SEly	42	101·3	14 & 15 „	66·0	10th „	97·0	72·4	84·7
	Darbhanga	Darbhanga	29·724	29·846	+·104	ESE	113	98·5	15th „	68 0	10th „	93·1	72 1	82·6
	Muzaffarpur	Muzaffarpur	29·692	29·825	—	ESE	103	99·7	15th „	67·2	10th „	95 6	71·5	83·6
	Champaran	Motihari	29·651	29·834	+·110	ENE & ESE.	131	100·2	15th „	66·8	9 & 10 „	94·6	70·4	82·5
	Saran	Chapra	29·686	29 821	+·107	ENE	85	103·8	15th „	66·9	11th „	97·8	71·7	84·8
South Bihar.	Shahabad	Dehri	29·489	29·795	+·066	SEly	37	106·4	15th „	69·0	10 & 11 „	100·8	71·7	86·2
		Buxar	29·612	29 806	+·076	Ely	92	105·0	15th „	69·3	10th „	99·9	72·5	86·2
		Arrah	29·670	29 813	+·098	Ely	63	104·8	15th „	68·5	11th „	99·4	72·5	85·9
	Gaya	Gaya	29·475	29·805	+·057	S	121	104·5	9 & 15 „	67·9	15th „	100·4	72·2	86·4
	Patna	Bankipore	29·689	29·825	+·089	ENE	124	103·0	15th „	67·9	10th „	97·1	72·8	84·9
	Monghyr													
	Sonthal Parganas	Naya Dumka	29·378	29·825	+·098	SEly	47	102·7	9th „	70·3	11th „	97·5	74·5	86·0
Chota Nagpur.	Hazaribagh	Hazaribagh	27·862	29·792	+·049	S	155	90·9	15th „	66·7	11th „	96·5	69·9	83·2
	Lohardaga	Ranchi	27·748	29·803	+·054	Sly	162	99·5	15th „	66·4	10th „	95·2	69·6	82·5
	Palamau													
	Singhbhum	Chaibassa	29·122	29·831	+·088	SW	42	103·5	15th „	71·8	10th „	100·1	74·5	87·3
	Manbhum													

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period
The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01
rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station
district, *viz.*, from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one of

for the week ending Saturday, the 15th of April 1893.

					DISTRICT OBSERVATIONS.										
					Of week.				Rainfall.						
									Since 1st of month.			Since 1st April 1893.			
Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.	District.
—	81·1	86	4·1	Nil	Nil	0·37	0·00	0·32	Nil	0·50	—0·50	Nil	0·50	—0·50	Puri.
—1·9	77·9	92	0	Nil											
—3·0	82·0	79	5·4	Nil											
—2 0	82·0	71	3·9	Nil	Nil	0·14	0·00	0·32	·0·01	0·31	—0·30	0·01	0·31	—0·30	Cuttack.
—2·9	80·4	84	2·7	0·19		0·35		0·66		0·62			0·62		Balasore.
—2·4	81·1	76	1·9	0·27	0·40	0·22	0·75	0·50	0·40	0·38	+0·02	0·40	0·38	+0·02	Midnapore.
—2·8	80·5	79	1·7	0·02	0·37	0·24	0·57	0·43	0·47	0·47	0	0·47	0·47	0	24-Parganas.
—1·6	82·1	83	4·9	Nil											
					0·03	0·29	0·00	0·49	0·03	0·60	—0·57	0·03	0·60	—0·57	Howrah.
					0·82	0·31	0·67	0·59	0·82	0·65	+0·17	0·82	0·65	+0·17	Hooghly.
—1·5	79·4	80	3·6	0·03	0·83	0·58	1·20	0·69	1·90	1·07	+0·83	1·90	1·07	+0·83	Nadia.
					0·17	0·53	3·00	0·70	1·49	0·86	+0·63	1·49	0·86	+0·63	Khulna.
—4·4	80·0	85	4·0	0·34	1·23	0·54	1·20	0·68	1·86	1·10	+0 76	1·86	1·10	+0·76	Jessore.
—3·0	78·9	79	4·7	0·17	0·15	0·41	0·50	0·51	0·35	0·69	—0·34	0·35	0·69	—0·34	Burdwan.
—0·3	80·3	77	0	0·36											
—0·3	81·0	73	2·9	Nil	Nil	0·31	0·00	0·53	0·04	0·36	—0·32	0·04	0·36	—0·32	Bankura.
					0·17	0·29	0·33	0·42	0·17	0·47	—0·30	0·17	0·47	—0·30	Birbhum.
—3·9	77·0	86	4·0	0·23	0·53	0·31	1·00	0·61	0·61	0·58	+0·03	0·61	0·58	+0·03	Murshidabad.
—3·6	76·5	81	1·9	0·37	0·24	0·45	1·00	0·69	1·08	0·96	+0·12	1·08	0·96	+0·12	Pabna.
—2·9	76·2	78	2·3	1·15	0·96	0·29	1·00	0·45	1·20	0·42	+0·78	1·20	0·42	+0·78	Bogra.
—1 1	79·1	78	2·6	0·16	0·29	0·16	1·00	0·34	0·56	0·41	+0·15	0·56	0·41	+0·15	Rajshahi.
—	79·3	77	1·7	0·23	0·12	0·40	0·50	0·30	0·30	0·47	—0·17	0·30	0·47	—0·17	Malda.
—2·2	76·9	73	1·7	0·62	0 17	0·10	0·60	0·23	0·36	0·18	+0·18	0·36	0·18	+0·18	Dinajpur.
—2·1	74·8	82	1·4	0·65	0·63	0·48	1·50	0·84	2·66	0·87	+1·79	2·66	0·87	+1·79	Rangpur.
—1·3	73·6	77	6·0*	0·47	0·36	0·63	1·00	1·00	0·74	1·25	—0·51	0·74	1·25	—0·51	Jalpaiguri.
					0·49	0·47	1·00	0·70	3·35	1·03	+2·32	3·35	1·03	+2·32	Kuch Bihar.
—1·2	51·8	93	6·6	0·42	1·67	0·89	2·25	1·40	4·45	1·55	+2·90	4·45	1·55	+2·90	Darjeeling.
—	38·4	62	1·7	1·75											Sikkim.
—0·9	77·9	81	2·7	0·08	0·03	0·46	0·00	0·54	0·03	0·66	— 0·63	0·03	0·66	—0·63	Chittagong.
					Nil	0·74	0·00	1·20	2·90	1·39	+1·51	2·90	1·39	+1·51	Chittagong Hill Tracts.
—1·8	80 0	85	1·7	0·19	0·40	0·49	0·75	0·82	1·03	0·82	+0·21	1·03	0·82	+0·21	Backergunge.
—2·2	81·3	78	2·4	0·09	0·18	1·07	0·50	1·18	0·18	1·63	—1·45	0·18	1·63	—1·45	Noakhali.
—4·2	77·7	85	1·0	0·76	0·49	0·69	0·75	1·14	1·13	1·15	—0·02	1·13	1·15	—0·02	Faridpur.
—3·8	78·6	75	1·6	0·32	0·47	0·84	1·75	1·07	0·82	1·44	—0·62	0·82	1·44	—0·62	Dacca.
—2·3	78·8	72	1·1	0·54	0·68	1·11	1·00	1·30	1·17	1·77	—0·60	1·17	1·77	—0·60	Tippera.
—3·0	74·8	81	2·6	2·12	1·40	0·55	1·60	0·81	2·30	1·01	+1·29	2·30	1·01	—1·29	Mymensingh.
—1·0	78·2	74	0·3	0·06	0·02	0·26	0·00	0·33	0·61	0·42	+0·19	0·61	0 42	+0·19	Purnea.
+1·1	81·0	64	0·7	Nil	Nil	0·22	0·00	0·31	Nil	0·28	—0·28	Nil	0·28	—0·28	Bhagalpur.
—1·6	79·0	66	0·4	0·02	Nil	0·15	0·00	0·23	Nil	0·18	—0·18	Nil	0·18	—0·18	Darbhanga.
—	78·5	76	0·4	Nil	0·04	0·16	0·33	0·21	0·04	0·22	—0·18	0·04	0·22	—0·18	Muzaffarpur.
+1·1	80·3	64	0·9	Nil	Nil	0·10	0·00	0·26	Nil	0·32	—0·32	Nil	0·32	—0·32	Champaran.
+1·0	80·6	65	0·3	Nil	Nil	0·04	0·00	0·12	Nil	0·06	—0·06	Nil	0·06	—0·06	Saran.
+0·3	81·4	55	0·6	Nil											
+1·1	82·7	53	1·0	Nil	Nil	0·04	0·00	0·13	Nil	0·12	— 0·12	Nil	0·12	—0·12	Shahabad.
+1·0	81·7	65	0·3	Nil											
—1·9	80·6	67	1·3	Nil	Nil	0·04	0·00	0·10	Nil	0·11	—0·11	Nil	0·11	—0·11	Gaya.
—2·1	81·7	59	0·3	Nil	Nil	0·04	0·00	0·13	Nil	0·09	—0·09	Nil	0·09	—0·09	Patna.
					Nil	0·09	0·00	0·19	Nil	0·13	—0·13	Nil	0·13	—0·13	Monghyr.
—0·8	82·1	68	1·3	Nil	0·21	0·21	0·33	0·35	0·22	0·29	—0·07	0·22	0·29	—0·07	Sonthal Parganas.
—1·4	82·8	39	2·3	Nil	Nil	0·08	0·00	0·26	Nil	0·11	—0·11	Nil	0·11	—0·11	Hazaribagh.
—0·7	79·6	58	0·7	0·02	Nil	0·18	0·00	0·47	Nil	0·28	—0·28	Nil	0·28	—0·28	Lohardaga.
					Nil	0·11	0·00	0·26	Nil	0·23	—0·23	Nil	0·23	—0·23	Palamau.
—1·8	80·2	68	2·1	Nil	Nil	0·15	0·00	0·45	0·35	0·39	—0·04	0·35	0·39	—0·04	Singhbhum.
					Nil	0·21	0·00	0·44	Nil	0·28	—0·28	Nil	0·28	—0·28	Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 15th of April 1893.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 9th.	Monday, 10th.	Tuesday, 11th.	Wednesday, 12th.	Thursday, 13th.	Friday, 14th.	Saturday, 15th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April to date.
ORISSA ..	Puri ...	Puri ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·20	Nil	0·20
		Khurda ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·21	Nil	0·21
		Banpur ...	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·20	Nil	0·20
		False Point ...	...	...	...	...	...	...	...	Nil	Nil	1·10	Nil	1·38	Nil	1·38
		Gop ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Satpara ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pipli ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Cuttack ...	Jagatsingpore	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·15	Nil	0·15
		Banki ...	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·18	Nil	0·18
		Cuttack ...	...	...	...	...	...	...	...	Nil	Nil	0·22	Nil	0·37	Nil	0·37
		Kendrapara ...	...	...	...	...	...	...	...	Nil	Nil	0·17	0·02	0·32	0·02	0·32
		Jajpur ...	...	...	...	...	...	...	...	Nil	Nil	0·16	0·02	0·35	0·02	0·55
		Dharmsala ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Salipore ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pal Lahara ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Balasore ...	*Akhyapada* ...										?		?		?
		Chandbali ...										0·20		0·46		0·46
		Bhadrak ...	...	...	...	...	...	...	...	Nil	Nil	0·45	Nil	0·87	Nil	0·87
		Soro ...	...	...	...	...	...	...	...	Nil	Nil	0·39	Nil	0·56	Nil	0·56
		Balasore ..	...	...	0·27							0·57		0·86		0·86
		Jellasore ...										0·27		0·45		0·45
		Baripodah ...										0·23		0·50		0·50
SOUTH-WEST BENGAL.	Midnapore	Contai ...	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·34	Nil	0·34
		Tamluk ..	...	..	0·02	...	...	...	...	Nil	0·02	0·11	0·02	0·35	0·02	0·35
		Midnapore ...	...	0·16	0·11	...	...	...	...	2	0·27	0·23	0·27	0·40	0·27	0·40
		Ghatal ..	...	0·02	1·30	...	...	...	...	1	1·32	0·35	1·32	0·40	1·32	0·40
		Kukrahaty ...	...	...	...	...	...	...	...	Nil	Nil	?	0·17	?	0·17	?
		Garhbeta ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Panskura ...	...	0·02	0·04	...	...	...	...	Nil	0·06	?	0·06	?	0·06	?
	24-Parganas ..	Saugor Island	...	...	...	...	...	...	...	Nil	Nil	0·15	0·04	0·21	0·04	0·21
		Diamond Harbour ..	...	...	...	...	...	...	...	Nil	Nil	0·36	Nil	0·49	Nil	0·49
		Canning Town	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Alipore (Observatory.)	...	0·02	...	...	...	...	...	Nil	0·02	0·18	0·02	0·56	0·02	0·56
		Barrackpore ...	...	...	0·58	...	...	...	...	1	0·58	0·25	0·58	0·58	0·58	0·58
		Dum-Dum ...	...	0·19	...	...	...	...	...	1	0·19	0·27	0·19	0·60	0·19	0·60
		Barasat ...	...	...	0·81	...	...	...	...	1	0·81	0·25	1·46	0·54	1·46	0·54
		Basirhat ...	...	...	0·97	...	...	...	...	1	0·97	0·25	0·97	0·39	0·97	0·39
	Howrah ...	Howrah .	...	0·05	...	...	...	...	...	Nil	0·05	0·31	0·05	0·81	0·05	0·81
		Mohesreka ...	...	...	...	...	..	...	...	Nil	Nil	0·27	Nil	0·38	Nil	0·38
		Uluberia ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Hooghly ...	Serampore ...	...	0·05	0·64	...	...	...	...	1	0·69	0·24	0·69	0·72	0·69	0·72
		Hooghly ...	...	..	0·93	...	..	...	...	1	0·93	0·40	0·93	0·63	0·93	0·63
		Jahanabad ...	...	0·02	...	...	...	...	...	Nil	0·02	0·29	0·02	0·55	0·02	0·55
	Nadia ...	Ranaghat ..	...	0·10	0·03	...	...	...	...	1	0·13	0·80	0·57	1·17	0·57	1·17
		Krishnagar ...	...	...	0·03	...	...	...	...	Nil	0·03	0·57	1·17	1·02	1·17	1·02
		Chuadanga ...	...	0·37	0·26	...	...	...	...	2	0·73	0·45	1·29	0·98	1·29	0·98
		Meherpore ...	...	1·83	0·04	...	..	...	...	1	1·87	0·18	3·73	1·14	3·73	1·14
		Kushtia .	...	0·95	0·45	...	...	...	...	2	1·40	0·59	2·77	1·00	2·77	1·00
	Khulna ...	Satkhira .	...	...	0·30	...	...	...	...	1	0·30	0·60	2·75	0·89	2·75	0·89
		Bagerhat ..	...	...	0·12	...	.	...	...	1	0·12	0·64	0·37	0·99	0·37	0·99
		Khulna ...	...	...	0·09	...	...	...	...	Nil	0·09	0·36	1·35	0·71	1·35	0·71
		Nakipur ...										?		?		?
		Rampal ...	...	...	0·40	...	...	...	...	1	0·40	?		?		?
	Jessore ...	Narail .	...	0·03	0·94	...	...	...	...	1	0·97	0·48	1·22	0·94	1·22	0·94
		Jessore ...	...	0·07	...	0·27	...	...	...	1	0·34	0·66	0·58	1·21	0·58	1·21
		Jhenidah .	...	0·21	2·95	...	..	...	...	2	3·16	0·46	4·37	1·31	4·37	1·31
		Magura ...	...	0·11	1·55	...	...	...	...	2	1·66	0·57	1·90	1·25	1·90	1·25
		Bangaon ...	...	...	...	...	...	...	...	Nil	Nil	0·58	1·22	0·84	1·22	0·84
	Burdwan ..	Kalna ..	...	0·03	...	...	...	...	...	Nil	0·03	0·5[illegible]	0·03	0·73	0·03	0·73
		Burdwan ...	..	0·17	...	...	...	...	...	1	0·17	0·77	0·26	0·62	0·26	0·62
		Katwa ..	0·01	0·05	...	...	...	...	...	Nil	0·06	0·36	0·57	0·74	0·57	0·74
		Raniganj ...	...	0·36	...	...	...	...	...	1	0·36	0·26	0·36	0·37	0·36	0·37
		Mankur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Bankura ..	Bankura ...	...	...	...	...	...	...	...	Nil	Nil	0·33	Nil	0·50	Nil	0·50
		Vishnupur ...	...	...	...	...	...	...	...	Nil	Nil	0·37	Nil	0·41	Nil	0·41
		Maliara ...	...	...	...	...	...	...	...	Nil	Nil	0·17	0·17	0·17	0·17	0·17
		Khatra ...	...	...	...	...	...	...	...	Nil	Nil	0·36	Nil	0·36	Nil	0·36
		Indas ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Kotalpur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Onda ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Gangajalghati	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Raipur ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sonamukhi ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Birbhum ...	Suri ..	...	0·38	...	...	...	...	...	1	0·38	0·24	0·38	0·35	0·38	0·35
		Hetampore ...	0·02	0·02	...	...	...	...	...	Nil	0·04	0·28	0·04	0·45	0·04	0·45
		Rampur Hat...	...	...	0·09	...	...	...	...	Nil	0·09	0·36	0·09	0·68	0·09	0·68
		Bolpur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Murari ...	...	...	0·30	...	...	...	...	1	0·30	?	0·30	?	0·30	?
	Murshidabad	Kandi ...	...	0·34	0·03	...	...	...	...	1	0·37	0·42	0·37	0·73	0·37	0·73
		Berhampore ...	...	0·13	0·10	...	...	...	...	2	0·23	0·41	0·23	0·68	0·23	0·68
		Lalbagh ...	...	...	0·52	...	...	...	...	1	0·52	0·27	0·75	0·29	0·75	0·29
		Azimganj ...	...	...	0·35	...	...	...	...	1	0·35	0·26	0·58	0·60	0·58	0·60
		Jangipur ...	...	0·72	...	...	...	...	...	1	0·72	0·37	0·72	0·64	0·72	0·64
		Lalgola ...	1·00	...	...	...	...	...	...	1	1·00	0·33	1·00	0·53	1·00	0·53
		Akhriganj ...	...	0·61	0·11	...	...	...	...	2	0·72	?	1·66	?	1·66	?
		Patkabari ..	...	1·80	...	...	...	...	...	1	1·80	?	2·60	?	2·60	?
NORTH BENGAL	Pabna ...	Pabna ...	...	0·11	...	...	...	...	...	1	0·11	0·55	1·77	1·08	1·77	1·08
		Sirajganj ...	...	0·37	...	...	...	...	...	1	0·37	0·35	0·39	0·84	0·39	0·84
	Bogra ...	Sherepore ...	...	1·33	...	...	...	...	...	1	1·33	0·16	2·08	0·24	2·08	0·24
		Nowkhilla ...	...	0·97	...	...	...	...	...	1	0·97	0·36	0·97	0·40	0·97	0·40
		Bogra ...	...	1·15	...	...	...	...	...	1	1·15	0·44	1·35	0·83	1·35	0·83
		Panchbibi ...	...	0·40	...	...	...	...	...	1	0·40	0·21	0·40	0·23	0·40	0·23
	Rajshahi ...	Boalia ...	...	0·12	0·02	...	...	...	...	1	0·14	0·16	0·42	0·53	0·42	0·53
		Nator ...	...	0·20	0·02	...	...	...	...	1	0·22	0·20	0·35	0·59	0·35	0·59
		Naugaon ...	...	0·50	...	...	...	...	...	1	0·50	0·11	0·90	0·11	0·90	0·11
		Lalpore ...	0·22									?		?		?
		Manda ...										?		?		?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 15th of April 1893—contd.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 9th.	Monday, 10th.	Tuesday, 11th.	Wednesday, 12th.	Thursday, 13th.	Friday, 14th.	Saturday, 15th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1892.	Average rainfall from 1st April.
NORTH BENGAL—concld.	Malda ...	Malda ...	...	0·23	...	...	...	...	...	1	0·23	0·33	0·43	0·43	0·43	0·43
		Chanchal ..	...	...	...	...	..	...	...	Nil	Nil	0·46	0·15	0·49	0·15	0·49
		Gajol ...	...	0·29	...	.	...	...	...	1	0·29	?	0·99	?	0·99	?
		Sibganj .	...	0·30	...	...	...	...	...	1	0·30	?	0·90	?	0·90	?
	Dinajpur ...	Mohadebpore	...	0·30	...	...	...	...	...	1	0·30	0·05	0·60	0·05	0·60	0·05
		Churaman ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·06	Nil	0·06
		Raiganj ...	...	..	...	..	...	...	...	Nil	Nil	0·08	0·16	0·30	0·16	0·30
		Dinajpur ...	0·39	0·16	...	...	...	...	...	2	0·55	0·31	1·03	0·48	1·03	0·48
		Balurghat ...	...	...	...	...	..	...	...	Nil	Nil	0·02	Nil	0·02	Nil	0·02
		Thakurgaon ...	0·10	...	...	...	...	...	...	1	0·10	?	0·86	?	0·86	?
	Rangpur ...	Bhawangunge (*Gyabanda*)	...	0·40	...	...	...	...	...	1	0·40	0·14	0·61	0·82	0·61	0·82
		Rangpur ...	0·46	0·19	...	...	...	...	...	2	0·65	0·38	2·40	0·75	2·40	0·75
		Kurigaon ...	1·22	0·11	...	...	...	...	...	2	1·33	0·79	6·08	1·35	6·08	1·35
		Baga gra (*Nilphamari*)	0·12	...	...	..	...	...	...	1	0·12	0·32	1·52	0·55	1·52	0·55
		Ulipore	1·30	0·45	...	...	...	...	...	2	1·75	?	4·40	?	4·40	?
	Jalpaiguri ...	Jalpaiguri	...	0·01	...	...	...	...	0·35	1	0·36	0·63	0·74	1·25	0·74	1·25
		Alipore Dooar	...	...	...	...	...	0·91	0·33	2	1·24	?	5·32	?	5·32	?
		Fallacotta ...	0·37	...	...	...	...	1·90	...	2	2·27	?	4·71	?	4·71	?
		Debiganj ...	0·11	...	...	...	...	...	...	1	0·11	?	0·88	?	0·88	?
		Bhagatpore (*Naorakatta*)	0·21	0·11	...	...	...	0·29	0·77	4	1·38	?	5·50	?	5·50	?
	Kuch Bihar	Dinhatta ...	0·64	...	...	...	...	...	...	1	0·64	0·61	2·79	0·81	2·79	0·81
		Kuch Bihar ...	0·72	...	...	...	...	...	...	1	0·72	0·77	5·30	1·92	5·30	1·92
		Mickliganj ..	0·17	...	...	...	...	...	...	1	0·17	0·28	1·70	0·54	1·70	0·54
		Mathabhanga	0·41	...	...	...	...	...	0·02	1	0·43	0·20	3·62	0·80	3·62	0·80
	Darjeeling ...	Buxa ...	1·85	0·11	...	...	...	...	1·25	3	3·21	1·73	8·47	3·08	8·47	3·08
		Siliguri ...	0·40	...	...	...	...	1·22	0·46	3	2·08	0·31	3·97	0·46	3·97	0·46
		Darjeeling ...	0·38	0·04	...	...	...	...	...	1	0·42	0·84	3·02	1·81	3·02	1·81
		Kalimpong ...	0·50	0·46	...	..	..	...	...	2	0·96	0·66	2·34	0·84	2·34	0·84
		Kurseong ..	1·20	0·03	0·45	...	...	...	0·33	3	2·01	?	3·31	?	3·31	?
EAST BENGAL	Chittagong ..	Cox's Bazar ...	...	...	...	...	...	...	...	Nil	Nil	0·34	Nil	0·53	Nil	0·53
		Chittagong ...	...	...	0·07	...	...	...	...	Nil	0·07	0·58	0·07	0·79	0·07	0·79
		Kutubdia ...										?				
		Satkanya ...										?				
		Kodala ...										?				
		Fenoa ...										?				
		Mirsarai ...	0·03	...	0·11	..	...	...	...	1	0·14	?	0·78	?	0·78	?
		Chandpur ...	...	...	0·10							?				
	Chittagong Hill Tracts.	Rangamati ...	...	...	...	...	...	...	...	Nil	Nil	0·74	0·61	1·39	0·61	1·39
		Bundarban ...	...	...	0·05	..	...	...	...	Nil	0·05	?	0·05	?	0·05	?
	Backergunge	Patuakhali ...	...	...	1·10	...	...	...	...	1	1·10	0·32	1·66	0·49	1·66	0·49
		Pirojpur ...	...	...	0·15	...	...	...	...	1	0·15	0·35	0·84	0·64	0·84	0·64
		Barisal ...	...	...	0·25	...	..	...	...	1	0·25	0·65	1·45	1·33	1·45	1·33
		Gournaddi ...	...	...	0·89	...	...	...	...	1	0·89	?	1·89	?	1·89	?
		Bhola ...	...	...	0·09	...	...	...	...	Nil	0·09	0·66	0·15	0·86	0·15	0·86
		Daulatkhan ...	..	...	...	...	..	...	...	Nil	Nil	?	Nil	?	Nil	?
		Bauphal ...	...	...	0·16	...	...	...	...	1	0·16	?	0·16	?	0·16	?
	Noakhali ...	Noakhali ...	...	...	0·09	...	...	...	..	Nil	0·09	1·05	0·09	1·51	0·09	1·51
		Fenny ...	...	...	0·26	...	...	...	...	1	0·26	1·09	0·26	1·76	0·26	1·76
		Harishpore ...	...	...	0·16							?		?		?
		Ramganj ...	...	...	0·55							?		?		?
	Faridpur ...	Madaripur ...	...	0·11								0·71		1·16		1·16
		Faridpur ...	..	0·21	0·55	...	...	...	...	2	0·76	0·74	1·38	1·26	1·38	1·26
		Goalundo ...	...	0·25	0·36	...	...	...	...	2	0·61	0·62	1·21	1·04	1·21	1·04
	Dacca ...	Munshiganj ...	...	0·61	0·28	...	...	...	...	2	0·80	0·82	0·89	1·87	0·89	1·87
		Dacca ...	...	0·20	0·06	...	...	...	...	1	0·26	0·97	1·14	1·66	1·14	1·66
		Narayanganj ..	...	0·21	0·17	...	...	...	...	2	0·38	0·90	[illegible]	1·04	0·49	1·04
		Manikganj ...	...	0·10	0·25	...	...	...	...	2	0·35	0·67	0·76	1·18	0·76	1·18
		Joydebpore ...	...	0·60	0·35	...	...	...	...	2	0·95	?	2·68	?	2·63	?
	Hill Tippera	Agartola ...	0·05	...	...	...	...	...	...	Nil	0·05	1·14	0·15	1·82	0·15	1·82
	Tippera ..	Comilla ...	...	...	0·43	...	...	...	...	1	0·43	1·13	0·59	2·01	0·59	2·01
		Chandpore ...	...	0·12	1·40	...	...	...	...	2	1·52	1·07	2·42	1·40	2·42	1·40
		Brahmanbaria	0·05	0·65	...	...	...	...	...	1	0·70	1·09	1·50	1·84	1·50	1·84
		Ramchandrapore	...	0·20	...	...	...	...	...	1	0·20	?	0·80	?	0·80	?
		Nasirnagar ...	0·20	0·54	0·07							?		?		?
		Daudkandi ...	...	0·30	0·28	...	...	...	...	2	0·58	?	0·68	?	0·68	?
		Kasba ...	1·30	...	...	...	...	...	...	1	1·30	?	1·30	?	1·30	?
		Laksham ...	...	...	0·55	...	...	...	...	1	0·55	?	0·55	?	0·55	?
	Mymensingh..	Kishorganj ...	0·75	0·78	...	...	...	...	...	2	1·53	0·79	2·08	1·76	2·08	1·76
		Atia (*Tangail*)	...	0·11	0·18	...	...	...	...	2	0·29	0·62	0·50	0·84	0·50	0·84
		Mymensingh ...	1·55	0·57	...	...	...	...	...	2	2·12	0·68	3·30	1·27	3·30	1·27
		Jamalpur ...	0·90	0·60	...	...	...	...	...	2	1·50	0·42	1·91	0·80	1·91	0·80
		Netrakona ...	0·83	0·71	...	...	...	...	...	2	1·54	0·22	3·68	0·34	3·68	0·34
		Subornakhally	...	0·40	...	...	...	...	...	1	0·40	?	0·50	?	0·50	?
		Durgapore ...	0·40	1·10								?		?		?
		Sherepore Town	1·80	0·77	...	...	?...	...	...	2	2·57	?	3·12	?	3·12	?
		Dewanganj ...	...	0·29								?		?		?
NORTH BIHAR	Purnea ...	Kishanganj ...	...	...	...	...	...	...	...	Nil	Nil	0·20	0·49	0·31	0·49	0·31
		Araria ...	...	...	...	..	...	...	...	Nil	Nil	0·33	0·63	0·51	0·63	0·51
		Purnea ...	...	0·06	...	...	...	...	...	Nil	0·06	0·24	0·67	0·43	0·67	0·43
		Gondwara (*Korah*)	...	...	...	...	...	...	...	Nil	Nil	?	0·25	?	0·25	?
		Barsoe ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Forbesganj ...	...	...	...	...	...	...	...	Nil	Nil	?	0·53	?	0·53	?
		Kaliaganj ...	0·16	...	...	...	...	...	...	1	0·16	?	0·51	?	0·51	?
	Bhagalpur ...	Madhipura ...	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·23	Nil	0·23
		Bongaon (*Sujabad*).	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Supaul ...	...	...	...	...	...	...	...	Nil	Nil	0·28	Nil	0·34	Nil	0·34
		Protabganj ...	...	0·18	...	...	...	...	...	1	0·18	?	0·18	?	0·18	?
		Bhagalpur ...	...	...	...	...	...	...	...	Nil	Nil	0·26	Nil	0·35	Nil	0·35
		Banka ...	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·20	Nil	0·20
		Colgong ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Darbhanga ...	Tajpur ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·10	Nil	0·10
		Darbhanga ...	...	...	...	...	...	...	...	Nil	Nil	0·20	Nil	0·22	Nil	0·22
		Madhubani ...	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·24	Nil	0·24
		Bahera ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Roshera ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 15th of April 1893—concld.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 9th.	Monday, 10th.	Tuesday, 11th.	Wednesday, 12th.	Thursday, 13th.	Friday, 14th.	Saturday, 15th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April.
NORTH BIHAR—concluded	Muzaffarpur...	Sitamarhi ...	...	0·12	..	...	...	...	...	1	0·12	0·32	0·12	0·33	0·12	0·33
		Muzaffarpur	...	...	...	...		...	...	Nil	Nil	0·14	Nil	0·18	Nil	0·18
		Hajipur ...	...	..	...	...	...	..	...	Nil	Nil	0·02	Nil	0·08	Nil	0·08
		Paru	...	..	...	...	..	..	...	Nil	Nil	?	Nil	?	Nil	?
		Mahwa (Chilwirra.)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sinhar ...	...	0·15	...	...	...	...	...	1	0·15	?	0·15	?	0·15	?
		Papri ..	...	...	...	...	..	..	...	Nil	Nil	?	Nil	?	Nil	?
	Champaran	Motihari ...	...	..	...	...	...	..	...	Nil	Nil	0·24	Nil	0·35	Nil	0·35
		Bettiah ..	...	..	...	...	...	..	...	Nil	Nil	0·17	Nil	0·29	Nil	0·29
		Bagaha ...	...	...	...	...		...	...	Nil	Nil	?	Nil	?	Nil	?
		Harharwa .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Saran ..	Gopalganj ...	...	..	...	...	.	...	...	Nil	Nil	0·04	Nil	0·04	Nil	0·04
		Siwan ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·03	Nil	0·03
		Chupra ...	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·11	Nil	0·11
SOUTH BIHAR	Shahabad ..	Buxar ..	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·15	Nil	0·15
		Dehri ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·11	Nil	0·11
		Bhabhua ..	..	...	...	...	..	...	...	Nil	Nil	0·03	Nil	0·07	Nil	0·07
		Sasaram ...	...	...	...	...	..	...	...	Nil	Nil	0·03	Nil	0·14	Nil	0·14
		Arrah ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·16	Nil	0·16
		Mohanea .	...	...	..	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Khiri ...	...	.	...	...	..	...	...	Nil	Nil	?	Nil	?	Nil	?
		Jgeaon ...	..	...	...	...	..	...	...	Nil	Nil	?	Nil	?	Nil	?
		Ramgar ...	...	...	...	...	...	..	..	Nil	Nil	?	Nil	?	Nil	?
		Koath ...	...	...	.	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sikroul ...	...	.	..	.	...	..	..	Nil	Nil	?	Nil	?	Nil	?
		Bassogwan ...	...	...	...	..	.	...	...	Nil	Nil	?	Nil	?	Nil	?
		Monaharpur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Gaya ...	Aurangabad ..	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·11	Nil	0·11
		Gaya ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·08	Nil	0·08
		Nawadah ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·12	Nil	0·12
		Jahanabad ..	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·14	Nil	0·14
		Arwal	...	...	...	...	...	..	...	Nil	Nil	?	Nil	?	Nil	?
		Daudnagar ...	...	...	...	...	..	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sherghati	...	...	...	...	..	...	...	Nil	Nil	?	Nil	?	Nil	?
		Rajauli ..	...	...	..	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pakri Barawan	...	..	..	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Patna ...	Patna ..	...	...	...	.	..	...	...	Nil	Nil	0·04	Nil	0·09	Nil	0·09
		Dinapore ...	...	..	...	..	...	...	...	Nil	Nil	0·06	Nil	0·10	Nil	0·10
		Behar ...	...	...	...	...	...	..	...	Nil	Nil	0·05	Nil	0·10	Nil	0·10
		Barh ...	...	..	...	...	...	...	...	Nil	Nil	0·02	Nil	0·04	Nil	0·04
		Bickram ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Hilsa .	...		...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Monghyr ...	Begusarai ...	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·11	Nil	0·11
		Monghyr ...	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·18	Nil	0·18
		Jamui ..	...	...	...	...	...	...	...	Nil	Nil	0·08	Nil	0·13	Nil	0·13
		[illegible]ri ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Shaikpura ..	...	...	...	...	...	...	..	Nil	Nil	?	Nil	?	Nil	?
		Chakai Bamda	...	...	...	...	...	...		Nil	Nil	?	Nil	?	Nil	?
	Sonthal Parganas.	Rajmahal ...	...	0·23	...	...	...	...	...	1	0·23	0·33	0·23	0·38	0·23	0·38
		Godda .	...	...	...	...	...	...	...	Nil	Nil	0·23	Nil	0·29	Nil	0·29
		Pakour ...	...	1·02	...	...	...	...	...	1	1·02	0·01	1·02	0·19	1·02	0·19
		Naya Dumka	...	...	...	...	...	...	...	Nil	Nil	0·25	0·03	0·45	0·03	0·45
		Deoghur ..	...	...	...	...	...	..	...	Nil	Nil	0·26	Nil	0·31	Nil	0·30
		Jamtara ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·09	Nil	0·09
		Belbodda ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	-	Nil	?
		Nanihat ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
CHOTA NAGPUR	Hazaribagh ...	Pachamba (Giridih). ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·14	Nil	0·14
		Hazaribagh	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·20	Nil	0·20
		Sumeshwara	...	...	..	...	...	...	...	Nil	Nil	0·12	Nil	0·13	Nil	0·13
		Mahudi Hills	...	...	...	...	...	...	...	Nil	Nil	0·06	Nil	0·09	Nil	0·09
		Jhunra Hill	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	Nil	Nil	Nil
		Barhi ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Chatra ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		K..ag. cha ..	0·02	...	...	...	...	...	...	Nil	0·02	?	0·02	?	0·02	?
		Ramgar ...	0·15	...	...	...	...	...	...	1	0·15	?	0·15	?	0·15	?
	Lohardaga .	Lohardaga ...	...	...	...	...	...	...	..	Nil	Nil	0·19	Nil	0·23	Nil	0·23
		Ranchi ...	...	...	...	...	...	...	...	Nil	Nil	0·17	Nil	0·32	Nil	0·32
		Silli ...	...	...	...					Nil	Nil	?	Nil	?	Nil	?
	Palamau ...	Palamau (Daltonganj).	...	...	...	...	...	...	...	Nil	Nil	0·11	Nil	0·23	Nil	0·23
		Alumnata ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Husainabad	...	...	...	...	..	...	...	Nil	Nil	?	Nil	?	Nil	?
		Garhwa ...	...	...	...					Nil	Nil	?	Nil	?	Nil	?
	Singhbhum ..	Chaibassa ...	...	...	...	...	...	...	...	Nil	Nil	0·15	0·35	0·39	0·35	0·39
		Chakardharpur.	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Ghatsila ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		[illegible]arajara	...	...	...	.	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Gaikera ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Manbhum ...	Purulia ...	...	...	...	...	...	...	...	Nil	Nil	0·26	Nil	0·35	Nil	0·35
		Gobindpur	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·29	Nil	0·29
		Raghunathpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Barahabhum	...	0·25	...	...	...	...	...	1	0·25	?	0·25	?	0·25	?
		Jhalda ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Chas ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pandra ...	...	...	...					Nil	Nil	?	Nil	?	Nil	?

Explanation.—.. indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the 18th April 1893.*

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 15TH OF APRIL 1893.

AT the close of the previous week weather conditions were fairly settled in Bengal, except for the fact that an area of low pressure was passing apparently through the hills to the north of the province, and also for the fact that an area of relatively low pressure existed over the Gangetic plain, the centre of the low pressure being represented by such stations as Lucknow, Allahabad, Sutna, and Nowgong. The low pressure passing through the hills caused a series of severe local storms on the Saturday evening, and Dhubri, Kurseong, Darjiling, Gnatong, etc., reported severe storms with hail and rain. The changes which occurred on Sunday the 9th were generally small, and pressure was rising moderately to slowly at all except a few western and south-western stations. The latter fact was caused by the drifting of the low pressure area in an easterly direction, and its centre was on this day near Hazaribagh. Hence with the advance of the depression over the western districts of Bengal, conditions became decidedly disturbed. A very rapid increase of pressure took place on the 10th, but still pressure remained relatively low over South-West and West Bengal, and the disturbed conditions thus continued, and on those two days numerous local storms with rain occurred in South-West, North and East Bengal, which rainfall was reported on the mornings of the 10th and 11th. Pressure continued to rise over a considerable part of the province on the 11th, and the area of low pressure quite disappeared or had perhaps drifted over Burma, and weather again became fine in Bengal, and from the 11th to the close of the week ordinary hot season conditions obtained, and no rain fell except on the 14th and 15th in and near the hills, where a few showers were reported. During this period pressure fell on the 12th, 13th, 14th and 15th, and from being moderately in excess of the normal at the beginning of the week, it had become in slight to moderate defect at its close, the defect ranging up to a twentieth of an inch at Gaya and Dehri, though slight excess pressures were still reported in North-East Bengal. In the case of temperature also there has been a general increase during the week, and on the 15th about half the stations reported temperatures in excess of the normal and the other half slight defects Winds also almost throughout the week have varied from south-westerly at the western and south-western stations, though south-easterly at the eastern stations, to easterly in the north of the province. Indeed the conditions generally during the week have been of ordinary hot weather character, and the changes which have occurred have been to make these conditions more pronounced.

Pressure.—Owing to the excessive pressure in the earlier part of the week the mean pressure has been largely in excess of the normal. This excess varies usually from 0·07″ to about 0·12″, and is largest in the north-east of the province, where it averages about 0·13″, and smallest at Hazaribagh and Ranchi, where it equals 0·05″.

Temperature.—The mean temperature of the province for the week has again been below the normal, the defect averaging 1·6°, while defects of from 2° to 3° are recorded in Orissa, South-West, North and East Bengal. The distribution of temperature for the week and its variation from the normal value are best seen in the table below, where the average maximum, minimum and mean temperatures for the week at nine typical stations in different districts of the province are compared with the normal values for the period. It will be seen, as in previous weeks, that the principal defects from the normal have occurred in the maximum or day temperatures:—

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 15th April 1893.

	Normal mean maximum temperature for the week ending 15th April.	Actual mean maximum temperature for the week ending 15th April 1893.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 15th April.	Actual mean minimum temperature for the week ending 15th April 1893.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 15th April.	Actual mean daily temperature for the week ending 15th April 1893.	Variation of actual mean from the normal.
Cuttack	102·6	99·0	−3·6	77·9	76·9	−1·0	90·3	88·0	−2·3
Calcutta	96·2	9[illegible]·0	−4·2	75·6	74·3	−1·3	86·0	83·2	−2·8
Dacca	[illegible]3·8	91·6	−3·2	75·1	70·8	−4·3	84·5	80·7	−3·8
Burdwan	101·5	96·5	−5·0	75·3	74·4	−0·9	88·4	85·4	−3·0
Patna	1[illegible]·2	97·1	−4·1	72·9	72·8	−0·1	87·1	81·9	−2·2
Gaya	10[illegible]·0	100·4	−2·6	73·4	72·2	−1·2	88·2	86·4	−1·8
Purnea	97·9	93·4	−[illegible]·5	68·7	71·2	+2·5	83·3	82·3	−1·0
Hazaribagh	97·4	95·5	−[illegible]·9	71·8	69·9	−1·9	84·6	83·2	−1·4
Darjeeling	61·1	59·1	−2·0	46·9	46·4	−0·5	54·0	52·8	−1·2

Rainfall.—The rainfall during the week has not been large. It has averaged about half an inch in South-West, North and East Bengal, but in the other districts the falls have been so small that they are quite unimportant. The falls in South-West and North Bengal are indeed a little above the normal value for the period, but elsewhere the falls have been in defect.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 15th of April 1893 :—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 1st April 1893.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	100 6	72·3	89·8	75·6	82 8	—2·5	0·02	0·28	—0·26	0·07	0·45	—0·38	0·02	0·47	0·02	0·47
South-West Bengal ..	103 7	66·7	95·2	74·5	84·9	—2·2	0·45	0·37	+0 08	0 76	0·56	+0 20	0·76	0 66	0·76	0·66
North Bengal	98 8	62 2	89·9	69·7	79·8	—2·2	0·44	0·33	+0·11	1·00	0·54	+0·46	1·43	0·63	1·43	0·63
East Bengal	94 8	63 6	89 5	70·2	79·8	—2 6	0 61	0·73	—0·12	1·40	1·00	+0·40	1·23	1·22	1·23	1 22
North Bihar	103 8	65 3	95·2	71·6	83·4	+0·1	0·01	0·17	—0·16	0·06	0·25	—0·19	0·11	0·25	0·11	0·25
South Bihar	106·4	67 9	99 2	72·7	85 9	—0 4	0 06	0·09	—0·03	0·09	0·18	—0·09	0·06	0·16	0·06	0·16
Chota Nagpur	103·5	66·4	97·3	71·3	84·3	—1·3	Nil	0 13	—0·13	0·00	0·35	—0 35	0·03	0·22	0·03	0·22

Meteorological Office, Bengal,
The 18th April 1893.

A. Pedler,
Meteorological Reporter to the Govt. of Bengal.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 9th to 15th April 1893.

Month	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature.				Hygrometry.					Rainfall at 10 A.M. for past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
April ...	9th ...	29·904	83·4	91·4	16 0	75·4	88·0	75 0	·694	68·3	52	...
" ..	10th ...	·959	82·9	91·0	16·2	74·8	84 6	76·5	·805	72·7	68	0·02
" ...	11th ...	·964	81·9	93·0	22·2	70·8	86 6	78·5	·867	74·9	69	...
" ...	12th ...	·923	81 9	96·0	22·2	73·8	87·6	79 3	·890	75 7	68	...
" ...	13th ..	·871	84·7	95·0	20·7	74 3	89·2	79·0	·854	74·4	62	...
" ...	14th ..	·836	86·2	97 0	21·7	75·2	89·8	79·5	·879	75·0	62	...
" ...	15th ...	·823	86·1	96·3	20·5	75·8	91·0	78·5	·807	72·8	55	...

	Inches.
The mean 10 A.M. pressure of the seven days	29·897
	°
The mean temperature of the seven days	84·3
The extreme variation of temperature	26·2
The maximum temperature	97·0
	%
The mean 10 A.M. relative humidity of the seven days	62
The total fall of rain from 9th to 15th April 1893	0·02

The daily mean temperatures are the crude means of maximum and minimum temperatures.

C. Little,
For Meteorological Reporter to the Govt. of India.

Meteorological Office, India,
The 17th April 1893.

Results of the Meteorological Observations taken at the Alipore Observatory from 9th to 15th April 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Temperature. Maximum.	Temperature. Range.	Temperature. Minimum.	Hygrometry. Mean wet bulb.	Hygrometry. Vapour tension.	Hygrometry. Dew point.	Hygrometry. Humidity.	Wind. Prevailing direction.	Wind. Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches.	°	%			Inches.	
April	9th	145 7	8·5	29·826	83·1	90 6	14·6	76 0	76·0	0·802	72 6	71	SSW and S ...	250	Nil	Partially cloudy, <.
„	10th	147·5	7·1	·893	81 7	88·7	14·2	74·5	76·5	·845	74·2	79	SSE and SSW ...	123	0·02	Partially cloudy.
„	11th	150·0	9·9	·898	82 0	90 5	18 5	72 0	75 4	·795	72·3	73	SSW and S ...	121	Nil	Chiefly clear.
„	12th	151·1	10·4	·857	83 4	93 2	20·0	73·2	77·2	·852	74·4	76	SSW and calm ...	69	„	Chiefly clear, △.
„	13th	148·3	10 8	·796	83 4	93·7	20 2	73·5	74·6	·739	70·2	64	SSW and calm ...	76	„	Chiefly clear, △.
„	14th	149 1	10·5	·754	84·8	95·6	20 4	75·2	74·7	·725	69·6	61	SSW ...	87	„	Cear, △.
„	15th	148 2	10·5	·751	84 3	94·1	18·8	75·3	76·4	·801	72·7	68	SSW and S ...	116	„	Clear, △.

	Inches.
The mean pressure of the seven days	29·825
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	29·748
	Hours.
The total number of hours of bright sunshine	67·7
The maximum possible number of hours of sunshine	87·9
	°
The mean temperature of the seven days	83 2
The average temperature of the corresponding period for 24 years, S.-G.'s Office	85·0
The extreme variation of temperature	23·6
The maximum temperature	95·6
	Miles.
The highest velocity of the wind in one hour	15
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	70
The average relative humidity of the corresponding peri d for 24 years, S.-G.'s Office	69
	Inches.
The total fall of rain from 9th to 15th April 1893	0·02
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·24
The total fall from 1st January to 15th April 1893	6·87
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	3·44

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a tl atched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

t, thunder; <, lightning; △, dew.

C. LITTLE,

For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;

Calcutta, the 17th April 1893.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 8th April 1893, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 8th April 1893.			Week ending Saturday, the 9th April 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	630	1,35,550	2,273	299	1,00,430	1,546
Jute	12	2,925	65	4	2,600	24
Firewood	147	88,925	1,343	118	68,450	1,020
Other articles	857	1,92,425	3,012	714	1,81,350	2,684
Total ...	1,646	4,19,825	6,683	1,135	3,52,830	5,274

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 15th April 1893, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 15th April 1893.			Week ending Saturday, the 16th April 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	329	99,950	1,728	279	1,16,180	1,984
Jute	22	6,125	95	23	11,600	115
Firewood	99	48,450	731	125	64,035	963
Other articles	533	1,35,410	2,189	601	1,58,535	2,435
Total ...	983	2,89,935	4,717	1,028	3,50,360	5,497

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 8th April 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	268,989	3,19,731 12 0	32,40,143 30	7,36,030 7 0	18,008 8 0	10,73,770 11 0	84,402½	124,222	208,624½
Or per mile of railway	......	198 8 5	......	457 0 4	11 2 11	666 11 8	......	......	......
For previous 13 weeks of half-year	3,931,634	44,30,378 0 0	3,81,48,439 10	86,08,655 3 0	2,41,376 1 0	1,32,80,400 4 0	1,023,495½	1,434,374	2,457,869½
Total for 14 weeks ...	4,200,614	47,50,109 12 0	4,13,88,583 0	93,44,685 10 0	2,59,384 9 0	1,43,54,179 15 0	1,107,897½	1,558,596	2,666,493½
Comparison.									
Total for corresponding week of previous year	278,931	3,16,692 4 8	28,07,359 10	7,10,357 9 0	20,432 6 9	10,47,482 4 5	83,190	116,288	199,478
Per mile of railway corresponding week of previous year ..	......	196 10 3	......	441 1 3	12 11 0	650 6 6	......	......	......
Total for corresponding 14? weeks of previous year	4,221,324	47,19,514 6 0	3,98,41,166 10	93,19,929 14 11	2,66,038 8 3	1,43,05,482 13 2	1,129,483	1,511,136	2,640,619

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 8th April 1893, on 22¼ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total
		Rs. A. P.	Mds. s.	Rs. A. P	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	29,931	8,950 2 0	15,954 0	577 12 0	9 0 0	9,536 14 0	868	100	968
Or per mile of railway	......	402 4 1	......	25 15 5	0 6 6	428 10 0	......	......	......
For previous 13 weeks of half-year	*282,670	*72,916 2 0	†1,62,595 0	†5,070 10 0	‡131 0 0	78,117 12 0	11,433	1,399	12,832
Total for 14 weeks ...	312,601	81,866 4 0	1,78,549 0	5,648 6 0	140 0 0	87,654 10 0	12,301	1,499	13,800
Comparison.									
Total for corresponding week of previous year	30,213½	8,711 10 9	21,465 0	852 6 0	7 4 3	9,571 5 0	869	99	968
Per mile of railway corresponding week of previous year	......	391 8 7	......	38 4 11	0 5 3	430 2 9	......	......	......
Total for corresponding 14? weeks of previous year ...	327,698	84,187 9 2	2,89,519 10	9,783 13 9	154 4 9	94,125 11 8	12,497	1,678	14,175

* Added number of passengers 1,124 and Rs. 4 }
† Ditto Mds. 316 and deducted „ 381 } on account of difference between the approximate and audited figures for the week ended 4th March 1893.
‡ Deducted „ 8 }

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 8th April 1893, on 161⅞ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs A. P.			
Total traffic for the week ...	*20,311	22,276 4 0	56,833 30	†10,188 6 0	53 0 0	32,517 10 0	6,077	3,461½	9,538½
Or per mile of railway	......	138 0 4	......	63 2 0	0 5 3	201 7 7	......	......	......
For previous 13 weeks of half-year	*221 787	*1,61,480 0 0	†7,02,755 30	†1,08,018 12 0	‡548 0 0	2,70,040 12 0	67,849	43,684½	111,533½
Total for 14 weeks ...	265,098	1,83,756 4 0	7,59,589 20	1,18,207 2 0	641 0 0	3,02,564 6 0	73,926	47,145½	121,071½
Comparison.									
Total for corresponding week of previous year	19,735½	22,685 7 11	51,617 30	8,533 0 0	70 11 9	31,289 3 8	7,094	2,638	9,732
Per mile of railway corresponding week of previous year ...	......	140 8 10	......	52 13 11	0 7 0	193 13 9	......	......	......
Total for corresponding 1?? weeks of previous year	242 688½	1,90.560 0 4	6,45,372 0	1,22,207 7 0	1,030 12 3	3,13,897 3 7	56,820	31,843	118,663

* Added number of passengers 692 and Rs. 303 }
† Ditto Mds. 2,961 and „ 577 } on account of difference between the approximate and audited figures for the week ended 4th March 1893.
‡ Ditto „ 12 }

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for the week ended 8th April 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	212,542	87,649 0 0	7,82,686 0	83,000 0 0	11,420 0 0	1,82,060 0 0	27,708	30,093	57,801
Or per mile of railway	274	113 0 0	1,007 0	120 0 0	†1 0 0	234 0 0	......	......	......
For previous 13 weeks of half-year*	2,407,018	11,65,419 0 0	96,11,250 0	12,73,575 0 0	1,94,841 0 0	26,34,835 0 0	366,193	366,923	733,416
Total for 14 weeks ..	2,619,560	12,53,059 0 0	1,03,93,936 0	13,06,575 0 0	2,06,261 0 0	28,25,895 0 0	394,201	397,016	791,217
Comparison.									
Total for corresponding week of previous year	187,590	76,913 0 0	6,60,667 0	78,899 0 0	10,919 0 0	1,66,731 0 0	26,139	27,922	54,061
Per mile of railway corresponding period of previous year ...	241	99 0 0	850 0	101 0 0	†1 0 0	201 0 0	......	......	......
Total to corresponding date of previous year	2,438,576	12,09,419 0 0	86,21,258 0	11,37,341 0 0	2,14,179 0 0	25,60,969 0 0	389,430	416,008	805,438

* Audited up to week ending 11th February 1893.
† Excluding steamer earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 8th April 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic		Other earnings.	Total earnings.	Traffic Train-miles run		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	36,357	11,470 0 0	74,574 0	4,200 0 0	60 0 0	15,730 0 0	3,781	1,909	5,690
Or per mile of railway	291	92 0 0	597 0	34 0 0	......	126 0 0	......	......	......
For previous 13 weeks of half-year*	406,093	1,47,022 0 0	8,83,505 0	53,779 0 0	1,883 0 0	2,02,684 0 0	48,211	25,633	73,844
Total for 14 weeks ...	442,450	1,58,492 0 0	9,58,079 0	57,979 0 0	1,943 0 0	2,18,414 0 0	51,992	27,542	79,534
Comparison.									
Total for corresponding week of previous year	33,858	9,629 0 0	58,347 0	3,770 0 0	54 0 0	13,453 0 0	3,779	1,893	5,672
Per mile of railway corresponding week of previous year ...	271	77 0 0	467 0	30 0 0	......	107 0 0	......	......	......
Total to corresponding date of previous year	429,882	1,55,258 0 0	8,70,679 0	53,381 0 0	1,229 0 0	2,09,848 0 0	52,502	28,561	81,063

* Audited up to week ending 11th February 1893.

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 8th April 1893, on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	19,138	5,130 0 0	13,222 0	1,390 0 0	310 0 0	6,830 0 0	2,487	737	3,234
Or per mile of railway	223	60 0 0	154 0	16 0 0	3 0 0	79 0 0	......	......	......
For previous 13 weeks of half-year*	257,066	78,764 0 0	2,14,572 0	22,160 0 0	1,976 0 0	1,02,900 0 0	32,542	9,813	42,355
Total for 14 weeks ...	276,204	83,894 0 0	2,27,794 0	23,550 0 0	2,286 0 0	1,09,730 0 0	35,029	10,550	45,579
Comparison.									
Total for corresponding week of previous year	24,157	6,454 0 0	19,957 0	892 0 0	127 0 0	7,473 0 0	2,577	737	3,314
Per mile of railway corresponding week of previous year ...	281	75 0 0	232 0	10 0 0	2 0 0	87 0 0	......	......	......
Total to corresponding date of previous year	251,736	82,084 0 0	2,10,182 0	15,471 0 0	2,260 0 0	99,815 0 0	35,704	10,324	46,088

* Audited up to week ending 11th February 1893.

BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

Approximate return of traffic for the week ending 8th April 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	90,600	†36,110	5,14,610	71,450	10,600	1,18,160	17,473	20,360	37,833
Or per mile of railway	119·84	47·77	680·70	94·51	14·02	156·30	......	......	......
For previous 13 weeks of half-year*	1,299,268	5,62,429	56,45,346	8,43,047	1,49,908	15,55,384	178,928	238,222	417,150
Total for 14 weeks ...	1,389,868	5,98,539	61,59,956	9,14,497	1,60,508	16,73,544	196,401	258,382	454,983
COMPARISON.									
Total for corresponding period of previous year on 755 miles open	123,558	59,762	4,39,022	67,364	12,810	1,39,936	12,279	23,329	35,608
Per mile of corresponding week of previous year	163·65	79·16	581·49	89·22	16·97	185·35	......	......	......
Total to corresponding date of previous year	1,339,995	6,08,099	47,82,674	7,03,626	1,54,092	14,65,817	173,062	255,995	429,057

* Includes audited figures up to 18th February 1893.
† Decrease is due to Baruni bathing mela which took place in the corresponding week of last year.

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SUPPLEMENT TO

The Calcutta Gazette.

WEDNESDAY, APRIL 26, 1893.

OFFICIAL PAPERS.

CONTENTS.

RESOLUTION ON THE REPORT ON THE LUNATIC ASYLUMS IN BENGAL FOR THE YEAR 1892.

MUNICIPAL DEPARTMENT—MEDICAL.

No. 1487Med.

Calcutta, the 20th April 1893.

RESOLUTION.

READ—

The Report on the Lunatic Asylums in Bengal for the year 1892.

Read again—

The Report for the year 1891 and the Resolution recorded upon it.

There was a slight decrease in the population of the five Native Asylums in the year under review. The number of persons under detention on the 1st January 1892 was 963. During the year 158 persons were admitted and 28 re-admitted, giving a total of 1,149 treated against 1,234, the figures of the previous year. The discharges (cured and otherwise) were 71 and 43 respectively, and 84 patients died, leaving 951 persons in confinement at the close of the year against 963 persons at the close of 1891. The number of criminal lunatics in confinement at the close of the year was the same as in the previous year, the decrease of 12 in the total population occurring in the non-criminal class.

2. The number of admissions and re-admissions fell from 213 in the previous year to 186. Of this number, 98 were criminals and 88 non-criminals,

against 91 criminals and 122 non-criminals in 1891. The Lieutenant-Governor is glad to observe this decrease in the admissions of non-criminals, which is attributed to the instructions contained in Government Circular No. 42, dated the 3rd December 1891, prescribing the exercise of greater discrimination in admitting patients to a lunatic asylum. While a falling off of 39 is shown in the number of admissions, it is remarkable that the number of re-admissions, which increased by 12, should be the highest recorded during the last ten years for which figures are given in the report. In last year's Resolution it was observed that the increase in the number of persons discharged was remarkable and its cause a little obscure, and the Inspector-General should now inquire whether the increase in the number of re-admissions in 1892, for which no explanation has been offered, may not to some extent be due to premature discharges in the previous year.

3. The Inspector-General of Civil Hospitals observes that the criminal population was in excess of that in any of the previous nine years, except 1890 and 1891, and seems inclined to think that the increase may be due to the effect of the rules for the treatment of recovered criminal lunatics confined in asylums and for their discharge, issued with Government Resolution of 21st August 1888, which, in his opinion, cause the detention of a larger proportion of these lunatics than heretofore. The Lieutenant-Governor is unable to concur in this opinion, which is opposed to the view taken last year, when part of the decrease in the number of criminal lunatics in 1891 was ascribed to the effect of those rules. The table of criminal lunatics given in the report shows that, with the exception of 1887, when there was a slight decrease, there has been a continuous increase in the number remaining under confinement at the close of each year up to 1890, and that since then there has been a decrease. It is therefore obvious that the causes of the increase must be some other than the rules of 1888.

4. During the year under review, the only asylum at which the total number of inmates at any time exceeded the capacity was that at Dacca, but the overcrowding was slight and no inconvenience was felt, nor was the health of the inmates affected. The extension of the Asylum at Berhampore will, when completed, largely increase the capacity for patients, and be the means of affording relief to other asylums which may be overcrowded.

5. In Statement No. VII, the causes of insanity in 53 out of the total of 186 admissions in 1892 are stated to be ganja-smoking and the use of bhang against 54 in 1891. The Lieutenant-Governor desires that the Inspector-General of Civil Hospitals, when inspecting the asylums, will enquire into some of the cases attributed to ganja-smoking, and ascertain upon what data this diagnosis is based. It is to be observed that in Statement No. VI only 40 of the admissions are shown to belong to the types of insanity caused by ganja-smoking and the use of bhang. The suggestion has been made that it is as reasonable to suppose that excessive ganja-smoking may be due to insanity, as that insanity may be due to excessive use of ganja.

6. The number of admissions into hospital was 595 against 717 in 1891. These figures indicate a less severe incidence of sickness in the asylums taken together, although at Dallanda and Patna there were more admissions into hospital than in the previous year. The increase at Dallanda is attributed to the occurrence of chicken-pox and to several cases of pneumonia which were absent in 1891, and to the prevalence of bowel-complaints to a greater extent than in the year before. There were 29 cases of chicken-pox and 10 of pneumonia, while the admissions for bowel-complaints were 22 against 7 in 1891. At Patna the increase is said to be due to fever and dysentery, and to disorders which these diseases leave in their train. As the jail population at Patna and Alipore suffered similarly in 1892 from bowel-complaints, pneumonia, and other disorders, it is inferred that the incidence of sickness in the Dallanda and Patna Asylums must be ascribed to general rather than to local influences. It is remarkable that, notwithstanding the outbreak of cholera in the jail at every station where an asylum is situated except Cuttack, the disease did not appear among the lunatics. There were 84 deaths against 80 in 1891, the death ratio to the daily average strength being 8·74 per cent. against 8·02 in the previous year. The increase in the death-rate is small compared to what has been reported from the jails, where it has advanced

from 30·9 in 1891 to 43·9 per mille in 1892. The reported mortality in the province generally has also increased from 26·94 in 1891 to 31·92 per mille in 1892.

7. The record of injuries and accidents is very small, the total number of cases being 11 against 16 in 1891. At Dallanda there were three injuries; at Dacca there were two accidents and one injury; at Patna there was one accident, and at Berhampore there were four cases of contusion. The Lieutenant-Governor notices with satisfaction that only two of the injuries, one of which was merely a contusion, were caused by the violent treatment of the patients by their keepers, and that in both cases the warders were punished with dismissal.

8. There were three escapes—one from each of the Asylums at Dallanda, Patna, and Dacca—against two in the previous year. The lunatics who escaped from Dallanda and Patna were recaptured, but no trace could be found of the other. The warders through whose carelessness the escapes occurred were adequately punished.

9. The following statement shows the income and expenditure of the past two years:—

INCOME.

		1891.	1892.	1891.	1892.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1.	Received from Treasury	64,576 5 9	63,232 6 9		
2.	Ditto from paying-patients ...	1,228 14 0	1,754 7 6		
				65,805 3 9	64,986 14 3
3.	Ditto from Manufacture Department			16,917 7 10	18,084 14 10
4.	Ditto from the Public Works Department			11,544 7 5	2,536 10 0
5.	Ditto from Government Medical Store			433 4 4	608 5 4
6.	Ditto from Stationery Office			80 4 9	76 3 8
	GRAND TOTAL ...			94,780 12 1	86,293 0 1

EXPENDITURE.

	Received from Treasury on account of— 1891.	Received from Treasury on account of— 1892.	Received from Manufacture Department on account of— 1891.	Received from Manufacture Department on account of— 1892.	1891.	1892.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
1. Establishment proper	16,480 2 7	16,230 11 3	......	......	16,480 2 7	16,230 11 3
2. Superintendence	15,946 14 7	15,936 12 10	......	......	15,946 14 7	15,936 12 10
3. Diet	20,583 1 5	22,139 8 2	14,010 13 2	15,330 5 4	34,593 14 7	37,469 13 6
4. Clothing and bedding	999 5 9	785 14 6	1,963 6 3	1,786 8 6	2,962 12 0	2,572 7 0
5. Bazar medicines	64 8 1	81 14 9	6 8 0	5 10 0	71 0 1	87 8 9
6. Contingencies proper	6,148 4 2	5,613 3 3	703 1 8	789 4 7	6,851 5 10	6,402 7 10
7. Contingencies of manufacture ...	...	......	2 12 0	2 1 5	2 12 0	2 1 5
8. Repairs and maintenance ...	1,224 5 2	281 13 6	230 14 9	171 1 0	1,455 3 11	452 14 6
9. Rates and taxes on asylum buildings.	4,358 10 0	3,917 0 0	......	......	4,358 10 0	3,917 0 0
Total ...	65,805 3 9	64,986 14 3	16,917 7 10	18,084 14 10		
10. Printed forms and stationery...	......	......	......	......	80 4 9	76 3 8
11. English medicines	......	......	......	......	433 4 4	608 5 4
12. Public Works	......	......	..	......	11,544 7 5	2,536 10 0
GRAND TOTAL ...	......	......	......	......	94,780 12 1	86,293 0 1

The only item of expenditure calling for special notice is "diet. Under this head the increase, which took place in all the asylums except Cuttack, where the number of inmates was unusually low, amounted to Rs. 2,875-4-11, and was due to the high prices that prevailed in 1892. The following statement compares the average cost of each lunatic on account of diet during the years 1891 and 1892:—

	1891.	1892.
	Rs. A. P.	Rs. A. P.
Dullunda	37 14 1	42 13 2
Dacca	36 13 2	40 13 2
Patna	31 10 0	34 7 8
Cuttack	27 15 1	36 6 5
Berhampore	33 3 5	37 12 3

The average cost of each lunatic, calculated on the actual expenditure incurred, was Rs. 67-10-5 against Rs. 65-15-7 in 1891.

10. During the year, the Government of India suggested that the practicability of establishing dairy farms in connection with the Lunatic

Asylums in Bengal might be taken into consideration. At Dallanda a dairy has been in successful operation since 1889, and steps are now being taken to extend it. The only other asylum with a dairy attached to it is the Dacca Asylum. The Superintendent of the Patna Asylum having reported that want of space will not admit of a dairy being opened there, and that a dairy farm is not likely to be profitable, owing to the cheap rate at which milk sells in the bazaar, the project of establishing a dairy in connection with that asylum will be abandoned. Efforts will be made to start this experiment in the remaining asylums, the result of which should be described in some detail in future reports.

11. The total population of the European Lunatic Asylum at Bhawanipur rose from 50 in 1891 to 61 during the year under review. Of this number 35 were under detention on the 1st January 1892, and 26 were subsequently admitted, including nine criminal lunatics. During the year 17 patients were discharged cured, one was despatched to Europe under the Merchant Shipping Act, four were transferred to the care of friends, one was deported to Europe as still insane, one was discharged, and two died, leaving 35 under detention at the close of the year, the same number as at the close of the previous year. There was no want of accommodation either in the male or in the female wards, and the health of the patients was good throughout the year. There was one accident, but no case of injury or escape. The expenditure amounted to Rs. 22,831 against Rs. 25,370 in 1891, the decrease of Rs. 2,539 occurring under the heads of Public Works and Rates and taxes.

12. In paragraph 8 of the Resolution on the report for 1891, it was stated that the question of abolishing the Bhawanipur Asylum and transferring the patients to the Dallanda Asylum had been referred to a Special Committee. This Committee was unable to suggest any practicable and economical arrangement and the proposal was therefore abandoned, leaving the asylums to be managed as at present.

13. The rules for the control and management of Lunatic Asylums in Bengal were last revised in 1878. Since then a new Code of Criminal Procedure has been passed, the Acts relating to Lunatic Asylums have been amended on several points, and a large number of executive orders have been issued on the subject. A Committee was accordingly appointed during the year under review to undertake the revision of the rules and to lay down a clear and distinct procedure for the admission and discharge of both criminal and non-criminal lunatics, and for the treatment and disposal of recovered criminal lunatics. The report of the Committee is still awaited.

14. A set of rules was also prepared and submitted during the year by the Committee appointed in 1891 to examine the system of guarding lunatics in force in the Dallanda Lunatic Asylum, and to suggest improvements, and also to draw up for adoption in all lunatic asylums in Bengal special rules for the care and custody of criminal lunatics. On receipt of the Committee's report, the Inspector-General of Civil Hospitals was requested to obtain the opinion of the Superintendents of Asylums on their proposals, and to submit a comprehensive report on the subject. His reply has not yet been received, but it is shortly expected.

15. The report is submitted by Surgeon Colonel J. G. Pilcher, who assumed charge of the office of Inspector-General of Civil Hospitals, Bengal, in November 1892. The thanks of the Lieutenant-Governor are due to Dr. Pilcher for the report and for the punctuality with which it has been submitted. His Honour is glad to observe that the Inspector-General is able to speak in favourable terms of the work of the Superintendents of the Asylums and of their subordinates.

By order of the Lieutenant-Governor of Bengal,

J. A. BOURDILLON,

Offg. Secretary to the Govt. of Bengal.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 22nd April 1893.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.				
BURDWAN DIVN.	1	Burdwan April 22, '93 Kalna ... Katwa ... Raniganj ..	0·01 Nil Nil Nil	Weather—hot. Ploughing proceeding. Fodder and water generally sufficient. Prices of common rice:— Srs. Burdwan ... ... 10 to 13 Kalna ... ... 10 to 13 Katwa ... ... 13 Raniganj ... ... 13 } per rupee.
	2	Bankura „ 22, '93 Vishnupur ...	Nil Nil	Weather—hot. Land is being prepared for sowing. Supply of fodder and water sufficient. Common rice selling at 11½ seers per rupee both at the Vishnupur and Sadar markets.
	3	Birbhum „ 22, '93 Rampur Hát ...	Nil Nil	Weather—hot and dry. Ploughing and manuring of fields going on. Sugar-cane pressing nearly finished. Fodder and water sufficient. Price of rice from 12 to 14½ seers per rupee. Cattle-pox reported from some villages in outposts Mahmed Bazar and Rajnagar and in thana Sakulipur.
	4	Midnapore „ 22, '93	Nil	Weather—warm. Ploughing going on in places. Indigo doing well. Prices of common rice:— Srs. Sadar ... ... 12 Contai ... ... 14 Tamluk ... ... 12 } per rupee.
	5	Hooghly „ 22, '93 Serampore ... Jahanabad ...	Nil Nil Nil	Weather—hot. Nothing important to note. Cultivation for jute and rice continues. Cattle-disease still continues in the Sadar subdivision and recently there has been some recrudescense of it. Fodder and water still scarce in Pandua and Dwarbasini. Prices of common rice:— Srs. Sadar ... ... 11 Serampore ... ... 10 to 11½ Jahanabad ... ... 12 to 12½ } per rupee.
	6	Howrah „ 22, '93 Ulubaria ...	Nil Nil	Weather—hot. Condition of cattle good. Fodder and water-supply sufficient. Price of rice 10 to 11½ seers per rupee.
PRESIDENCY DIVN.	7	24-Parganas „ 22, '93	0·01	Weather—seasonable. Ploughing going on. No cattle-disease. Sufficient fodder and water. Prices of rice:— Srs. c. Sadar ... ... 10 to 13 0 Dum-Dum ... ... 12 0 Barasat ... ... 10 10 Diamond Harbour ... ... 13 0 Barrackpore ... ... 11 12 Basirhat ... ... 11 13½ } per rupee.
	8	Nadia „ 22, '93 Kushtia ... Meherpur ... Chuadanga ... Ranaghat ...	Nil Nil Nil Nil Nil	Weather—hot. Sowing of *aus* paddy has begun. Fodder and water for cattle sufficient. Cattle-disease reported from a few villages.
	9	Khulna „ 22, '93 Bagerhat ... Satkhira ...	Nil Nil Nil	Weather—hot. Harvesting of *boro* paddy continues; outturn 12 annas expected. Outturn of *rabi* in Sadar 12 annas. Ploughing for *aus* and *aman* continues. Common rice sells at 13 seers per rupee in Sadar and Bagerhat and 11 seers in Satkhira.
	10	Jessore „ 22, '93 Jhenida ... Magura ... Narail ... Bangaon ...	Nil Nil Nil Nil Nil	Weather—seasonable. Sowing of *aus* in progress. *Til*, indigo, jute, and sugar-cane promising. Plenty of fodder and water for cattle. Price of rice stationary.
	11	Murshidabad „ 22, '93	0·11	Weather—very hot and sultry. Harvesting of *rabi* crops completed. Sowing of *bhadoi* going on. Cultivation of jute has commenced. Mulberry and *til* plants progressing well. Fodder sufficient for cattle. Common rice sells at 12½ seers per rupee.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and State and prospects of the crops.
BENGAL—*concld.*			
CHITTAGONG DIVN.			
12	Chittagong April 25, '93	2·14	Weather—seasonable with occasional clouds. *Aus* cultivation commenced in places. Prospects good. Prices stationary.
13	Noakhali „ 22, '93	0·45	Weather—seasonable. Harvesting of *rabi* crops almost completed with an outturn of ten annas. Fodder and water available. No cattle-disease except in Sundip. Common rice selling at 13 to 13½ seers per rupee.
14	Tippera „ 22, '93	0·30	Weather—cloudy and cool. The rain has immensely facilitated the sowing of both *aus* and *aman* paddy, which is now being vigorously carried on. Prices of rice abated a little but are again towards increase. There is no lack of fodder and water.
15	Chittagong Hill Tracts. „ 21, '93	Nil	Weather—seasonable. *Jum* burning continues. Prospects of sugarcane and chillies good. Tobacco not doing well. No cattle-disease. Common rice is sold at 10 seers per rupee.
DACCA DIVN.			
16	Dacca „ 22, '93	0·32	Weather—very hot with strong wind. *Boro* paddy being harvested. *Aman*, *aus* and other standing crops doing well. The Subdivisional Officer of Narayanganj reports that on the 7th instant a tornado passed through some of the villages in that subdivision and blew down 473 houses and a large quantity of paddy, *mug* and mustard. Fodder available. No cattle-disease. Common rice selling at from 10 to 12 seers per rupee.
17	Faridpur „ 22 '93	3·47	Weather—seasonable. Faridpur was visited by a very heavy thunder-storm yesterday (21st) evening, but no serious damage has been reported. *Boro* paddy being reaped. Cultivation and sowing of *aus*, *aman* and jute still in progress. Common rice selling at from 11 to 13 seers per rupee. Cattle-pox reported from outposts Deorah and Sadarpur and thanas Baliakandi and Shibchar.
18	Backergunge „ 22, '93	Nil	Weather—seasonable. State and prospects of crops fair. Common rice selling at from 10 to 13 seers per rupee. Fodder and water sufficient.
19	Mymensingh „ 22, '93	0·63	Weather—hot. State and prospects of standing crops, including *boro*, good. Harvesting of *boro* commenced. Common rice selling at 11 to 13 seers per rupee. Condition of cattle good. Supply of fodder and water sufficient.
RAJSHAHI DIVN.			
20	Dinajpur „ 22 '93 Thakurgaon ...	0·02 Nil	Weather—hot with strong westerly wind during day; mornings occasionally cool and cloudy. Sowing of jute, sugarcane and *bhadoi* continues Prospects good. Prices of rice unchanged. Cattle in good condition. Supply of fodder and drinking water plentiful.
21	Rajshahi „ 22, '93 Nator ... Naugaon ...	Nil Nil Nil	Weather—seasonable: very hot and dry. Prospects of jute and other standing crops good. Ploughing in full operation almost everywhere. No cattle-disease. Fodder and water-supply ample. Price of rice varies from 11 to 15 seers per rupee.
22	Rangpur „ 22, '93 Gaibanda ... Nilphamari ... Kurigram ... Ulipur ...	0·35 Nil Nil Nil Nil	Weather—hot. Weeding of *aus* in progress. Tobacco crop nearly average. Average price of common rice 13 seers per rupee.
23	Bogra „ 22, '93	Nil	Weather—seasonable. Ploughing still going on. Standing crops benefited by recent rain. Common rice sells at 13½ seers per rupee. Fodder and water sufficient.
24	Pabna „ 22, '93	Nil	Weather—hot and windy. Ploughing and sowing going on. Price of common rice at Pabna 12 seers per rupee and at Sirajganj Rs. 3-10 to Rs. 4-12 per maund. Condition of cattle good. Water and fodder sufficient.
25	Darjeeling „ 22, '93 Siliguri ...	1·67 1·78	Weather—fine but hazy. Thunder-storms on 21st and 22nd. *In the hills:*—Wheat and barley coming to maturity. *Bhutta, kangni,* potatoes, *chhota marua* and *phafar* progressing favourably. *Tori* being harvested. *In the terai:*—Jute and *bhadoi* being sown. *Kangni* is ripe and being cut. Barley has been harvested. Prices of coarse rice:— Srs. Hills ... . 10 } per rupee. Terai ... ... 12 }
26	Jalpaiguri „ 22, '93	0·15	Weather—hot and cloudy. Ploughing and sowing continue. Condition of cattle good. Average price of common rice 13 seers per rupee. Fodder and water-supply sufficient.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.			
Bhagalpur Divn.			
27	Monghyr April 22, '93 Begusarai ... Jamui ...	Nil Nil Nil	Weather—warm during day with strong westerly breeze. A few drops of rain last night. *Rabi* crops harvested; average 10 annas outturn. Indigo doing well. Lands prepared for *cheena* and sugarcane. No cattle-disease. Plenty of fodder and water. Prices stationary. Rice:— Srs. Sadar ... ... 13 to 15 } per rupee. Begusarai ... ... 14½ } Jamui ... ... 12½ }
28	Bhagalpur „ 22 '93 Banka ... Madhipura ... Supaul ...	Nil Nil Nil Nil	Weather—hot with strong west winds. *Rabi* harvest complete. A good *mahua* crop expected in Banka. A shower of rain wanted for *bhadoi* sowings. Price of common rice 15 seers 2 chitaks per rupee.
29	Purnea „ 22, '93 Kishanganj ... Araria ...	Nil Nil Nil	Weather—very hot in the day with strong east and west winds; cool at night and in the early morning. *Rabi* harvest over in Araria, where the outturn is good; elsewhere it is drawing to a close. Sowing of *bhadoi* and *aghani* paddy and of jute going on. Indigo sowing finished in parts of the Sadar subdivision. No cattle-disease. Fodder and water sufficient. Prices of common rice:— Srs. Araria ... ... 16 } per rpuee. Kishanganj ... ... 12 } Sadar ... ... 13 to 15 }
30	Malda „ 22, '93	Nil	Weather—hot with light westerly winds. Harvesting of *rabi* crops not yet finished. *Boro* paddy coming into ear. Lands are being prepared for *bhadoi* crops. Price of coarse rice 11 to 15 seers per rupee. Fodder and water-supply sufficient. Cow-pox still prevails in Shibganj thana.
31	Sonthal Parganas „ 22, '93 Deoghur ... Godda ... Jamtara ... Rajmahal ...	0·03 Nil Nil Nil Nil	Weather—hot. West winds. *Mahua* dropping freely; outturn will be very good. Mangoes very deficient. *Chaitali* crops reaped; outturn satisfactory. Water-supply better than last year but deficient. Fodder sufficient.
Patna Division.			
32	Patna „ 22, '93	Nil	Weather—hot. Threshing and winnowing of *rabi* in progress. Weighment of opium going on. Sugarcane and *cheena* doing well. Prices of common rice:— Srs. Sadar ... ... 16 } per rupee. Bihar ... ... 16¾ } Dinapore ... ... 15 } Barh ... ... 11½ }
33	Gaya „ 22, '93 Aurangabad ... Nawada ...	0·08 Nil Nil	Weather—very hot with variable winds. A slight storm last night (21st). *Rabi* harvest nearly over, with yield about three-fourths of an average. Sugarcane being planted. Price of common rice 14 to 15 seers per rupee. Fodder and water-supply sufficient.
34	Shahabad „ 22, '93	Nil	Weather—unsettled; sultry with dust-storms from the north-west. Sugarcane is thriving. Millet being sown extensively under irrigation. Prices still high. Fodder and water abundant.
35	Darbhanga „ 22, '93	Nil	Weather—very hot with high west winds. *Rabi* harvest completed and the average outturn estimated at 12 annas. Paddy, *mung* and indigo sowings coming on well. Supply of fodder for cattle sufficient. Prices remain stationary.
36	Muzaffarpur „ 22, '93 Sitamarhi ... Hajipur ...	Nil Nil Nil	Weather—seasonable. *Rabi* crops mostly reaped now; outturn fair. Lands under preparation for fresh crops. Fodder and water available.

	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR—*concld.*				
PATNA DIVISION—*concld.*	37	Saran April, 22, '93 Siwan .. Gopalganj ...	0·03 Nil Nil	Weather—seasonable. West winds. Last two days unsettled with threatening of rain. Indigo in parts much damaged by caterpillars which are, however, now disappearing. Other crops on ground doing well. Prices stationary. Fodder and water ample. Prices of common rice:— Srs. c. Chapra ... ... 14 0 Siwan ... ... 13 2 } per rupee. Gopalganj 13 7
	38	Champaran „ 22, '93	Nil	Weather—hot. Threshing of *rabi* nearly over. Sowing of *cheena* and paddy has been delayed till rain falls. Weighment of opium going on. No marked change in prices. No cattle-disease. Water and fodder sufficient.
ORISSA.				
ORISSA DIVN.	39	Cuttack „ 22, '93	0·24	Weather—hot. Supply of fodder and water sufficient. Price of rice stationary.
	40	Puri „ 20, '93 Khurda ... Banpur ...	Nil Nil Nil	Weather—seasonable. Rain wanted. *Dalua* rice being harvested. Miscellaneous crops good. Rice sells at from 14 seers 10 chitaks to 17 seers 1 chitak per rupee.
	41	Balasore „ 22, '93	Nil	Weather—seasonable. Ploughing continues. Rice sells at 15 seers per rupee at Balasore and 17 seers at Bhadrak.
CHOTA NAGPUR.				
South-West Frontier Agency.				
CHOTA NAGPUR DIVN.	42	Hazaribagh April, 22, '93 Giridi ...	Nil Nil	Weather—seasonable. Sugarcane doing well. Mango prospects fair. *Mahua* yielding abundantly. No other crops. Fodder and water sufficient. Common rice selling at from 11 to 14 seers per rupee.
	43	Lohardaga „ 22, '93	Nil	Weather—hot. *Rabi* harvest almost finished. Ploughing progressing.
	44	Palamau „ 21, '93	Nil	Weather—seasonable. *Rabi* harvest still continues. Owing to unseasonable rainfall the produce is disappointing. Fodder and water-supply deficient. Cattle-disease prevalent in a few places. Rice selling at from 12 to 22 seers per rupee.
	45	Singhbhum „ 22, '93	Nil	Weather—cloudy and threatening; very hot. Crops on the ground doing well. *Mahua* on the whole yielding a fair outturn. Common rice selling at from 12 to 14 seers per rupee. No cattle-disease reported. Water and fodder plentiful.
	46	Manbhum „ 22, '93 Gobindpur ...	Nil Nil	Weather—hot; cloudy the last day or two. *Mahua* still being gathered. Lands being ploughed. Price of rice 10 to 13 seers per rupee. Fodder and water-supply ample.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 25th April, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 16th to 22nd April 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Temperature. Maximum.	Temperature. Range.	Temperature. Minimum.	Hygrometry. Mean wet bulb.	Hygrometry. Vapour tension.	Hygrometry. Dew point.	Hygrometry. Humidity.	Wind. Prevailing direction.	Wind. Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
April	16th	144 9	9·9	29·701	83·9	91·9	15·9	76·0	78·4	0·898	76·0	79	S by W and SSW	188	Nil	Chiefly clear, ⌓.
"	17th	145 6	8·9	·623	84·6	92·1	15·6	76·5	79·8	·953	77·8	81	SSW and S ...	215	"	Partially cloudy.
"	18th	150·1	9·5	·612	86·1	96 5	19·1	77·4	80·1	·950	77·7	77	SSW and S ...	220	"	Chiefly clear.
"	19th	147·4	9·5	·651	86·1	93·6	14·2	79·4	80·3	·958	77·9	77	SSW and S ...	203	"	Morning chiefly cloudy, day and night chiefly clear.
"	20th	149·2	9·2	·637	86·6	96·0	17·6	78·4	79·9	·931	77·1	75	SSW and S ...	198	"	Chiefly clear.
"	21st	149 7	7·9	·614	86·6	94·3	14·9	79·4	79·3	·904	76·2	71	SSW and S ...	211	"	Partially cloudy.
"	22nd	157·9	4·7	·641	84·1	96·1	17·0	79·1	75·2	·755	70·8	64	SSE, SSW and variable.	161	0·01	Chiefly cloudy, o, t, <, d.

	Inches.
The mean pressure of the seven days	29·640
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	29·750
	Hours.
The total number of hours of bright sunshine	59·6
The maximum possible number of hours of sunshine	88·9
	°
The mean temperature of the seven days	85 4
The average temperature of the corresponding period for 24 years, S.-G.'s Office	84·7
The extreme variation of temperature	20·5
The maximum temperature	96·5
	Miles.
The highest velocity of the wind in one hour	16
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	75
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	70
	Inches.
The total fall of rain from 16th to 22nd April 1893	0·01
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·52
The total fall from 1st January to 22nd April 1893	6·88
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	3·96

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

⌓, dew; t, thunder; <, lightning; o, overcast; d, drizzling rain.

C. Little,
For Meteorological Reporter to the Govt. of India.

Meteorological Office, Govt. of India;
Calcutta, the 24th April 1893.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	Station Observations. Air pressure. Mean barometric height, 8 A. M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. Prevailing direction.	Mean wind velocity.	Temperature. Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri ...	29·737	29·686	—	SWly	425	94·7	22nd Apl.	79·6	16 & 17 Apl.	88·2	80·2	84·2
		Gopalpore ..	29·727	29·688	—·095	SSW	545	91·2	22nd ,,	75 8	17th ,,	87·6	77 2	82·4
		False Point ..	29·739	29·702	—·084	SW	432	97·0	22nd ,,	78·2	16th ,,	88·9	79·5	84·2
	Cuttack	Cuttack ...	29·662	29·684	—·084	SWly	140	105·1	21st ,,	77·9	17th ,,	101·1	79·0	90·1
	Balasore	Balasore ...	29·663	29·665	—·106	SSW	256	101 5	22nd ,,	74·8	16th ,,	97·5	77 2	87·3
South-West Bengal.	Midnapore	Midnapore ..	29·567	29·662	—·100	S	267	107·4	18 & 22 ,,	75·1	20th ,,	104 4	76 9	90·7
	24-Parganas	Calcutta ..	29·696	29·663	—·109	SSW	105	96 6	19th ,,	76·2	16th ,,	94 1	78·0	86·1
		Saugor Island	29·705	29·674	—·107	Sly	552	89·7	22nd ,,	80·0	16 & 17 ,,	89 1	80 8	85·0
	Howrah													
	Hooghly													
	Nadia	Krishnagar ..	29·649	29·645	—·105	S	225	103 0	21st ,,	76 1	16th ,,	100·7	77·4	89·1
	Khulna													
	Jessore	Jessore ..	29·679	29 659	—·124	SWly	113	101·5	19th ,,	75·4	16th ,,	97·6	78·3	88·0
	Burdwan ...	Burdwan ..	29 608	29·633	—·108	Sly	145	105·7	18 h ,,	76·2	16 & 20 ,,	102 7	77·4	90·1
		Raniganj ...	29 337	29·615	—·142	Sly	66	107·0	18 & 20 ,,	75·9	20th ,,	106·4	77 7	92·1
	Bankura	Bankura .	29 377	29·620	—·115	Wly	119	108·1	20th ,,	76 6	17 & 20 ,,	106·2	78 2	92·2
	Birbhum													
	Murshidabad	Berhampore .	29 621	29 636	—·127	SWly	160	104·7	20th ,,	73 3	16th ,,	102·8	76 8	89·8
North Bengal.	Pabna	Sirajganj	29·665	29·661	—·118	SSE	100	100·7	19th ,,	71·6	22nd ,,	97·7	75·7	86·7
	Bogra	Bogra	29 633	29·646	—·104	SEly	127	102·3	20th ,,	70·2	22nd ,,	98·5	74·9	86·7
	Rajshahi	Rampur Boalia.	29·613	29·632	—·122	SWly	198	102·5	21st ,,	72·7	22nd ,,	100·0	75·3	87·7
	Malda	Malda ..	29·578	29·609	—	SE	91	103·7	20th ,,	71 2	19th ,,	100·5	73·9	87·2
	Dinajpur	Dinajpur ..	29·564	29 636	—·156	Variable	164	103·1	20 & 21 ,,	69·2	19th ,,	97 1	73·4	85·3
	Rangpur	Rangpur ..	29·567	29·645	—·131	ENE	139	99·8	21st ,,	67·7	22nd ,,	91 9	71·9	81·9
	Jalpaiguri	Jalpaiguri	29·423	29·663	—·115	Ely	93	91·9	20 & 22 ,,	69·1	20th ,,	86·6	70·5	78·6
	Kuch Bihar													
	Darjeeling	Darjeeling ...	22·878	—	—·085	WSW	332	65·6	20th ,,	45·7	22nd ,,	63 1	51 1	57·1
	Sikkim	Gnatong ...	19·171	—	—	Wly	115	47·0	17th ,,	23·1	22nd ,,	43·5	26·2	35·0
East Bengal.	Chittagong	Chittagong ...	29·712	29·746	—·092	SSE	187	89·7	16th ,,	72·1	17th ,,	88·6	75·0	81·8
	Chittagong Hill Tracts	Demagiri ..						Observations not received.						
	Backergunge	Barisal ..	29·737	29 695	—·093	SSW	198	94·3	16th Apl.	73 9	16 & 17 ,,	91·2	78·0	81 6
	Noakhali	Noakhali* ...	29·734	29·724	—·096	SSW	202	93·3	16th ,,	70·4	22nd ,,	89·3	76 6	83·0
	Faridpur	Faridpur ..	29·689	29·683	—·122	S	222	97·5	19th ,,	66 0	22nd ,,	92 4	75·1	83·8
	Dacca	Dacca ...	29·705	29·675	—·121	Sly	311	94·6	16th ,,	73·7	22nd ,,	[illegible]	77·6	85·7
	Tippera	Comilla ..	29·720	29·703	—·110	SE	217	95·3	16th ,,	72·8	17th ,,	92·2	75 7	84·0
	Mymensingh	Mymensingh	29·672	29·686	—·109	SEly	185	96·1	19th ,,	68·5	22nd ,,	92 5	74·5	83·5
North Bihar.	Purnea	Purnea ..	29·539	29·618	—·142	Variable	104	105·3	20th ,,	71·2	18 & 20 ,,	103·1	73·1	86 6
	Bhagalpur	Bhagalpur ..	29·488	29·600	—·137	Calm	74	106·3	21 & 22 ,,	72·0	17 & 18 ,,	103 0	73·8	88·4
	Darbhanga	Darbhanga ...	29·501	29 619	—·137	ESE & WSW.	175	102·8	21st ,,	71 4	19th ,,	99·9	73·9	86·9
	Muzaffarpur	Muzaffarpur	29·475	29·605	—	Variable	150	103·7	21st ,,	69·2	19th ,,	101·3	71·4	86·4
	Champaran	Motihari ..	29·416	29·596	—·142	WSW	252	104·2	21st ,,	66·8	19 & 22 ,,	101·8	69 2	85·5
	Saran	Chapra ...	29·478	29 611	—·111	WSW	203	105·3	22nd ,,	73·6	16th ,,	104 1	75·4	89·8
South Bihar.	Shahabad	Dehri ...	29·307	29·604	—·126	Wly	82	107·2	16th ,,	74·0	16th ,,	105 2	79 3?	92·3?
		Buxar ..	29·438	29·627	—·110	W	153	105·0	17th ,,	73·3	19th ,,	103·6	75·8	89·8
		Arrah .	29·470	29 609	—·112	Wly	129	106 3	17th ,,	74·0	16th ,,	105·0	75·0	90·0
	Gaya	Gaya ...	29·299	29·623	—·117	S	165	107·4	10th ,,	64·9	22nd ,,	105·0	69 9	87·5
	Patna	Bankipore ..	29·475	29·607	—·135	W	156	105·6	22nd ,,	74 8	16th ,,	104·1	76·4	90·3
	Monghyr													
	Sonthal Parganas ..	Naya Dumka	29·174	29·608	—·125	SSE	28*	106·2	20 & 21 ,,	75·6	16th ,,	105 3	77·6	91·5
Chota Nagpur.	Hazaribagh	Hazaribagh	27·714	29 619	—·098	NWly	236	102·2	16th ,,	70·8	22nd ,,	100·4	75·5	88·0
	Lohardaga	Ranchi ..	27 603	29 626	—·090	SW	206	101 1	17th ,,	73·1	19th ,,	99·8	75·2	87·4
	Palamau													
	Singhbhum	Chaibassa .	28·948	29·645	—·085	SWly	46	106·6	20th ,,	76·2	20th ,,	105·3	77·9	91·6
	Manbhum													

* Mean of 6 days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period
The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01
rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station
district, *i.e.*, from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one of

for the week ending Saturday, the 22nd of April 1893.

					DISTRICT OBSERVATIONS.										
					Of week.				Rainfall.						
									Since 1st of month.			Since 1st April 1893.			
Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.	District.
—	82·4	83	5·4	Nil	Nil	0·18	0·00	0·32	Nil	0·68	—0·68	Nil	0·68	—0·68	Puri.
+1·1	80·8	89	0·3	0·04											
0	84·1	80	6·6	Nil											
—0·1	84·6	70	4·1	0·28		0·40		0·46		0·71			0·71		Cuttack.
+0·4	83·2	78	1·3	Nil		0·45		0·65		1·07			1·07		Balasore.
0	83·5	71	1·0	Nil	Nil	0·47	0·00	0·65	0·40	0·85	—0·45	0·40	0·85	—0·45	Midnapore.
+0·2	82·3	82	3·6	0·01	Nil	0·37	0·00	0·66	0·47	0·84	—0·37	0·47	0·84	—0·37	24-Parganas.
—0·3	83·1	84	8·9	Nil											
					Nil	0·38	0·00	0·59	0·03	0·98	—0·95	0·03	0·98	—0·95	Howrah.
					Nil	0·58	0·00	0·59	0·82	1·03	—0·21	0·82	1·03	—0·21	Hooghly.
+1·3	83·0	78	2·3	Nil	0·07	0·53	0·40	0·74	1·97	1·60	+0·37	1·97	1·60	+0·37	Nadia.
					Nil	0·86	0·00	1·05	1·49	1·72	—0·23	1·49	1·72	—0·23	Khulna.
+1·5	83·4	83	6·9	Nil	Nil	0·62	0·00	1·06	1·86	1·72	+0·14	1·86	1·72	+0·14	Jessore.
+1·9	82·0	77	2·9	0·01	0·01	0·35	0·00	0·56	0·36	1·04	—0·68	0·36	1·04	—0·68	Burdwan.
+2·0	85·0	58	0	Nil											
+2·1	86·7	57	1·7	Nil	Nil	0·26	0·00	0·43	0·04	0·62	—0·58	0·04	0·62	—0·58	Bankura.
					Nil	0·20	0·00	0·33	0·17	0·67	—0·50	0·17	0·67	—0·50	Birbhum.
+2·0	80·7	87	2·0	0·11	0·04	0·23	0·33	0·38	0·65	0·81	—0·16	0·65	0·81	—0·16	Murshidabad.
+1·5	80·1	85	6·0	0·01	Nil	0·59	0·00	1·15	1·08	1·55	—0·47	1·08	1·55	—0·47	Pabna.
—0·4	81·2	83	2·0	Nil	Nil	0·36	0·00	0·66	1·20	0·78	+0·42	1·20	0·78	+0·42	Bogra.
—1·7	82·3	81	2·6	Nil	0·09	0·19	0·33	0·40	0·65	0·60	+0·05	0·65	0·60	+0·05	Rajshahi.
—	83·6	77	0·6	Nil	Nil	0·15	0·00	0·23	0·30	0·62	—0·32	0·30	0·62	—0·32	Malda.
+0·5	78·5	81	5·3	0·08	Nil	0·24	0·00	0·54	0·36	0·42	—0·06	0·36	0·42	—0·06	Dinajpur.
0	76·5	87	1·7	0·35	0·56	0·51	0·75	0·91	3·22	1·38	+1·84	3·22	1·38	+1·84	Rangpur.
—1·5	76·4	83	6·9	0·14	0·15	0·89	1·00	1·16	0·89	2·14	—1·25	0·89	2·14	—1·25	Jalpaiguri.
					0·66	0·84	1·75	1·36	4·01	1·87	+2·14	4·01	1·87	+2·14	Kuch Bihar.
+1·2	57·0	81	4·6	1·67	1·26	0·89	1·50	1·69	5·71	2·44	+3·27	5·71	2·44	+3·27	Darjeeling.
—	33·8	82	2·9	1·60											Sikkim.
+0·7	81·3	81	2·9	0·44	0·28	0·64	0·50	0·84	0·31	1·30	—0·99	0·31	1·30	—0·99	Chittagong.
					Nil	0·50	0·00	0·95	2·90	1·98	+0·92	2·90	1·98	+0·92	Chittagong Hill Tracts.
+1·9	82·8	81	7·0	Nil	Nil	0·83	0·00	1·13	1·03	1·65	—0·62	1·03	1·65	—0·62	Backergunge.
+0·6	83·2	62	5·0	0·45	Nil	0·81	0·00	1·06	0·18	2·44	—2·26	0·18	2·44	—2·26	Noakhali.
—1·5	81·0	86	5·1	3·47	1·89	0·72	1·00	1·31	2·93	1·87	+1·06	2·93	1·87	+1·06	Faridpur.
+2·1	81·7	83	8·3	0·34	0·24	0·94	0·50	1·46	1·06	2·38	—1·32	1·06	2·38	—1·32	Dacca.
+1·5	81·0	81	0·9	0·33		1·27		1·61		3·04			3·04		Tippera.
+0·9	78·6	88	[illegible]	0·63	0·63	1·02	1·20	1·57	2·93	2·03	+0·90	2·93	2·03	+0·90	Mymensingh.
+1·8	78·8	63	0·3	Nil	0·01	0·22	0·00	0·30	0·62	0·64	—0·02	0·62	0·64	—0·02	Purnea.
+2·5	84·8	48	0·7	Nil	Nil	0·11	0·00	0·67	Nil	0·39	—0·39	Nil	0·39	—0·39	Bhagalpur.
+1·8	81·8	56	0·6	0·01	Nil	0·11	0·00	0·29	Nil	0·29	—0·29	Nil	0·29	—0·29	Darbhanga.
—	82·8	50	1·4	Nil	Nil	0·11	0·00	0·16	0·04	0·33	—0·29	0·04	0·33	—0·29	Muzaffarpur.
+1·5	83·2	47	1·7	Nil	Nil	0·07	0·00	0·14	Nil	0·39	—0·39	Nil	0·39	—0·39	Champaran.
+3·3	84·5	54	0·4	0·03	0·01	0·05	0·00	0·09	0·01	0·11	—0·10	0·01	0·11	—0·10	Saran.
+3·8	80·3	29	3·4	Nil											
+1·6	85·9	36	3·6	Nil	Nil	0·02	0·00	0·07	Nil	0·14	—0·14	Nil	0·14	—0·14	Shahabad.
+2·2	86·8	41	0·3	Nil											
—2·0	84·9	50	2·4	0·08	0·11	0·05	0·25	0·12	0·11	0·16	—0·05	0·11	0·16	—0·05	Gaya.
+2·7	87·0	38	1·1	Nil	0·04	0·07	0·00	0·18	0·04	0·16	—0·12	0·04	0·16	—0·12	Patna.
					Nil	0·11	0·00	0·17	Nil	0·24	—0·24	Nil	0·24	—0·24	Monghyr.
+2·5	88·3	40	0·4	0·03	0·02	0·17	0·17	0·30	0·24	0·46	—0·22	0·24	0·46	—0·22	Sonthal Parganas.
+2·4	86·8	24	3·3	0·05	0·01	0·05	0·00	0·09	0·01	0·16	—0·15	0·01	0·16	—0·15	Hazaribagh.
+1·4	85·1	43	1·0	Nil	Nil	0·05	0·00	0·18	Nil	0·33	—0·33	Nil	0·33	—0·33	Lohardaga.
					Nil	0·05	0·00	0·11	Nil	0·28	—0·28	Nil	0·28	—0·28	Palamau.
+0·6	86·4	63	2·1	Nil	Nil	0·22	0·00	0·50	0·35	0·61	—0·26	0·35	0·61	—0·26	Singhbhum.
					Nil	0·17	0·00	0·44	Nil	0·45	—0·45	Nil	0·45	—0·45	Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 22nd of April 1893.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 16th.	Monday, 17th.	Tuesday, 18th.	Wednesday, 19th.	Thursday, 20th.	Friday, 21st.	Saturday, 22nd.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April to date.
Orissa ..	Puri ...	Puri ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·30	Nil	0·30
		Khurda ...	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·36	Nil	0·36
		Banpur ...	...	...	...	...	...	...	...	Nil	Nil	0·14	Nil	0·34	Nil	0·34
		False Point ...	...	...	...	...	...	...	...	Nil	Nil	0·34	Nil	1·72	Nil	1·72
		Gop ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Satpara ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pipli ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Cuttack ...	Jagatsingpore	...	...	...	...	...	...	...	Nil	Nil	0·26	Nil	0·41	Nil	0·41
		Banki ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·20	Nil	0·20
		Cuttack ...	...	...	...	...	...	...	...	Nil	Nil	0·40	Nil	0·77	Nil	0·77
		Kendrapara ...	...	...	...	...	...	...	...	Nil	Nil	0·50	0·02	0·82	0·02	0·82
		Jajpur ...	...	...	...	...	...	...	...	Nil	Nil	0·82	0·02	1·37	0·02	1·37
		Dhrmsala ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Salipore ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pal Lahara ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Balasore ...	*Akhyapada* ...	...	...	...	...	...	...	...	Nil	Nil	?		?		?
		Chandbali ...	...	...	...	...	...	...	...	Nil	Nil	0·27		0·73		0·73
		Bhadrak ...	...	...	...	...	...	...	...	Nil	Nil	0·60	Nil	1·47	Nil	1·47
		Soro ...	...	...	...	...	...	0·30	...	1	0·30	0·52	0·30	1·08	0·30	1·08
		Balasore ..	...	...	...	...	...	...	...	Nil	Nil	0·75	0·27	1·61	0·27	1·61
		Jellasore ...	...	...	...	...	...	...	...	Nil	Nil	0·18	0·50	0·63	0·50	0·63
		Baripodah ..	...	...	...	...	...	...	3·15	1	3·15	0·34	3·15	0·84	3·15	0·84
South-West Bengal.	Midnapore	Contai ...	...	...	...	...	...	...	...	Nil	Nil	0·47	Nil	0·81	Nil	0·81
		Tamluk ..	...	...	...	...	...	...	...	Nil	Nil	0·39	0·02	0·74	0·02	0·74
		Midnapore ...	...	...	...	...	...	...	...	Nil	Nil	0·34	0·27	0·74	0·27	0·74
		Ghatal ...	...	...	...	...	...	...	...	Nil	Nil	0·07	1·32	1·07	1·32	1·07
		Kukrahaty ..	...	...	...	...	...	...	...	Nil	Nil	?	0·17	?	0·17	?
		Garhbeta ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Panskura ...	...	...	...	...	...	...	...	Nil	Nil	?	0·06	?	0·06	?
	24-Parganas ...	Saugor Island	...	...	...	...	...	...	...	Nil	Nil	0·45	0·04	0·66	0·04	0·66
		Diamond Harbour ...	...	...	...	...	...	...	...	Nil	Nil	0·48	Nil	0·97	Nil	0·97
		Canning Town	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Alipore (Observatory.)	...	...	...	...	...	0·01	...	Nil	0·01	0·35	0·03	0·91	0·03	0·91
		Barrackpore...	...	...	...	...	...	...	...	Nil	Nil	0·25	0·58	0·83	0·58	0·83
		Dum-Dum ...	...	...	...	...	...	...	...	Nil	Nil	0·38	0·19	0·98	0·19	0·98
		Barasat ..	...	...	...	...	...	...	...	Nil	Nil	0·34	1·46	0·88	1·46	0·88
		Basirhat ...	...	...	...	...	...	...	...	Nil	Nil	0·36	0·97	0·75	0·97	0·75
	Howrah ...	Howrah ..	...	...	...	...	...	...	...	Nil	Nil	0·44	0·05	1·25	0·05	1·25
		Mohesreka ...	...	...	...	...	...	...	...	Nil	Nil	0·31	Nil	0·69	Nil	0·69
		Ulubaria ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Hooghly ...	Serampore ...	...	...	...	...	...	...	...	Nil	Nil	0·27	0·69	0·99	0·69	0·99
		Hooghly ...	...	...	...	...	...	...	...	Nil	Nil	0·43	0·93	1·06	0·93	1·06
		Jahanabad ..	...	...	...	...	...	...	...	Nil	Nil	0·45	0·02	1·00	0·02	1·00
	Nadia ...	Ranaghat ..	...	...	...	...	...	...	...	Nil	Nil	0·53	0·57	1·70	0·57	1·70
		Krishnagar ...	...	...	...	...	...	...	...	Nil	Nil	0·34	1·17	1·38	1·17	1·38
		Chuadanga ...	...	...	...	...	...	...	...	Nil	Nil	0·67	1·29	1·65	1·29	1·65
		Meherpore ...	...	...	...	...	...	...	0·26	1	0·26	0·57	3·99	1·71	3·99	1·71
		Kushtia .	...	...	...	...	...	...	0·10	1	0·10	0·53	2·87	1·53	2·87	1·53
	Khulna ...	Satkhira .	...	...	...	...	...	...	...	Nil	Nil	0·48	2·75	1·37	2·75	1·37
		Bagerhat ..	...	...	...	...	...	...	...	Nil	Nil	1·05	0·37	2·04	0·37	2·04
		Khulna ...	...	...	...	...	...	...	...	Nil	Nil	1·05	1·35	1·76	1·35	1·76
		Nakipur ...	...	...	...	...	...	...	...	Nil	Nil	?		?		?
		Rampal ...	...	...	...	...	...	...	...	Nil	Nil	?		?		?
	Jessore ...	Narail .	...	...	...	...	...	...	...	Nil	Nil	0·59	1·22	1·53	1·22	1·53
		Jessore ...	...	...	...	...	...	...	...	Nil	Nil	0·59	0·58	1·80	0·58	1·80
		Jhenidah .	...	...	...	...	...	...	0·02	Nil	0·03	0·70	4·39	2·01	4·39	2·01
		Magura .	...	...	...	...	...	...	...	Nil	Nil	0·73	1·90	1·98	1·90	1·98
		Bangaon ...	...	...	...	...	...	...	...	Nil	Nil	0·50	1·22	1·34	1·22	1·34
	Burdwan .	Kalna .	...	...	...	...	...	...	...	Nil	Nil	0·35	0·03	1·08	0·03	1·08
		Burdwan ...	...	...	...	...	...	...	0·01	Nil	0·01	0·43	0·27	1·05	0·27	1·05
		Katwa .	...	...	...	...	...	...	0·04	Nil	0·04	0·28	0·61	1·00	0·61	1·00
		Raniganj ...	...	...	...	...	...	...	...	Nil	Nil	0·29	0·36	0·66	0·36	0·66
		Mankur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Bankura ..	Bankura ...	...	...	...	...	...	...	...	Nil	Nil	0·33	Nil	0·83	Nil	0·83
		Vishnupur ...	...	...	...	...	...	...	...	Nil	Nil	0·51	Nil	0·92	Nil	0·92
		Maliara ..	...	...	...	...	...	...	...	Nil	Nil	0·13	0·17	0·30	0·17	0·30
		Khatra ...	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·43	Nil	0·43
		Indas ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Kotalpur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Onda ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Gangajalghati	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Raipur ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sonamukhi ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Birbhum ...	Suri ..	...	...	...	...	...	...	...	Nil	Nil	0·17	0·38	0·52	0·38	0·52
		Hetampore ...	...	...	...	...	...	...	...	Nil	Nil	0·26	0·04	0·70	0·04	0·70
		Rampur Hat...	...	...	...	...	...	...	...	Nil	Nil	0·07	0·09	0·75	0·09	0·75
		Bolpur ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Murari ...	...	...	...	...	...	...	...	Nil	Nil	?	0·30	?	0·30	?
	Murshidabad	Kandi ...	...	...	...	...	...	...	0·14	1	0·14	0·29	0·51	1·02	0·51	1·02
		Berhampore...	...	...	...	...	...	...	0·11	1	0·11	0·25	0·34	0·93	0·34	0·93
		Lalbagh ...	...	...	...	...	...	...	...	Nil	Nil	0·28	0·75	0·57	0·75	0·57
		Azimganj ...	...	...	...	...	...	...	...	Nil	Nil	0·32	0·58	0·92	0·58	0·92
		Jangipur ..	...	...	...	...	...	...	...	Nil	Nil	0·10	0·72	0·74	0·72	0·74
		Lalgola ...	...	...	...	...	...	...	...	Nil	Nil	0·11	1·00	0·64	1·00	0·64
		Akhriganj ...	...	...	...	...	...	...	...	Nil	Nil	?	1·68	?	1·68	?
		Patkabari ...	...	...	...	...	...	...	0·30	1	0·30	?	2·90	?	2·90	?
North Bengal	Pabna ...	Pabna ...	...	...	...	...	...	...	...	Nil	Nil	0·54	1·77	1·62	1·77	1·62
		Sirajganj ...	...	...	...	...	...	...	0·01	Nil	0·01	0·63	0·40	1·47	0·40	1·47
	Bogra ...	Sherepore ...	...	...	...	...	...	...	...	Nil	Nil	0·42	2·08	0·66	2·08	0·66
		Nowkhilla ...	...	...	...	...	...	...	...	Nil	Nil	0·28	0·97	0·68	0·97	0·68
		Bogra ...	...	...	...	...	...	...	...	Nil	Nil	0·33	1·35	1·16	1·35	1·16
		Panchbibi ...	...	...	...	...	...	...	...	Nil	Nil	0·42	0·40	0·65	0·40	0·65
	Rajshahi ...	Boalia ...	...	...	...	...	...	...	...	Nil	Nil	0·21	0·42	0·74	0·42	0·74
		Nator ...	...	...	...	...	...	...	0·26	1	0·26	0·36	0·61	0·95	0·61	0·95
		Naugaon ...	...	...	...	...	...	...	...	Nil	Nil	0·01	0·90	0·12	0·90	0·12
		Lalpore ...	...	...	...	...	...	0·40	...	1	0·40	?		?		?
		Manda ...	...	...	...	...	...	...	...	Nil	Nil	?		?		?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 22nd of April 1893—contd.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 16th.	Monday, 17th.	Tuesday, 18th.	Wednesday, 19th.	Thursday, 20th.	Friday, 21st.	Saturday, 22nd.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April.
North Bengal—concld.	Malda ...	Malda ...	...	...	...	...	...	...	...	Nil	Nil	0·20	0·43	0·63	0·43	0·63
		Chanchal ..	...	...	...	...	...	...	...	Nil	Nil	0·09	0·15	0·58	0·15	0·58
		Gajol ...	...	...	...	...	...	...	...	Nil	Nil	?	0·99	?	0·99	?
		Sibganj .	...	...	...	...	...	...	...	Nil	Nil	?	0·90	?	0·90	?
	Dinajpur ..	Mohadebpore	...	...	...	...	...	...	...	Nil	Nil	0·44	0·60	0·49	0·60	0·49
		Churaman ...	...	...	...	...	...	...	...	Nil	Nil	0·12	Nil	0·18	Nil	0·18
		Raiganj ..	...	...	...	...	...	...	...	Nil	Nil	0·14	0·16	0·44	0·16	0·44
		Dinajpur ...	...	...	...	...	...	...	0·02	Nil	0·02	0·30	1·05	0·78	1·05	0·78
		Balurghat ...	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·20	Nil	0·20
		Thakurgaon ...	...	...	...	...	...	...		Nil	Nil	?	0·86	?	0·86	?
	Rangpur ...	Bhawanigunge (*Gyabanda*)	...	...	...	...	...	...	0·95	1	0·95	0·44	0·56	1·26	1·56	1·26
		Rangpur ...	...	...	...	...	...	...	0·35	1	0·35	0·40	2·75	1·15	2·75	1·15
		Kurigaon ...	...	...	...	...	...	...	0·95	1	0·95	0·58	7·03	1·93	7·03	1·93
		[illegible]gra (*Nilphamari*)	...	...	...	...	...	...	...	Nil	Nil	0·63	1·52	1·17	1·52	1·17
		Ulipore ...	...	...	...	...	...	...	0·10	1	0·10	?	4·50	?	4·50	?
	Jalpaiguri ...	Jalpaiguri	...	0·15	...	...	...	...	...	1	0·15	0·80	0·89	2·14	0·89	2·14
		Alipore Dooar	...	...	0·22	...	...	...	0·15	2	0·37	?	5·69	?	5·69	?
		Fallacotta ...	0·25	0·25	0·25	...	...	...	...	3	0·75	?	5·46	?	5·46	?
		Debiganj ...	...	...	...	...	...	...	...	Nil	Nil	?	0·88	?	0·88	?
		Bhagatpore (*Nagrakatta*)	0·31	0·05	...	...	...	...	...	1	0·36	?	5·86	?	5·86	?
	Kuch Bihar	Dinhatta ...	0·13	0·73	0·24	...	...	...	0·42	4	1·52	0·70	4·31	1·51	4·31	1·51
		Kuch Bihar ...	...	0·25	0·59	...	...	...	...	2	0·84	0·90	6·14	2·82	6·14	2·82
		Mekliganj ...	...	...	...	...	...	...	...	Nil	Nil	1·04	1·70	1·58	1·70	1·58
		Mathabhanga	...	0·05	0·22	...	...	...	...	1	0·27	0·70	3·89	1·50	3·89	1·50
	Darjeeling ...	Buxa ...	1·34	0·70	0·26	...	...	...	0·53	4	2·83	1·63	11·30	4·70	11·30	4·70
		Siliguri ...	0·05	0·05	...	...	...	...	...	Nil	0·10	0·35	4·07	1·01	4·07	1·01
		Darjeeling ...	0·06	0·01	...	...	...	...	1·60	1	1·67	0·70	4·69	2·60	4·69	2·60
		Kalimpong ...	0·05	...	...	...	...	...	0·39	1	0·44	0·61	2·78	1·45	2·78	1·45
		Kurseong ...	0·18	...	...	...	...	...	0·52	2	0·70	?	4·01	?	4·01	?
East Bengal	Chittagong ..	Cox's Bazar ...	...	...	...	...	...	...	0·02	Nil	0·02	0·48	0·02	1·01	0·02	1·01
		Chittagong ...	...	...	...	...	...	...	0·54	1	0·54	0·80	0·61	1·59	0·61	1·59
		Kutubdia ...										?		?		?
		Satkanya ...										?		?		?
		Kodala ...										?		?		?
		Fenoa ...										?		?		?
		Mirsarai ...	...	...	...	...	...	...	0·12	1	0·12	?	0·90	?	0·90	?
		Chandpur ...										?		?		?
	Chittagong Hill Tracts.	Rangamati ...	...	...	...	...	...	...	...	Nil	Nil	0·59	0·61	1·98	0·61	1·98
		Bundarban ...	...	...	...	...	...	...	...	Nil	Nil	?	0·05	?	0·05	?
	Backergunge	Patuakhali ...	...	...	...	...	...	...	...	Nil	Nil	0·61	1·66	1·10	1·66	1·10
		Pirojpur ...	...	...	...	...	...	...	...	Nil	Nil	0·94	0·84	1·58	0·84	1·58
		Barisal ...	...	...	...	...	...	...	...	Nil	Nil	0·81	1·45	2·14	1·45	2·14
		Gournaddi ...	...	...	...	...	...	...	...	Nil	Nil	?	1·89	?	1·89	?
		Bhola ...	...	...	...	...	...	...	...	Nil	Nil	0·95	0·15	1·81	0·15	1·81
		Daulatkhan ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Bauphal ...	...	...	...	...	...	...	...	Nil	Nil	?	0·16	?	0·16	?
	Noakhali ...	Noakhali ...	...	...	...	...	...	...	0·45	1	0·45	0·65	0·54	2·16	0·54	2·16
		Fenny ...	...	...	...	...	...	...	...	Nil	Nil	0·96	0·26	2·72	0·26	2·72
		Harishpore ...	...	...	...	...	...	...	...	Nil	Nil	?	0·43	?	0·43	?
		Ramganj ...	...	...	...	...	...	...	0·77	1	0·77	?	1·45	?	1·45	?
	Faridpur ...	Madaripur ...	...	...	...	...	...	...	0·25	1	0·25	0·86	1·32	2·02	1·32	2·02
		Faridpur ...	...	...	...	...	...	...	3·47	1	3·47	0·63	4·85	1·89	4·85	1·89
		Goalundo ...	...	...	...	...	...	...	1·65	1	1·65	0·66	2·86	1·70	2·86	1·70
	Dacca ..	Munshiganj ...	...	...	...	...	...	...	0·08	Nil	0·08	1·04	0·97	2·91	0·97	2·91
		Dacca ...	...	...	...	...	...	...	0·32	1	0·32	1·04	1·46	2·70	1·46	2·70
		Narayanganj...	...	...	...	...	...	...	0·08	Nil	0·08	0·98	0·57	2·72	0·57	2·72
		Manikganj ...	...	...	...	...	...	...	0·48	1	0·48	0·69	1·24	1·87	1·24	1·87
		Joydebpore ...	...	...	...	...	...	...	0·15	1	0·15	?	2·83	?	2·83	?
	Hill Tippera	Agartola ...										1·37		3·19		3·19
	Tippera ..	Comilla ...	...	...	...	...	...	...	0·30	1	0·30	1·13	3·89	3·14	0·89	3·14
		Chandpore ...	...	...	...	...	...	...	1·10	1	1·10	1·28	5·52	2·68	3·52	2·68
		Brahmanbaria	...	...	...	...	...	...	...	Nil	Nil	1·30	1·50	3·14	1·50	3·14
		Ramchandrapore	...	...	...	...	...	...	...	Nil	Nil	?	0·80	?	0·80	?
		Nasirnagar ...	...	...	...	...	...	...	0·74	1	0·74	?		?		?
		Daudkandi ...	...	...	...	...	...	...	...	Nil	Nil	?	0·68	?	0·68	?
		Kasba ...	...	...	...	...	...	...	...	Nil	Nil	?	1·30	?	1·30	?
		Laksham ...	...	...	...	...	...	...	...	Nil	Nil	?	0·55	?	0·55	?
	Mymensingh..	Kishorganj ...	...	...	...	...	...	0·03	...	Nil	0·03	0·91	2·11	2·67	2·11	2·67
		Atia (*Tangail*)	...	...	...	...	...	...	0·24	1	0·24	0·52	0·74	1·36	0·74	1·36
		Mymensingh ...	...	0·13	...	...	...	...	0·50	2	0·63	0·80	3·93	2·07	3·93	2·07
		Jamalpur ...	...	...	...	...	...	...	0·24	1	0·24	0·89	2·15	1·69	2·15	1·69
		Netrakona ...	...	0·27	...	...	...	...	...	1	0·27	1·99	5·70	2·33	5·70	2·33
		Subornakhally	...	...	...	...	...	...	1·75	2	2·02	?	0·50	?	0·50	?
		Durgapore ...	...	0·20	0·20	...	...	...	...	2	0·40	?		?		?
		Sherepore Town	...	...	...	...	...	...	0·83	1	0·83	?	3·95	?	3·95	?
		Dewanganj ...	...	...	...	...	...	...	0·55	1	0·55	?	1·48	?	1·48	?
North Bihar	Purnea ...	Kishanganj ...	...	...	...	...	...	...	0·03	Nil	0·03	0·23	0·52	0·54	0·52	0·54
		Araria ...	...	...	...	...	...	...	...	Nil	Nil	0·21	0·63	0·72	0·63	0·72
		Purnea ...	...	...	...	...	...	...	...	Nil	Nil	0·22	0·67	0·65	0·67	0·65
		Gondwara (*Korah*) ..	...	...	...	...	...	...	...	Nil	Nil	?	0·25	?	0·25	?
		Barsoe ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Forbesganj ..	...	...	...	...	...	...	...	Nil	Nil	?	0·53	?	0·53	?
		Kaliaganj ...	...	...	...	...	...	...	...	Nil	Nil	?	0·51	?	0·51	?
	Bhagalpur ...	Madhipura ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·33	Nil	0·33
		Bongaon (*Syfabad*)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Supaul ...	...	...	...	...	...	...	...	Nil	Nil	0·05	Nil	0·39	Nil	0·39
		Protabganj ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Bhagalpur ..	...	...	...	...	...	...	...	Nil	Nil	0·14	0·18	0·49	0·18	0·49
		Banka ...	...	...	...	...	...	...	...	Nil	Nil	0·15	Nil	0·35	Nil	0·35
		Colgong ...	...	...	...	...	...	...	0·01	Nil	0·01	?	0·01	?	0·01	?
	Darbhanga ...	Tajpur ..	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·17	Nil	0·17
		Darbhanga ...	...	...	...	...	...	...	0·01	Nil	0·01	0·09	0·01	0·31	0·01	0·31
		Madhubani ...	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·42	Nil	0·42
		Bahera ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Roshera ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 22nd of April 1893—concld.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 16th.	Monday, 17th.	Tuesday, 18th.	Wednesday, 19th.	Thursday, 20th.	Friday, 21st.	Saturday, 22nd.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April.
NORTH BIHAR—concluded.	Muzaffarpur...	Sitamarhi ...	...	...	..	...	...	...	...	Nil	Nil	0·25	0·12	0·58	0·12	0·58
		Muzaffarpur	...	...	...	...	..	...	...	Nil	Nil	0·06	Nil	0·24	Nil	0·24
		Hajipur ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·11	Nil	0·11
		Paru	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Mahwa (Chitwarra.)	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sirahar ...	...	...	...	...	...	...	...	Nil	Nil	?	0·15	?	0·15	?
		Pupri .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Champaran	Motihari ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·38	Nil	0·38
		Bettiah ..	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·30	Nil	0·30
		Bagaha ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Burhurwa	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Saran ..	Gopalganj ...	...	...	...	...	...	...	...	Nil	Nil	0·01	Nil	0·05	Nil	0·05
		Siwan ...	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·10	Nil	0·10
		Chapra ...	...	...	...	...	...		0·03	Nil	0·03	0·07	Nil	0·18	Nil	0·18
SOUTH BIHAR	Shahabad ...	Buxar ...	...	...	...	...	...	...	...	Nil	Nil	0·03	Nil	0·18	Nil	0·18
		Dehri ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·11	Nil	0·11
		Bhabhua ...	...	...	...	...	...	...	0·02	Nil	0·02	0·02	Nil	0·09	Nil	0·09
		Sasaram ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·16	Nil	0·16
		Arrah ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·18	Nil	0·18
		Mohanea .	...	...	...	...	.	...	...	Nil	Nil	?	Nil	?	Nil	?
		Khiri ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Ageaon ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Ramgar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Koath ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sikroul ...	...	...	...	...	...	...	..	Nil	Nil	?	Nil	?	Nil	?
		Bassowan ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Monaharpyr	...	...	...	...	. .	...	...	Nil	Nil	?	Nil	?	Nil	?
	Gaya ...	Aurangabad ...	...	...	...	...	...	...	0·07	Nil	0·07	0·03	0·07	0·14	0·07	0·14
		Gaya ...	...	...	...	...	...	...	0·08	...	0·08	0·12	0·08	0·20	0·08	0·20
		Nawadah ...	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·16	Nil	0·16
		Jahanabad ...	...	...	...	...	...	...	0·30	1	0·30	0·02	0·30	0·16	0·30	0·16
		Arwal	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Daudnagar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sherghati .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Rajauli ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Pakri Barawan	...	. .	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Patna ...	Patna .	...	. .	...	...	...	...	...	Nil	Nil	0·07	Nil	0·16	Nil	0·16
		Dinapore ...	...	...	...	...	...	0·03	...	Nil	0·03	0·10	0·03	0·20	0·03	0·20
		Bihar ...	...	...	...	...	...	...	0·07	Nil	0·07	0·06	0·07	0·10	0·07	0·16
		Barh ...	...	...	...	...	...	...	0·04	Nil	0·04	0·04	0·04	0·08	0·04	0·08
		Bikram ...	...	...	...	...	...	..	...	Nil	Nil	?	Nil	?	Nil	?
		Hilsa	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Monghyr ..	Begusarai ...	...	...	...	...	...	...	...	Nil	Nil	0·07	Nil	0·18	Nil	0·18
		Monghyr ...	...	...	...	...	...	...	...	Nil	Nil	0·09	Nil	0·27	Nil	0·27
		Jamui ..	...	...	...	...	...	...	...	Nil	Nil	0·18	Nil	0·31	Nil	0·31
		Gogri ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Shaikpura ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Chahai Bamda	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Sonthal Parganas.	Rajmahal ...	...	...	...	...	...	...	...	Nil	Nil	0·31	0·23	0·69	0·23	0·69
		Godda .	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·39	Nil	0·39
		Pakour ...	...	...	...	..	...	...	0·11	1	0·11	0·08	1·13	0·27	1·13	0·27
		Naya Dumka	...	...	...	..	...	...	0·03	Nil	0·03	0·18	0·06	0·63	0·06	0·63
		Deoghur	...	...	...	. .	...	...	...	Nil	Nil	0·21	Nil	0·51	Nil	0·51
		Jamtara ...	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·25	Nil	0·25
		[illegible]odda ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Nanihat ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
CHOTA NAGPUR.	Hazaribagh ...	Pachamba (Giridih). ...	...	...	...		...	...	...	Nil	Nil	0·22	Nil	0·36	Nil	0·36
		Hazaribagh	...	...	...	...	...	...	0·05	...	0·05	0·05	0·05	0·25	0·05	0·25
		Semutaguran	...	...	..	...	...	...	...	Nil	Nil	Nil	Nil	0·13	Nil	0·13
		Mahudi Hills	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·09	Nil	0·09
		Jhumra Hill	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	Nil	Nil	Nil
		Barhi ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Chatra ...	...	...	...	...	...	...	0·02	Nil	0·02	?	0·02	?	0·02	?
		Kurag-cha	...	...	...	...	...	...	...	Nil	Nil	?	0·02	?	0·02	?
		Ramgar ...	...	...	...	...	...	...	...	Nil	Nil	?	0·15	?	0·15	?
	Lohardaga	Lohardaga ...	...	...	...	...	.	...	...	Nil	Nil	Nil	Nil	0·20	Nil	0·20
		Ranchi ...	...	...	...	...	...	...	...	Nil	Nil	0·10	Nil	0·42	Nil	0·42
		Suli ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Palamau ..	Palamau ...	...	..	...	...	...	...	...	Nil	Nil	0·05	Nil	0·28	Nil	0·28
		Palumath ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Husainabad	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Garhwa .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Singhbhum ..	Chaibassa ..	...	...	...	...	...	...	...	Nil	Nil	0·22	0·35	0·61	0·35	0·61
		Chakardharpur.	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Ghatsila .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Baharagora	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Gaikeira ...	...	...	...	...	...	...	0·02	Nil	0·02	?	0·02	?	0·02	?
	Manbhum ...	Purulia ...	...	...	...	...	...	...	...	Nil	Nil	0·19	Nil	0·54	Nil	0·54
		Gobindpur .	...	...	...	...	...	...	...	Nil	Nil	0·16	Nil	0·45	Nil	0·45
		Raghunathpore	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	
		Barahabhum	...	...	...	...	...	...	...	Nil	Nil	?	0·25	?	0·25	
		Jhalda ..	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	
		Chas .	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	
		Pandra ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the 25th April* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 22ND OF APRIL 1893.

DURING the latter half of the previous week ordinary hot weather conditions seemed to be established over the greater part of the province, the exceptional cases occurring at the extreme northern stations where showers were falling. These showers were probably due to the approach of a low pressure area, which first began to affect the distribution in Bengal on the first day of the present week, and which passed slowly across the province, causing in some parts a defect of about 0·2 inch.

The effect of the depression was not so decided as is usual in such cases, as the rainfall was confined almost entirely to the more northern districts in North Bengal, but its influence on the wind circulation was easily traced, in the direction changing from east to west in Bihar and later in North Bengal, while the steeper gradients caused stronger southerly winds in the southern districts. Pressure was falling slowly on the first day of the week, and the fall continued more rapidly on the second day when the centre of the depression was over the Sonthal Parganas. Easterly winds were still general in Bihar on the latter day, but on the 18th they had changed to west at all the western stations, the depression having moved eastward. After the 18th pressure began to recover, but changes were nowhere large, and never were so till the end of the week. As westerly winds advanced, cloudless weather with rising temperature became general in all districts till the last day of the week, the 22nd, when showers, usually very light, fell at most of the stations in East and North Bengal.

Pressure—Has been below the normal throughout the week. A steady fall continued during the first three days and then a tendency to rise prevailed, but the changes were so small that the readings never recovered their normal values within a tenth of an inch. The means for the week are below the normal by amounts varying between 0·1 inch and 0·15 inch in all districts except Chota Nagpur and Orissa, where the mean defect is about 0·08 inch.

Temperature.—While showers were falling in East and North Bengal during the first three days of the week, temperature was below the normal in these districts by one or two degrees. In the western half of the province, however, there was excess of about the same amount. After the depression passed eastward, the westerly winds caused a rise of temperature in all districts, and readings were everywhere above the normal by between two and three degrees till the 22nd, when showers again began to fall in North and East Bengal accompanied by a lowering of the temperature. The means for the week are slightly below the normal in Orissa and North Bengal, and above in the other districts by amounts varying from 1°·2 in South-West Bengal to 2°·2 in North Bihar.

Table showing the excess or defect of the actual mean temperature from the normal for the week ending 22nd April 1893.

	Normal mean maximum temperature for the week ending 22nd April.	Actual mean maximum temperature for the week ending 22nd April 1893.	Variation of actual mean from the normal.	Normal mean minimum temperature for the week ending 22nd April.	Actual mean minimum temperature for the week ending 22nd April 1893.	Variation of actual mean from the normal.	Normal mean daily temperature for the week ending 22nd April.	Actual mean daily temperature for the week ending 22nd April 1893.	Variation of actual mean from the normal.
Cuttack	102·3	101·1	−1·2	78·0	79·0	+1·0	90·2	90·1	−0·1
Calcutta	96·0	94·1	−1·9	75·7	78·0	+2·3	85·9	86·1	+0·2
Dacca	93·1	93·7	+0·6	74·0	77·6	+3·6	83·6	85·7	+2·1
Burdwan	100·6	102·7	+2·1	75·9	77·4	+1·5	88·2	90·1	+1·9
Patna	101·3	104·1	+2·8	73·9	76·4	+2·5	87·6	90·3	+2·7
Gaya	104·0	105·0	+1·0	74·9	69·9?	−5·0?	89·5	87·5?	−2·0?
Purnea	99·1	100·1	+1·0	70·2	73·4	+3·2	84·7	86·8	+2·1
Hazaribagh	98·3	100·4	+2·1	72·7	75·5	+2·8	85·5	88·0	+2·5
Darjeeling	63·2	63·1	−0·1	48·6	51·1	+2·5	55·9	57·1	+1·2

Rainfall—Has been very light in North and East Bengal and practically absent in other parts. In the north and east, as stated above, light showers fell in the early part of the week and again on the last day, but the average for North Bengal and for East Bengal only averages about 50 per cent. of the normal falls. In North Bihar and Chota Nagpur no falls were reported, while in Orissa, South-West Bengal and South Bihar the average falls were between ·01 and ·03 inch.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 22nd of April 1893 :—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 1st April 1893.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	105·1	74·8	92·7	78·6	85·6	—0·4	0·23	0·36	—0·13	0·13	0·50	—0·37	0·25	0·83	0·25	0·83
South-West Bengal ...	107·9	73·3	100·4	77·9	89·2	+1·2	0·01	0·41	—0·40	0·09	0·64	—0 55	0·77	1 07	0·77	1·07
North Bengal	103·7	67·7	96·0	73·7	84·9	—0·2	0·21	0·44	—0·23	0·48	0·78	—0·30	1·64	1·07	1·64	1·07
East Bengal	97·5	66·0	91·4	76·1	83·8	+0 9	0·48	0·92	—0·44	0·60	1·33	—0·73	1·71	2·14	1·71	2·14
North Bihar	106·3	71·2	101·7	72·8	87·3	+2·2	Nil	0·11	—0·11	0·00	0·18	—0·18	0·11	0·36	0·11	0·36
South Bihar	107·4	73·3	104·7	75·7	90·2	+1·8	0·03	0·09	—0·06	0·09	0·17	—0·08	0·09	0·25	0·09	0·25
Chota Nagpur	106·6	70·8	101·7	76·3	89·0	+1·5	Nil	0·10	—0·10	0·00	0·21	—0·21	0·03	0·32	0·03	0·32

METEOROLOGICAL OFFICE, BENGAL,
The 25th April 1893.

C. LITTLE,
for Meteorological Reporter to the Govt. of Bengal.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 16th to 22nd April 1893.

Month.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature.				Hygrometry.						Rainfall at 10 A.M. for past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.		
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%		Inches.
April ...	16th ...	29·785	85·1	94·0	17·9	76·1	88·4	79·5	·887	75·6	66		Nil
" ...	17th ...	·699	85·9	95·0	18·2	76·8	89·0	81·0	·951	77·7	69		"
" ...	18th ...	·680	87·6	98·2	21·2	77·0	90·6	81·5	·954	77·8	67		"
" ...	19th ...	·728	87·4	96·0	17·2	78·8	89·6	82·3	1·006	79·4	72		"
" ...	20th ...	·716	88·0	98·0	20·0	78·0	91·4	82·0	·966	78·2	66		"
" ...	21st ...	·682	87·4	96·0	17·2	78·8	90·1	82·5	1·010	79·5	72		"
" ...	22nd ...	·708	87·8	96·2	16·9	79·3	85·6	80·3	·964	78·1	78		"

	Inches.
The mean 10 A.M. pressure of the seven days	29·714
	°
The mean temperature of the seven days	87·1
The extreme variation of temperature	23·1
The maximum temperature	98·2
	%
The mean 10 A.M. relative humidity of the seven days	70
The total fall of rain from 16th to 22nd April 1893	Nil

The daily mean temperatures are the crude means of maximum and minimum temperatures.

C. LITTLE,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 24th April 1893.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 22nd April 1893, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 22nd April 1893.			Week ending Saturday, the 23rd April 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	309	57,920	954	92	19,815	282
Jute	9	4,900	74	1	200	4
Firewood	69	35,675	522	53	28,625	428
Other articles	583	1,24,485	1,828	427	1,06,649	1,426
Total ...	970	2,22,980	3,378	573	1,55,289	2,140

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 15th April 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	272,248	2,74,566 0 0	30,25,169 30	6,97,125 1 0	17,769 8 0	9,89,460 9 0	79,188½	124,029¾	203,218½
Or per mile of railway	......	170 7 9	......	432 13 10	11 0 6	614 6 1	......	......	......
For previous 14 weeks of half-year	4,208,866	47,53,829 12 0	4,13,63,201 0	93,44,942 10 0	2,58,599 9 0	1,43,57,371 15 0	1,107,897½	1,558,596	2,666,493½
Total for 15 weeks ...	4,481,114	50,28,395 12 0	4,43,88,370 30	1,00,42,067 11 0	2,76,369 1 0	1,53,46,832 8 0	1,187,086	1,682,625¾	2,869,711¾
Comparison.									
Total for corresponding week of previous year	263,629½	2,83,922 14 11	31,50,322 10	7,93,929 10 4	20,502 3 6	10,98,354 12 9	78,207	126,134	204,341
Per mile of railway corresponding week of previous year ...	......	176 4 9	......	492 15 6	12 11 8	681 15 11	......	......	......
Total for corresponding 15¾ weeks of previous year	4,484,953½	50,03,437 4 11	4,29,91,488 20	1,01,13,859 9 3	2,86,540 11 9	1,54,03,837 9 11	1,207,690	1,637,270	2,844,960

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 15th April 1893, on 22½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	36,800	10,576 11 0	7,945 0	341 13 0	9 0 0	10,927 8 0	1,280*	84	1,364
Or per mile of railway	......	475 5 8	......	15 5 10	0 6 6	491 2 0	......	......	......
For previous 14 weeks of half-year	*314,422	*81,907 4 6	†1,78,923 0	†5,653 6 0	‡145 0 0	87,705 10 0	12,301	1,409	13,800
Total for 15 weeks* ...	351,222	92,483 15 0	1,86,868 0	5,995 3 0	154 0 0	98,633 2 0	13,581	1,583	15,164
Comparison.									
Total for corresponding week of previous year	36,075	10,492 10 4	10,501 10	401 15 0	22 4 6	10,976 13 10	1,163	69	1,232
Per mile of railway corresponding week of previous year ..	......	471 9 4	......	20 12 2	1 0 0	493 5 6	......	......	......
Total for corresponding 15¾ weeks of previous year ...	363,771	94,680 3 6	3,00,020 20	10,245 12 9	176 9 3	1,05,102 9 6	13,660	1,747	15,407

* Added number of passengers 1,821 and Rs. 41 }
† Ditto Mds. 374 and " 5 } on account of difference between the approximate and audited figures for the week ended 11th March 1893.
‡ Ditto " 5 }

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 15th April 1893, on 161⅜ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs A. P.			
Total traffic for the week ...	*18,810	*18,273 10 0	56,132 30	10,100 0 0	49 0 0	28,482 10 0	6,655½	4,127¾	10,783¼
Or per mile of railway	......	113 3 6	......	62 15 2	0 4 11	176 7 7	... ..	......	......
For previous 14 weeks of half-year	†266,450	*1,84,568 4 0	†8,38,287 20	†1,20,274 2 0	‡604 0 0	3,05,446 6 0	73,926	47,145¾	121,071¾
Total for 15 weeks ...	285,269	2,02,841 14 0	8,94,420 10	1,30,434 2 0	653 0 0	3,33,929 0 0	80,581½	51,273½	131,855
Comparison.									
Total for corresponding week of previous year	16,411	16,235 4 2	37,075 10	6,960 2 0	96 0 3	23,291 6 5	7,052	2,512	9,564
Per mile of railway corresponding week of previous year .	......	100 9 5	......	43 2 0	0 9 6	144 4 11	......	......	......
Total for corresponding 15¾ weeks of previous year	259,099½	2,06,804 4 6	6,82,417 10	1,29,167 9 0	1,126 12 6	3,37,098 10 0	93,872	34,355	128,227

* The increase occurred at Delhi and Umballa Cantonment.
\+ Added number of passengers 1,352 and Rs. 812 }
‡ Ditto Mds. 78,698 and „ 2,067 } on account of difference between the approximate and audited figures for the week ended 11th March 1893.
§ Ditto „ 3 }

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for the week ended 15th April 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	149,148	73,490 0 0	6,87,311 0	88,540 0 0	10,180 0 0	1,72,210 0 0	27,800	31,169	58,969
Or per mile of railway	192	95 0 0	885 0	114 0 0	†1 0 0	210 0 0	......	......	.....
For previous 14 weeks of half-year*	2,607,865	12,54,522 0 0	1,04,02,568 0	13,58,360 0 0	2,22,540 0 0	28,35,422 0 0	397,483	396,054	793,537
Total for 15 weeks ...	2,757,013	13,28,012 0 0	1,10,89,879 0	14,46,900 0 0	2,32,720 0 0	30,07,632 0 0	425,283	427,223	852,506
Comparison.									
Total for corresponding week of previous year	135,322	66,222 0 0	6,71,975 0	75,240 0 0	4,170 0 0	1,45,632 0 0	26,622	28,438	55,060
Per mile of railway corresponding period of previous year ...	174	85 0 0	736 0	97 0 0	†1 0 0	183 0 0	......	......	......
Total to corresponding date of previous year	2,573,898	12,75,671 0 0	91,93,233 0	12,12,581 0 0	2,18,319 0 0	27,06,601 0 0	416,052	444,446	860,498

* Audited up to week ending 25th February 1893.
† Excluding steamer earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 15th April 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic		Other earnings.	Total earnings.	Traffic Train-miles run		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	27,779	9,260 0 0	59,754 0	4,430 0 0	70 0 0	13,760 0 0	3,675	2,015	5,690
Or per mile of railway	222	74 0 0	478 0	35 0 0	1 0 0	110 0 0	.....	......	......
For previous 14 weeks of half-year*	442,291	1,59,999 0 0	9,61,060 0	59,074 0 0	1,982 0 0	2,21,055 0 0	52,550	26,992	79,542
Total for 15 weeks ...	470,070	1,69,259 0 0	10,20,814 0	63,504 0 0	2,052 0 0	2,34,815 0 0	56,225	29,007	85,232
Comparison.									
Total for corresponding week of previous year	24,224	8,349 0 0	61,037 0	3,354 0 0	156 0 0	11,958 0 0	3,638	2,014	5,652
Per mile of railway corresponding week of previous year ...	194	67 0 0	438 0	28 0 0	1 0 0	96 0 0	......	......	......
Total to corresponding date of previous year	454,100	1,63,607 0 0	9,31,716 0	56,814 0 0	1,385 0 0	2,21,806 0 0	56,140	30,575	86,715

* Audited up to week ending 25th February 1893.

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 15th April 1893, on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	13,748	4,350 0 0	12,454 0	1,140 0 0	50 0 0	5,540 0 0	2,487	737	3,224
Or per mile of railway	160	51 0 0	145 0	13 0 0	......	64 0 0	......	......	......
For previous 14 weeks of half-year*	276,204	84,193 0 0	2,27,794 0	23,501 0 0	2,530 0 0	1,10,224 0 0	35,029	10,550	45,579
Total for 15 weeks ...	289,952	88,543 0 0	2,40,248 0	24,641 0 0	2,580 0 0	1,15,764 0 0	37,516	11,287	48,803
Comparison.									
Total for corresponding week of previous year	12,690	4,075 0 0	30,990 0	890 0 0	64 0 0	5,029 0 0	2,395	737	3,132
Per mile of railway corresponding week of previous year ...	148	47 0 0	360 0	10 0 0	1 0 0	58 0 0	......	......	......
Total to corresponding date of previous year	264,435	86,159 0 0	2,41,181 0	16,361 0 0	2,324 0 0	1,04,844 0 0	38,159	11,061	40,220

* Audited up to week ending 25th February 1893.

BENGAL AND NORTH-WESTERN RAILWAY.

(Includes the Tirhut State Railway.)

Approximate return of traffic for the week ending 15th April 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	89,590	34,500	6,07,800	79,700	11,350	1,25,550	16,239	24,830	41,069
Or per mile of railway	118·51	45·64	803·97	105·42	15·01	166·07	......	......	......
For previous 14 weeks of half-year*	1,397,679	6,02,089	62,05,521	9,13,938	1,64,780	16,80,807	197,267	258,369	455,636
Total for 15 weeks ...	1,487,269	6,36,589	68,13,321	9,93,638	1,76,130	18,06,357	213,506	283,199	496,705
Comparison.									
Total for corresponding period of previous year on 755 miles open	86,044	35,593	4,64,815	81,460	12,130	1,29,183	11,667	26,463	38,130
Per mile of corresponding week of previous year	113·97	47·14	615·65	107·89	16·07	171·10	......	......	......
Total to corresponding date of previous year	1,426,039	6,13,692	52,47,659	7,85,086	1,66,222	15,93,000	184,729	292,458	467,187

* Includes audited figures up to 25th February 1893.

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 8th April 1893	11,951	0	0
Corresponding period of 1892	11,913	0	0
Increase	38	0	0
Receipts per mile for the week ending 8th April 1893	234	5	4
Corresponding period of 1892	233	9	7
Increase	0	11	9
Receipts from 1st January to 8th April 1893	1,46,935	0	0
Corresponding period of 1892	1,41,331	0	0
Increase	5,604	0	0

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No. 18 of 1893.



SUPPLEMENT TO The Calcutta Gazette.

WEDNESDAY, MAY 3, 1893.

OFFICIAL PAPERS.

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CONTENTS.

RESOLUTION ON THE ANNUAL REPORT OF THE HEALTH OFFICER OF THE PORT OF CALCUTTA FOR THE YEAR 1892.

No. 1119Marine.

GOVERNMENT OF BENGAL, MARINE DEPARTMENT.

Dated Calcutta, the 1st May 1893.

RESOLUTION.

READ—

A letter, No. 2586, dated 28th March 1893, from the Sanitary Commissioner for Bengal, submitting the report of the Health Officer of the Port of Calcutta for the year 1892.

Establishment.—Dr. Forsyth was the Health Officer of the Port of Calcutta throughout the year, except from the 3rd September to 28th October, when Surgeon Captain Green officiated for him. The work was carried out in the steam launch *Relief*, and in a steam cutter.

2. *Inspections.*—The total number of vessels inspected by the Health Officer of the Port during the year was 1,497 against 1,501, 1,394, and 1,443 in the three preceding years. Sir Charles Elliott desires that in future reports the number of vessels that entered the Port in the year should be given with the number of vessels uninspected, and the reasons for such non-inspection.

3. *Ventilation of crew spaces.*—The ventilation of the forecastle of iron built cargo steamers has, in a few cases, been improved, but in no instance has a wooden sheathing been laid over the iron roof.

The Health Officer writes:—"In the case of the Greenock Shipping Company, I hope that their vessels will be improved, as the Secretary was in port in April and May, and he admitted that the Managers had not the faintest idea of what life in the forecastle was in the Indian hot season; that he would on his return place my suggestions before the Manager for immediate compliance; and that, in case of additions to their fleet, he would suggest that all quarters should be built on deck. In the latest additions to the City Line of steamers, quarters for the crew are built on the upper deck. The contrast between these and the quarters on the main deck is great, and no line visiting this port give their crews such well lighted and ventilated quarters."

The question of improving the accommodation for the crew of such steamers has been referred to the Government of India, in the Finance and Commerce Department, with the suggestion that the Board of Trade should be moved to endeavour to give effect to Dr. Forsyth's suggestions for sheathing the forecastle deck, and for improving the ventilation of, and providing a double awning with side curtains for, the forecastle. If the Board of Trade refuse to insist on these alterations being made, the Lieutenant-Governor is of opinion that it will be necessary to amend the Indian Ports Act of 1889 so far as to enable the Local Government to insist on such temporary alterations being made, while the vessel is in port, as will meet the requirements of the case.

4. *Bathing accommodation for native crews.*—The provision of a protected bathing place is being carried out on nearly all vessels coming to the port.

5. *Sickness and mortality among European seamen.*—The number of European seamen who arrived in the Port during the year was 21,635, against 21,505 and 19,496 in the two preceding years, and the daily average number in Port was 2,133 against 1,420 and 1,679. Including deaths out of hospital, the death rate per mille during the year was 11·72. Of this 3·28 was from cholera and 8·44 from other causes. The Lieutenant-Governor views with great satisfaction this low death-rate, which is the lowest on record.

The total number of natural deaths was 25, against 42 and 40 in the two preceding years. Of these 25 deaths, 22 occurred in hospital and 3 outside.

The total number of admissions into hospital was 2,204, against 1,284 and 1,419 in the two previous years. No reason is given for the large increase in the number of admissions into hospital.

The admissions from cholera numbered 12, with 7 deaths; from sunstroke 7, with 3 deaths; and from small-pox and scurvy 2 and 8 respectively, with no deaths. The number of cases of drowning was 8 against 9 and 14 in the two preceding years.

The Coroner of Calcutta having reported in the case of one of the deaths by drowning that there was unnecessary exposure to the sun, copies of Marine Notification No. 104 of the 14th April 1891, prohibiting work involving direct exposure to the sun between 9 A.M. and 4 P.M., were circulated to the Masters of Ships in the port, and the Commissioner of Police directed to prosecute under section 54 of the Indian Ports Act any breaches of the rule observed.

6. The following table gives the admissions into hospital of European seamen suffering from venereal diseases:—

Year.	Total admissions.	Rate per mille.
1883	237	127·4
1884	184	109·2
1885	170	100·4
1886	417	179·2
1887	228	120·4
1888	183	121·1
1889	186	114·3
1890	248	147·7
1891	185	129·7
1892	479	224·5

The number of admissions during the year is the highest on record, and the Health Officer reports that the masters of vessels complain of numbers of their crew being rendered unfit for work soon after leaving port from venereal affections.

7. There were 43 deaths at sea during the year on vessels entering the port, against 28 and 32 in the two preceding years.

8. *Sickness and mortality among the native floating population.*—The following figures give the mortality from all causes among the native floating population, the averages being calculated on a population of 25,000:—

		Total deaths.		Ratio per mille.	
		1892.	1891.	1892.	1891.
Cholera ...	...	73	97	2·92	3 88
Bowel complaints ...	...	3	7	0·12	0·28
Fever, malarious ...	...	11	11	0·44	0·44
Do., simple ...	...	13	22	0·52	0 88
Other causes ...	..	32	33	1·28	1·32
Total	...	132	170	5·28	6·80

Of the 132 deaths, 35 occurred in hospital, of which 21 were from cholera.

9. *Food.*—The complaints as to the quality of food on board vessels coming to the Port were few, and of these only a few were justified. The Health Officer mentions that the sailors after being a long time in port are very desirous of occasionally being given salt meat as a change.

10. *Conservancy.*—The drain and latrine in Messrs. Ahmuty and Company's compound, noticed in the Resolution on the Annual Report of the Health Officer for 1891, has been altered to meet requirements, but the Health Officer reports that the brickfield foreshore at Ghoosery, and the Mateabroog foreshore of Babu Doorga Prosonno Ghose's property, are still used as latrines by the public. The attention of the District Magistrates will be drawn to this.

11. *Corpses and carcasses.*—The Lieutenant-Governor is pleased to find from the Health Officer's report that there has been some decrease in the number of corpses and carcasses found floating in the river.

12. *Water supply.*—The supply of Municipal filtered water to the vessels in the port was satisfactory in every respect.

13. The Health Officer has, in the course of his report, made several suggestions and proposals which require much consultation and consideration from legal and other aspects. It should be remembered that the annual report is a record of the events of the year, and questions on which orders are required should be separately submitted.

The information given in the report regarding the accommodation of European seamen, the crowding of the quarters of native crews, the sea-diet scale of sailing vessels, and the facilities existing for the communication of reasonable grievances of sailors as regards the quality of their food, and the seaworthiness of the ship, is important as bearing on the welfare of seamen, and it is therefore well that the public should know that the alleged defects are under consideration, and that the question whether the Government can lawfully interfere in any of these matters, or would be well advised to do so, will be separately considered.

By order of the Lieutenant-Governor of Bengal,

C. W. ODLING,

Secretary to the Govt. of Bengal.

ANNUAL REPORT ON THE WORKING OF THE CHEMICAL EXAMINER'S DEPARTMENT FOR 1892.

RESOLUTION.

MEDICAL.

No. 1607Med.

Dated Calcutta, the 26th April 1893.

READ—

A letter from the Inspector-General of Civil Hospitals, No. 2603, dated 11th March 1893, forwarding the Report of the Chemical Examiner for the year 1892.

Read also—

The Report for 1891 and the Resolution recorded on it.

The following table shows the general nature of the work done during the year compared with that of the previous year:—

	1891.	1892.
Medico-legal.		
Human viscera tested for poison ...	228	276
Animal ditto ditto ...	118	147
Fowls' ditto ditto ...	...	2
Dogs' ditto ditto ...	3	1
Pigeons' ditto ditto ...	5	...
Cats' ditto ditto ...	1	...
Mules' ditto ditto ...	1	...
Other substances suspected to be or to contain poison, including cattle-poison ...	745	1,000
Articles examined in connection with a case of forged notes	...	16
Articles tested for blood stains	235	234
Ditto for seminal stains ...	21	18
Ditto for both blood and seminal stains	49	46
Human hair	7	5
Cotton fibre	1	...
Total Medico-legal ...	1,414	1,745
Articles tested for purity and quality.		
Potable water	100	149
Petroleum and inflammable oils	397	382
Lime-juice	26	23
Opium confiscated	103	53
Do. from the Board of Revenue, Lower Provinces	16	17
Salt	12	2
Ghee	39	44
Spirit for deleterious adulterations ...	53	23
Spirit determinations for the Collector of Customs, Calcutta	147	193
Small Arms Ammunition Factory, Dum-Dum	520	609
Fort William Arsenal	2	1
Medical Store Department	1	12
Telegraph ditto	6	13
Commissariat ditto	74	37
Army Clothing ditto	3	...
Other departments	150	100
Total tested for purity and quality ...	1,649	1,658
GRAND TOTAL ...	3,063	3,403

2. The number of analyses performed during the year under report was 3,403 against 3,063 in 1891 and 2,746 in 1890. These figures show a considerable increase of work in the Chemical Examiner's Department. Besides analytical work, the Chemical Examiner had to report on 16 technical questions referred to him, and on 10 applications for leave to file specifications for patent processes.

3. The increase was almost entirely in the number of medico-legal analytical cases, which rose from 1,414 to 1,745. In 1,426 of these cases (against 1,101 in 1891) human viscera or other substances were sent up for examination under the suspicion of containing poison. In 150 out of 276 human viscera, and in 489 other cases of suspected substances, out of 1,000 sent up, no poison was found. The principal poisons detected were arsenic, opium and aconite. In the case of human remains, opium was the most common form of poison, having been found in 26 per cent. of these cases. Arsenic was discovered in as many as 79·59 per cent. of the supposed cattle-poisoning cases in which animal viscera were sent up for examination.

4. The Lieutenant-Governor notices with satisfaction the increase which has taken place in the number of samples of potable water sent up for analysis, which increased from 61 in 1890 to 100 in 1891 and 149 during the year under report. Of the 149 samples examined in 1892, 13 were for Municipal authorities, 69 for jails and 67 for other departments. The results of these analyses are set forth in a special table in the Chemical Examiner's Report. After issue of the Resolution on the Administration Report for 1891, the Sanitary Commissioner was asked when inspecting a municipality to procure samples of the water in ordinary use, in order that they might be submitted to the Chemical Examiner for analysis. The Lieutenant-Governor hopes that greater effect will be given to these orders during the current year, and he desires that the Deputy Sanitary Commissioners will share in this work. The duty of testing the water of all the towns in Bengal must be taken up on a uniform and general plan, so as to obtain information where a pure water-supply ought to be provided, and where it is possible to rest content with the present supply. This should be the work of the Sanitary Commissioner. Besides this, whenever an epidemic of sickness occurs, which the Civil Surgeon thinks attributable to the water of the place, he should be authorised and enjoined to send in samples of the water for examination. Separate instructions will be issued to this effect.

5. The thanks of the Lieutenant-Governor are due to Dr. Ranking for his concise but full report, and for the good work he has done during the period he held charge of the office. The Lieutenant-Governor also notices with satisfaction the high terms in which Dr. Ranking speaks of the work done by the Assistant Chemical Examiner, Rai Taraprasana Ray Bahadur.

By order of the Lieutenant-Governor of Bengal,

J. A. BOURDILLON,

Offg. Secretary to the Govt. of Bengal.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 29*th April* 1893.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.			
BURDWAN DIVN.			
1	Burdwan April 29, '93 Kalna ... Katwa ... Raniganj ..	1·09 Nil 0·39 0·22	Weather—hot with occasional showers. Fodder and water sufficient. No crops on the ground except *til*. Prices of common rice— Srs. Burdwan ... ... 10 to 13 } Kalna ... ... 10 to 12 } Katwa ... ... 13 } per rupee. Raniganj ... ... 13 }
2	Bankura „ 29, '93 Vishnupur ...	1·59 2·04	Weather—hot and occasionally cloudy. Ploughing and manuring going on. Fodder and water sufficient. Rice is selling at 11½ seers per rupee at Sadar and Vishnupur.
3	Birbhum „ 29, '93 Rampur Hát ...	·52 ·90	Weather—cloudy; storms in the afternoon. Ploughing being carried on vigorously. Water sufficient, but straw is selling dearer. Rice sells at from 12 to 14½ seers per rupee.
4	Midnapore „ 29, '93	1·57	There has been rain in each subdivision. Ploughing going on and sowing reported from Tamluk. Prices of common rice— Srs. Sadar ... ... 12 } Contai ... ... 14 } Tamluk ... ... 12 } per rupee. Garhbetta ... ... 11 to 11½ }
5	Hooghly „ 29, '93 Serampore ... Jahanabad ...	0·81 0·01 Nil	Weather—cool at the beginning of the week, now hotter. There is practically nothing to note. Ploughing continues. Cattle-disease has abated. Want of fodder and water continues in Pandua and Dwarbasini. Prices of common rice— Srs. Sadar ... ... 10 to 11 } Serampore ... ... 10 to 11½ } per rupee. Jahanabad ... ... 10 to 12½ }
6	Howrah „ 29, '93 Ulubaria ...	0·03 0·27	Weather—hot; cool wind at night. Condition of cattle good. Fodder and water-supply sufficient. Price of rice 10 to 11½ seers per rupee.
PRESIDENCY DIVN.			
7	24-Parganas „ 29, '93	0·14	Weather—seasonable. Ploughing going on. No cattle-disease. Sufficient fodder and water. Prices of common rice:— Srs. c. Sadar ... ... 10 to 13 4 } Barrackpore ... ... 11 12 } Barasat ... ... 10 9 } Basirhat ... ... 12 5 } per rupee. Dum-Dum ... ... 11 10 } Diamond Harbour ... ... 13 0 }
8	Nadia „ 29, '93 Kushtia ... Meherpur ... Chuadanga ... Ranaghat ...	1·72 Nil 1·33 1·50 0·07	Weather—hot with occasional storms. Paddy being sown everywhere. Plenty of fodder and water for cattle. Prices stationary.
9	Khulna „ 29, '93 Bagerhat ... Satkhira ...	1·07 0·52 0·15	Weather—hot; heavy rain last night at Sadar. Harvesting of *boro* paddy progressing. Cultivation of *aus, aman* and jute continues. Common rice sells at 13 seers at Sadar and 10 seers 10 chitaks at Satkhira. Fodder and water ample.
10	Jessore „ 29, '93 Jhenida ... Magura .. Narail ... Bangaon ...	1·59 0·35 1·0 0·31 Nil	Weather—rather cloudy, with occasionalrain and high winds. Sowing of *aus* and ploughing for *aman* paddy going on. *Til*, jute and indigo promising. Harvesting of *boro* has commenced. Plenty of fodder and water for cattle. Prices of rice stationary.
11	Murshidabad „ 29, '93	3·53	Weather—seasonable. The harvesting of *rabi* crops finished. *Bhadoi* is being sown. The cultivation of jute going on. Fodder for cattle sufficient. Coarse rice sells at 13 seers per rupee.

Division	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL—*concld.*					
Chittagong Divn.	12	Chittagong	...	...	Report not received.
	13	Noakhali	...	...	Ditto.
	14	Tippera	...	...	Ditto.
	15	Chittagong Hill Tracts.	...	...	Ditto.
Dacca Divn.	16	Dacca	April 29, '93	3·23	Weather—very hot. Harvesting of *boro* paddy going on. *China* and *kaon* doing well. *Aus*, *aman* and jute thriving. Fodder available. No cattle-disease. Common rice selling at from 10 to 12 seers per rupee.
	17	Faridpur	„ 29, '93	3·09	Weather—very unsettled. State of young crops good so far. Common rice sells at 11 to 12 seers per rupee. Cattle-pox still prevalent in three thanas of the Madaripur and Sadar subdivisions. Fodder available.
	18	Backergunge	„ 29, '93	1·43	Weather—seasonable. State and prospects of crops fair. Common rice selling at from 10 to 13 seers per rupee. Fodder and water sufficient.
		Pirojpur	...	0·50	
		Bhola	...	1·33	
	19	Mymensingh	...	...	Report not received.
Rajshahi Divn.	20	Dinajpur	„ 29, '93	2·90	Weather—cloudy and rainy with occasional breaks. The rain has done immense good to jute and *bhadoi*. Sowing continues. Price of rice at Sadar 13¼ seers per rupee, that at Thakurgaon stationary. Condition of cattle good. Supply of fodder and drinking-water continue sufficient.
		Thakurgaon	...	3·93	
	21	Rajshahi	„ 29, '93	4·46	Weather—hot and showery. Jute, *boro* rice, *aus* all coming on well. The week's rain has done much good to the crops, and greatly facilitated ploughing and preparation of lands for *aman*. Water and fodder-supply ample. No cattle-disease anywhere. Price of rice varies from 11 to 15 seers per rupee.
		Nator	...	1·97	
		Naugaon	...	0·42	
	22	Rangpur	„ 29, '93	3·66	Weather—rainy and cool. Jute and *aus* sowings completed. Both crops are very promising. Fine weather now wanted. Price of common rice 12 to 14 seers per rupee.
		Gaibanda	...	1·21	
		Nilphamari	...	4·11	
		Kurigram	...	5·38	
		Ulipur	...	2·14	
	23	Bogra	„ 29, '93	0·78	Weather—stormy and unsettled. Lands are being ploughed for *aman* and jute. Sugarcane is being cut and pressed. General stock and prospect of crops satisfactory. Fodder and water sufficient.
		Sherpur	...	0·15	
	24	Pabna	„ 29, '93	3·33	Weather—hot and windy. Price of rice is 12¼ seers per rupee at Pabna and Rs. 3-8 to Rs. 5 at Sirajgang. Jute sells at Rs. 4-12 to Rs. 5-10 per maund. Condition of cattle good. Fodder and water-supply sufficient.
	25	Darjeeling	„ 29, '93	3·40	Weather—wet and overcast. *In the hills*:—Wheat and barley coming to maturity and in some places being harvested. *Bhutta* has come up in several places; in some places it is still being planted. *Phafar*, potatoes, *kangni* and *bhadoi* doing well. *In the terai*:—Jute and *bhadoi* coming up. Rain has done good to the crops. Prices of coarse rice— Hills ... ... Srs. 10 } per rupee. Terai ... ... 11 } per rupee.
		Siliguri	...	4·45	
	26	Jalpaiguri	...	...	Report not received.

No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
BHAGALPUR DIVN.				
27	Monghyr	April 29, '93	1·31	Weather—warm in the beginning of the week. A little cooler after rainfall. *Rabi* crops reaped. 10 annas outturn. Indigo doing well. Condition of cattle good. Sufficient fodder and water. Common rice sells at— Srs. Sadar ... ... 13 to 15½ per rupee. Begusarai ... ... 14½ per rupee. Jamui ... ... 13 per rupee.
28	Bhagalpur	„ 29, '93	3·78	Weather—cloudy and cool with east winds and some heavy storms of rain. The rain has been beneficial, but there has been sufficient for the present in the Sadar subdivision. It is wanted at Supaul. Lands are being prepared for the *bhadoi*. Prospects of indigo good.
	Banka	...	1·85	
	Madhipura	...	0·05	
	Supaul	...	Nil	
29	Purnea	„ 29, '93	3·82	Weather—cloudy with strong east wind. There was heavy rain at Sadar during the latter part of the week, and also at Araria. *Rabi* harvest nearly over at Sadar. Sowing of indigo nearly finished. Sowing of *bhadoi*, *aghani* and jute going on briskly. The late rain has benefited the standing crops very much. No cattle-disease. Fodder and water plentiful. Prices almost the same as before.
	Kishanganj	...	1·53	
	Araria	...	2·13	
30	Malda	„ 29, '93	3·09	Weather—cool for the season owing to the heavy shower of rain on the 24th. It rained again this morning, and the sky is still cloudy. Threshing of *rabi* crops is not yet over. Sowing of *bhadoi* crops continues. *Boro* paddy coming into maturity. Cattle suffering from foot-sore in English Bazar and Ratua thanas. Price of common rice 11 to 14 seers per rupee. No want of fodder or drinking water.
	Chanchal	...	0·41	
	Shibganj	...	0·75	
	Gajole	...	1·65	
31	Sonthal Parganas	„ 29, '93	1·10	Weather—cool with thunder-storms except in Rajmahal, where hot west winds prevail. *Mahua* has done well, a 16-anna outturn in south and west. *Boro* dhan in Rajmahal promises well. Ploughing goes on. Rice sells at 13 seers per rupee. Fodder and water sufficient.
	Deoghur	...	2·57	
	Godda	...	1·33	
	Jamtara	...	0·79	
	Pakur	...	2·14	
	Rajmahal	...	2·54	
PATNA DIVISION.				
32	Patna	„ 29, '93	1·90	Weather—hot. Threshing and winnowing of *rabi* still in progress. Weighment of opium about to be finished. The rainfall will benefit the sugarcane and *cheena* crops, but will do some damage to the *rabi* crops stored in the Khalihan. Common rice sells at— Srs. Sadar ... ... 15½ per rupee. Barh ... ... 11½ per rupee. Bihar ... ... 16¾ per rupee. Dinapore ... ... 15 per rupee.
	Barh	...	0·[illegible]7	
	Bihar	...	0·97	
	Dinapore	...	0·52	
33	Gaya	„ 29, '93	0·60	Weather—unseasonable, being cloudy and no west winds. A smart thunder shower yesterday (28th), which will do much good to the young sugarcane. Practically no agricultural operations in progress. Mango prospects very poor. *Mahua* very fair. Prices of rice pretty stationary at 14 to 15 seers per rupee. Fodder and water-supply sufficient.
	Aurangabad	...	0·07	
	Jahanabad	...	0·42	
	Nawada	...	Nil	
34	Shahabad	„ 29, '93	Nil	Weather—hot with winds from north-east and occasional dust-storms. Lands are being prepared for *khareef*. Millet being sown in irrigated lands. Sugarcane is looking well. Water is becoming scarce in the south.
35	Darbhanga	„ 29, '93	1·18	Weather—occasionally cloudy with strong east and west winds. Storm last night (28th). The rainfall of the week has greatly benefited the early paddy, *mung* and indigo crops. Lands being prepared for *bhadoi* cultivation. Fodder and water for cattle sufficient. Price of common rice ranges from 13 to 14 seers per rupee.
	Samastipur	...	0·51	
36	Muzaffarpur	„ 29, '93	1·66	Weather—heat moderate with east wind. Harvesting of *rabi* nearly over. *Cheena*, *mung* and dhan are being sown. Lands are under preparation for millets. Outturn of *rabi* on the whole is fair. No cattle-disease. Fodder and water sufficient.
	Sitamarhi	...	0·29	
	Hajipur	...	1·87	

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR—*concld.*				
Patna Division—*concld.*	37	Saran April, 29, '93 Siwan .. Gopalganj ..	0·06 0·41 0·12	Weather—east wind with disturbed atmosphere and unusual moisture and coolness. Crops on ground doing well. Indigo improved, but not yet safe from caterpillars. Prices stationary. Water and fodder ample. Prices of common rice— Srs. c. Chapra ... ... 14 8 per rupee. Siwan ... ... 12 8 per rupee. Gopalganj ... ... 12 7 per rupee.
	38	Champaran „ 29, '93	2·41	Weather has been more or less cloudy during the week. On two days there was good rain and on a third a shower. Weather cool for the time of year. Threshing of *rabi* is nearly over. The rain, which was much needed, will do much good. It will permit of *cheena* being sown, and indigo in lands in which it had not germinated. It is also very good for the crops already sown by cultivators in hopes that rain would fall and cause the seed to germinate. Opium weighments continue. Outturn good. No marked change in prices. No cattle-disease. Water and fodder sufficient.
ORISSA.				
Orissa Divn.	39	Cuttack „ 29, '93	Nil	Weather—cloudy and warm. Supply of fodder and water sufficient. Price of rice unchanged.
	40	Puri „ 27, '93 Khurda ... Banpur ...	0·04 Nil Nil	Weather—hot. Lands are being ploughed for the ensuing *sarad* crop. *Dalua* paddy being harvested. Miscellaneous crops doing well. Rice sells at 14 seers 10 chitaks to 17 seers 8 chitaks per rupee.
	41	Balasore „ 29, '93	1·37	Weather—stormy. Ploughing continues. Rice sells at 18 seers at Bhadrak and 15 seers at Balasore.
CHOTA NAGPUR.				
South-West Frontier Agency.				
Chota Nagpur Divn.	42	Hazaribagh April, 29, '93 Giridi ...	Nil Nil	Weather—unsettled. Occasional storms. Unusually cool for the time of the year. Sugarcane and mango promise well. *Mahua* yielding abundantly. Fodder and water sufficient. Common rice 11 to 14 seers per rupee.
	43	Lohardaga „ 29, '93	0·90	Weather—cool with showers of rain. *Rabi* harvest almost finished. Ploughing going on generally.
	44	Palamau „ 27, '93	Nil	Weather—seasonable. Very slight rainfall in some parts, which has damaged the *mahua* to some extent. *Rabi* harvest still not completed in parts. A small amount of cattle-disease reported. No deficiency of fodder and water as yet. Rice selling at from 11¼ to 24 seers per rupee.
	45	Singhbhum „ 29, '93	0·45	Weather—cloudy and stormy. *Mahua, boro dhan,* cotton and sugarcane doing well. Price of common rice ranges from 10 to 14 seers per rupee. Cattle-disease reported from some villages in Bharagora outpost jurisdiction.
	46	Manbhum „ 29, '93 Gobindpur ...	2·45 Nil	Weather—very heavy storms during latter part of week. The *mahua* harvest is practically over. The recent storms have done no harm. Rice selling 10 to 13 seers per rupee. Fodder and water-supply sufficient.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 2nd May, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS. Air pressure. Mean barometric height, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. Prevailing direction.	Mean wind velocity.	Temperature. Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri ...	29·710	29·662	—	SWly	231	89·7	23rd Apl.	72·6	23rd Apl.	87·6	78·0	82·8
		Gopalpore ...	29·703	29·664	—·107	SW	425	96·2	23rd ,,	69·9	23rd ,,	88·4	76·1	82·3
		False Point ..	29·725	29·688	—·087	Variable	339	88·5	24 & 29 ,,	67·0	24th ,,	87·1	75·9	81·6
	Cuttack	Cuttack ...	29·650	29·672	—·078	SWly	128	100·1	24th ,,	70·3	23rd ,,	96·5	76·0	86·3
	Balasore	Balasore ...	29·674	29·677	—·076	SW	213	102·5	23rd ,,	66·8	24th ,,	90·8	73·9	82·3
South-West Bengal.	Midnapore	Midnapore ..	29·590	29·686	—·059	SEly	301	102·3	23rd ,,	70·2	24th ,,	94·9	74·0	84·5
	24-Parganas	Calcutta ...	29·721	29·683	—·066	SSW	117	96·1	23rd ,,	69·7	23rd ,,	91·7	73·1	82·4
		Saugor Island	29·711	29·680	—·085	Sly	405	97·2	23rd ,,	71·0	24th ,,	90·1	77·4	83·7
	Howrah													
	Hooghly													
	Nadia	Krishnagar ..	29·698	29·694	—·037	Ely	166	99·1	23rd ,,	69·8	23rd ,,	94·3	72·6	83·5
	Khulna													
	Jessore	Jessore ...	29·718	29·698	—·072	SE	103	95·5	23rd ,,	67·5	23rd ,,	92·9	71·9	82·4
	Burdwan ...	Burdwan ..	29·641	29·686	—·056	E & SW	127	100·1	23rd ,,	70·7	24th ,,	94·0	72·9	83·5
		Raniganj ...	29·388	29·672	—·072	SE	98	104·7	23rd ,,	70·9	23 & 24 ,,	96·3	73·6	85·0
	Bankura	Bankura ..	29·407	29·657	—·064	SEly	129	103·1	23rd ,,	70·6	24th ,,	94·3	73·8	84·1
	Birbhum													
	Murshidabad	Berhampore...	29·681	29·697	—·052	E	104	96·2	23rd ,,	67·7	24th ,,	89·3	73·3	81·3
North Bengal.	Pabna	Sirajganj ..	29·719	29·715	—·055	Calm	72	92·6	27 & 29 ,,	57·8	23rd ,,	88·6	69·5	79·1
	Bogra	Bogra ..	29·721	29·735	—·008	E	92	93·2	29th ,,	67·2	23—25 ,,	[illegible]	[illegible]	79·6
	Rajshahi	Rampur Boalia.	29·680	29·700	—·042	Variable	123	92·3	23rd ,,	65·7	23rd ,,	88·7	70·2	79·5
	Malda	Malda ...	29·671	29·704	—	SE	107	95·7	23rd ,,	65·2	24th ,,	90·1	70·9	80·6
	Dinajpur	Dinajpur ...	29·659	29·732	—·053	ENE	138	91·1	29th ,,	65·3	23rd ,,	87·1	70·2	78·7
	Rangpur	Rangpur ...	29·669	29·747	—·032	Ely	86	88·8	29th ,,	64·7	23rd ,,	85·3	68·1	76·7
	Jalpaiguri	Jalpaiguri	29·516	29·757	—·026	E	91	88·9	26th ,,	66·1	23rd ,,	85·2	68·5	76·9
	Kuch Bihar													
	Darjeeling	Darjeeling ...	22·913	—	—·053	WSW	181	69·6	29th ,,	44·0	24th ,,	57·3	47·1	52·3
	Sikkim	Gnatong ...	19·173	—	—	ESE	74	48·1	25th ,,	21·3	24th ,,	42·7	24·3	33·5
East Bengal.	Chittagong	Chittagong ...	29·713	29·747	—·083	Ely		89·7	28th ,,	67·6	23rd ,,	86·4	71·3	79·1
	Chittagong Hill Tracts	Demagiri ...						Observations not received.						
	Backergunge	Barisal ..	29·766	29·725	—·056	Calm	77	91·3	23 & 28 Apl.	67·0	23rd ,,	87·2	71·6	79·0
	Noakhali	Noakhali ...	29·762	29·752	—·061	Variable	101	90·1	28th ,,	67·7	24th ,,	86·0	71·2	78·6
	Faridpur	Faridpur ...	29·742	29·736	—·059	SEly	98	89·5	29th ,,	67·4	23rd ,,	86·4	70·9	78·6
	Dacca	Dacca ...	29·756	29·726	—·060	SE	136	92·1	29th ,,	68·7	25th ,,	88·9	71·1	80·0
	Tippera	Comilla ...	29·756	29·739	—·065	Variable	113	93·3	28th ,,	67·8	23 & 25 ,,	87·8	70·7	79·2
	Mymensingh	Mymensingh	29·726	29·741	—·045	NE & SE	117	90·7	29th ,,	68·1	25th ,,	86·3	71·9	79·1
North Bihar.	Purnea	Purnea ...	29·639	29·710	—·043	E	76	97·3	23rd ,,	63·3	24th ,,	92·1	69·9	81·0
	Bhagalpur	Bhagalpur ...	29·574	29·688	—·058	E	74	99·3	23rd ,,	67·5	24th ,,	91·1	71·4	81·2
	Darbhanga	Darbhanga .	29·569	29·690	—·055	ESE	183	97·8	23rd ,,	69·7	24th ,,	91·1	72·3	81·8
	Muzaffarpur	Muzaffarpur	29·546	29·679	—	ESE	182	98·2	23rd ,,	70·2	24th ,,	92·3	72·3	82·3
	Champaran	Motihari ...	29·499	29·683	—·047	ENE	188	97·2	23rd ,,	67·8	27th ,,	92·9	71·2	82·1
	Saran	Chapra ...	29·532	29·667	—·040	Ely	183	97·8	23 & 27 ,,	71·6	24 & 29 ,,	94·9	73·2	84·1
South Bihar.	Shahabad	Dehri ..	29·311	29·613	—·105	E	126	103·4	27th ,,	72·0	23rd ,,	[illegible]	74·1	88·6
		Buxar ...	29·451	29·644	—·078	E	231	99·5	27 & 29 ,,	71·8	24th ,,	97·7	74·4	86·1
		Arrah ..	29·566	29·647	—·057	Ely	116	99·2	23rd ,,	72·2	24th ,,	96·7	74·8	85·8
	Gaya	Gaya ...	29·308	29·636	—·082	Ely	170	102·5	29th ,,	65·7	23rd ,,	100·3	74·6	87·5
	Patna	Bankipore ...	29·529	29·665	—·064	Ely	215	98·7	23rd ,,	70·5	24th ,,	94·2	72·8	83·5
	Monghyr													
	Sonthal Parganas ..	Naya Dumka	29·228	29·674	—·056	SSE	72	101·7	23rd ,,	68·4	23rd ,,	93·3	72·5	83·0
Chota Nagpur.	Hazaribagh	Hazaribagh	27·685	29·629	—·100	SE & SW	285	98·2	29th ,,	62·8	24th ,,	94·0	68·2	81·1
	Lohardaga	Ranchi ..	27·581	29·641	—·087	SW	176	96·0	29th ,,	61·2	24th ,,	91·9	66·8	79·3
	Palamau													
	Singhbhum ...	Chaibassa ..	28·957	29·659	—·052	SW	66	104·3	23rd ,,	68·6	23rd ,,	98·4	73·4	85·9
	Manbhum													

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period
The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01
rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station
district, i.e., from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one of

for the week ending Saturday, the 29th of April 1893.

Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	DISTRICT OBSERVATIONS. Rainfall. Of week. Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Since 1st of month. Mean for district.	Normal mean.	Variation.	Since 1st April 1893. Mean for district.	Normal mean.	Variation.	DISTRICT.
—	81·7	81	3·6	0·07		0·31		0·42		0·99			0·09		Puri.
+0·2	81·0	82	1·0	1·12											
—1·0	80·6	80	7·3	1·13											
—4·6	82·4	68	6·0	0·08		0·31		0·51		1·02			1·02		Cuttack.
—3·7	81·2	83	3·9	2·29		0·44		0·77		1·51			1·51		Balasore.
—5·8	81·2	74	3·1	1·63	1·35	0·69	2·25	0·82	1·75	1·54	+0·21	1·75	1·54	+0·21	Midnapore.
—2·0	80·1	79	5·9	0·14	0·61	0·89	1·14	1·08	1·07	1·73	—0·63	1·07	1·73	—0·66	24-Parganas.
—2·1	81·6	78	7·0	1·12											
					0·25	0·55	1·00	0·08	0·28	1·53	—0·25	0·28	1·53	—0·23	Howrah.
					0·90	0·71	1·00	1·02	1·72	1·74	—0·02	1·72	1·74	—0·02	Hooghly.
—2·7	80·5	73	5·7	1·72	2·66	1·00	2·20	1·45	4·63	2·60	+2·03	4·63	2·60	+2·03	Nadia.
					0·65	1·18	1·67	1·63	2·14	2·90	—0·76	2·14	2·90	—0·76	Khulna.
—2·9	79·9	86	6·0	1·61	1·87	1·41	1·80	1·86	3·73	3·13	+0·60	0·73	3·13	+0·60	Jessore.
—4·9	79·5	71	5·4	1·69	0·81	0·84	2·00	1·15	1·17	1·88	—0·71	4·17	1·88	—0·71	Burdwan.
—1·0	79·5	73	1·0	1·00											
—0·3	80·2	69	4·6	1·59	2·08	0·38	3·50	0·59	2·12	1·00	+1·12	2·12	1·00	+1·12	Bankura.
					0·89	0·45	2·00	0·78	1·06	1·12	—0·06	1·06	1·12	—0·08	Birbhum.
—5·9	76·1	89	6·1	3·53	2·91	0·43	3·00	0·77	3·56	1·24	+2·32	4·13	1·24	+2·32	Murshidabad.
—3·1?	77·7	83	6·0	0·21	1·77	1·16	1·59	1·63	2·85	2·71	+0·14	2·85	2·71	+0·14	Pabna.
—[illegible]	75·5	85	4·0	0·98	1·57	0·83	2·75	1·32	2·77	1·67	+1·10	2·77	1·67	+1·10	Bogra.
—4·4	77·8	84	5·0	4·66	3·06	0·57	2·33	0·94	3·71	1·17	+2·54	3·71	1·17	+2·54	Rajshahi.
—	77·4	82	4·9	3·09	2·03	0·19	3·00	0·31	2·33	0·81	+1·52	2·33	0·81	+1·52	Malda.
—2·9	73·8	85	8·6	2·61	2·14	0·55	2·80	0·77	2·50	0·97	+1·53	2·31	0·97	+1·53	Dinajpur.
—2·0	73·4	87	3·0	3·66	3·04	1·76	4·25	1·57	7·16	3·14	+4·02	7·16	3·14	+4·02	Rangpur.
—0·7	73·4	83	7·4	3·52	3·71	1·70	3·00	2·05	4·60	3·84	+0·76	4·60	3·84	+0·76	Jalpaiguri.
					4·78	2·21	6·25	2·61	8·79	4·08	+4·71	8·79	4·08	+4·71	Kuch Bihar.
—1·6	51·2	93	8·9	3·40	3·02	2·10	4·00	2·97	8·73	4·63	+4·10	8·73	4·63	+4·10	Darjeeling.
—	36·6	92	7·0	3·43											Sikkim.
—2·0	78·7	85	3·9	1·69		1·04		1·41		2·34			2·34		Chittagong.
					1·82	1·06	2·00	1·65	4·72	3·04	+1·68	4·72	3·04	+1·68	Chittagong Hill Tracts.
—2·0	79·6	86	7·3	1·63	1·16	1·23	2·50	1·41	2·19	2·88	—0·69	2·19	2·88	—0·69	Backergunge.
—3·9	78·6	74	5·4	1·18		1·39		1·33		3·83			3·83		Noakhali.
—3·6	76·0	89	5·4	3·09	3·05	1·38	2·67	1·91	5·98	3·45	+2·53	5·98	3·45	+2·53	Faridpur.
—3·2	77·2	85	7·1	3·36	2·83	1·81	1·75	2·39	3·89	4·19	—0·30	2·19	4·19	—0·30	Dacca.
—2·5	78·1	81	5·1	1·72		1·47		1·82		4·51			4·51		Tippera.
—1·5	77·1	82	4·9	1·50		1·51		2·07		3·54			3·54		Mymensingh.
—1·9	76·2	83	3·3	3·84	2·78	0·79	2·33	0·93	3·40	1·43	+1·07	3·40	1·43	+1·97	Purnea.
—2·8	77·5	78	5·0	3·78	1·75	0·29	1·75	0·47	1·75	0·68	+1·07	1·75	0·68	+1·07	Bhagalpur.
—2·7	78·1	73	4·0	1·18	0·81	0·28	2·00	0·53	0·81	0·57	+0·24	0·81	0·37	+0·24	Darbhanga.
—	77·5	78	4·3	1·66	1·12	0·25	1·67	0·42	1·16	0·58	+0·38	1·16	0·58	+0·58	Muzaffarpur.
—1·4	77·3	72	5·4	2·41	1·52	0·29	2·00	0·33	1·52	0·68	+0·84	1·53	0·68	+0·84	Champaran.
—2·5	79·3	71	5·4	0·06	0·19	0·06	0·67	0·24	0·20	0·17	+0·03	0·20	0·17	+0·03	Saran.
—1·8	83·7	51	0·9	Nil											
—2·5	81·9	59	3·3	0·06	0·02	0·02	0·00	0·07	0·02	0·16	—0·04	0·02	0·16	—0·04	Shahabad.
—2·4	81·2	67	0·9	0·04											
—3·0	80·1	70	1·6	0·69	0·25	0·08	0·75	0·12	0·36	0·24	+0·12	0·36	0·24	+0·12	Gaya.
—4·5	80·4	68	3·0	1·90	1·00	0·03	1·25	0·13	1·04	0·19	+0·85	1·04	0·19	+0·85	Patna.
					0·74	0·12	1·67	0·20	0·74	0·36	+0·38	0·74	0·36	+0·38	Monghyr.
—3·9	79·6	70	1·9	1·10	1·97	0·23	2·67	0·51	2·21	0·69	+1·52	2·21	0·69	+1·52	Sonthal Parganas.
—5·8	76·7	61	1·9	0·37		0·07		0·13		0·23			0·23		Hazaribagh.
—6·7	74·6	76	2·1	0·90	0·33	0·08	1·00	0·25	0·38	0·41	—0·03	0·38	0·41	—0·03	Lohardaga.
						0·02		0·11		0·30			0·30		Palamau.
—5·4	83·0	64	2·6	0·45	0·45	0·15	3·00	0·30	0·80	0·74	+0·06	0·80	0·74	+0·06	Singhbhum.
					1·48	0·16	2·00	0·42	1·48	0·61	+0·87	1·48	0·61	+0·87	Manbhum.

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater.
The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of
for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the
which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 29th of April 1893.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 23rd.	Monday, 24th.	Tuesday, 25th.	Wednesday, 26th.	Thursday, 27th.	Friday, 28th.	Saturday, 29th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April to date.
ORISSA	Puri	Puri	0·04		...	...	...	0·03	...	Nil	0·70	0·31	0·07	0·61	0·07	0·61
		Khurda	0·05	0·05								0·29		0·65		0·65
		Banpur	0·07									0·17		0·51		0·51
		False Point	0·13	0·98	0·07	...	...	...	...	2	1·18	0·47	1·18	2·19	1·18	2·19
		Gop										?		?		?
		Satpara	0·10	...	0·15							?		?		?
		Pipli	...	0·13	0·19							?		?		?
	Cuttack	Jagatsingpore		0·08	...	...	0·05					0·25		0·66		0·66
		Banki										0·15		0·35		0·35
		Cuttack										0·58		1·35		1·35
		Kendrapara	0·02	0·41	0·27	...	...	0·10	...	3	0·80	0·25	0·82	1·07	0·82	1·07
		Jajpur		1·79	0·05	0·09	...	0·34	...	2	2·27	0·32	2·29	1·69	2·29	1·69
		Dharmsala	0·26	0·32			1·36					?		?		?
		Saliporè	...	0·48								?		?		•
		Pal Lahara										?		?		?
	Balasore	*Akhyapada*	...	0·31	...	...	...	0·49	...	2	0·80	?		?		?
		Chandbali	...	1·15	...	...	...	...	...	1	1·15	0·21	1·15	0·94	1·15	0·94
		Bhadrak	...	0·21	...	0·70	...	0·20	...	3	1·11	0·34	1·11	1·81	1·11	1·81
		Soro	0·80								Nil	0·48		1·56		1·56
		Balasore	...	1·26	0·11	...	...	...	...	2	1·37	0·70	1·64	2·31	1·64	2·31
		Jellasore										0·46		1·09		1·09
		Baripodah	...	...	...	...	...	...	...	Nil	Nil	0·43	3·15	1·27	3·15	1·27
SOUTH-WEST BENGAL.	Midnapore	Contai	...	0·73	...	...	...	0·99	...	2	1·72	0·50		1·31		
		Tamluk	...	0·21	...	0·90	...	0·13	...	3	1·24	0·72	1·26	1·46	1·26	1·31
		Midnapore	...	0·28	...	...	...	1·29	...	2	1·57	0·66	1·84	1·40	1·84	1·46
		Ghatal	...	0·06	...	...	...	0·29	0·51	2	0·86	0·68	2·18	1·75	2·18	1·40
		Kukrahaty	...	0·21	...	0·11	...	0·55	...	3	0·87	?	1·04	?	1·04	1·75
		Garhbeta		0·88	...	...	0·07	0·72	0·43	3	2·10	?	2·10	?	2·10	?
		Panskura	...	0·24	...	...	...	0·08	...	1	0·32	?	0·38	?	0·38	?
		Dautoon	...	1·46	...	...	...	0·58	...	2	2·04	?	2·04	?	2·04	?
	24-Parganas	Saugor Island	...	0·84	...	...	...	0·28	...	2	1·12	0·59	1·16	1·25	1·16	1·25
		Diamond Harbour	...	...	...	...	...	0·42	...	1	0·42	1·13	0·42	2·10	0·42	2·10
		Canning Town	...	...	...	0·40	..	...	...	1	0·40	?	0·40	?	0·40	?
		Alipore (Observatory.)	...	0·04	...	...	...	0·10	...	1	0·14	0·68	0·17	1·59	0·17	1·59
		Barrackpore	...	...	...	...	...	...	1·35	1	1·35	0·84	1·03	1·67	1·93	1·67
		Dum-Dum	...	...	...	...	...	0·22	0·13	2	0·35	0·95	0·54	1·93	0·54	1·93
		Barasat	...	...	...	...	...	...	0·81	1	0·81	0·89	2·27	1·77	2·27	1·77
		Basirhat	...	...	..	...	...	...	...	Nil	Nil	1·13	0·97	1·88	0·97	1·88
	Howrah	Howrah	...	...	...	...	...	...	0·03	Nil	0·03	0·71	0·08	1·96	0·08	1·96
		Mohesreka	0·03	0·19	...	...	...	0·24	...	2	0·46	0·40	0·46	1·09	0·46	1·09
		Ulubaria	...	0·27	...	...	...	0·15	...	2	0·42	?	0·42	?	0·42	?
	Hooghly	Serampore	0·01	...	...	...	...	0·01	1·23	1	1·25	0·75	1·94	1·74	1·94	1·74
		Hooghly	...	...	...	...	...	...	0·81	1	0·31	0·63	1·74	1·69	1·74	1·69
		Jahanabad	...	...	...	...	...	0·65	...	1	0·65	0·74	0·67	1·74	0·67	1·74
	Nadia	Ranaghat	...	...	...	0·07	...	...	0·52	1	0·59	1·02	1·16	2·72	1·16	2·72
		Krishnagar	...	...	...	0·08	0·05	0·15	1·44	2	1·72	0·90	2·89	2·26	2·80	2·26
		Chuadanga	0·44	1·06	...	...	...	...	2·82	3	4·32	1·04	5·61	2·29	5·61	2·69
		Meherpore	0·85	...	...	0·22	...	...	1·63	3	2·70	0·76	6·99	2·47	6·69	2·47
		Kushtia	0·85	...	...	...	...	...	3·10	2	3·95	1·27	6·82	2·80	6·82	2·80
	Khulna	Satkhira	0·01	...	...	0·14	...	...	0·20	2	0·35	1·37	3·10	2·74	3·10	2·74
		Bagerhat	0·28	0·24	...	...	...	...	...	2	0·52	1·01	0·89	3·05	0·89	3·05
		Khulna	0·04	0·04	..	...	...	...	0·99	1	1·07	1·17	2·42	2·93	2·42	2·93
		Nakipur	...	...	...	0·77	...	...				?		?		?
		Rampal	...	0·50	0·80	...	...	...	...	2	1·30	?		?		?
	Jessore	Narail	...	...	...	0·31	...	...	0·53	2	0·84	1·42	2·06	2·95	2·06	2·95
		Jessore	...	...	...	0·97	...	...	0·62	2	1·59	1·81	2·17	3·61	2·17	3·61
		Jhenidah	0·33	...	...	...	...	...	2·65	2	2·98	1·13	7·37	3·14	7·37	3·14
		Magura	1·00	...	...	...	...	...	2·39	2	3·39	1·71	5·29	3·69	5·29	3·69
		Baugaon	...	...	...	...	...	...	0·56	1	0·56	1·00	1·78	2·34	1·78	2·34
	Burdwan	Kalna	...	...	...	...	...	...	0·45	1	0·45	1·02	0·48	2·10	0·48	2·10
		Burdwan	...	0·10	...	...	0·22	0·08	0·69	3	1·09	1·07	1·36	2·12	1·36	2·12
		Katwa	...	...	...	...	0·35	...	0·53	2	0·88	0·43	1·49	1·43	1·49	1·43
		Raniganj	...	...	...	...	0·22	...	0·78	2	1·00	0·34	1·36	1·20	1·36	1·20
		Mankur	...	...	...	...	1·12	...	0·58	2	1·70	?	1·70	?	1·70	?
	Bankura	Bankura	...	0·15	...	...	0·71	0·13	0·60	4	1·59	0·50	1·59	1·33	1·59	1·33
		Vishnupur	0·08	0·24	...	...	0·68	1·04	0·43	4	2·47	0·45	2·47	1·37	2·47	1·37
		Maliara	0·47	0·09	...	...	...	...	0·52	2	1·08	0·39	1·25	0·69	1·25	0·69
		Khatra	...	0·85	...	...	1·00	1·15	0·17	4	3·17	0·17	3·17	0·60	3·17	0·60
		Indas	...	0·22	...	0·85	0·59	0·05	0·36	4	2·07	?	2·07	?	2·07	?
		Kotalpur	...	...	...	...	0·50	...	1·00	2	1·50	?	1·50	?	1·50	?
		Onda	0·15	...	...	1·15	0·81	0·61	...	4	2·72	?	2·72	?	2·72	?
		Gangajalghati	...	0·32	...	...	0·54	...	0·69	3	1·55	?	1·55	?	1·55	?
		Kaipur	...	1·47	...	...	0·63	0·20	...	3	2·32	?	2·32	?	2·32	?
		Sonamukhi	...	...	...	...	2·23	0·05	0·47	2	2·75	?	2·75	?	2·75	?
	Birbhum	Suri	0·03	...	...	...	0·30	..	0·19	2	0·52	0·51	0·90	1·03	0·90	1·03
		Hetampore	0·01	...	...	...	0·05	...	0·75	1	0·81	0·16	0·85	0·86	0·85	0·86
		Rampur Hat	0·78	...	...	...	0·12	...	0·33	3	1·23	0·59	1·32	1·34	1·32	1·34
		Bolpur	...	0·51	...	...	0·20	...	0·73	3	1·44	?	1·44	?	1·44	?
		Murari	...	0·24	...	...	1·00	...	0·46	3	1·70	?	2·00	?	2·00	?
	Murshidabad	Kandi	0·92	...	...	...	0·55	...	0·92	3	2·39	0·46	2·90	1·48	2·00	1·48
		Berhampore	0·56	0·20	...	0·01	2·15	...	0·61	4	3·53	0·60	3·87	1·53	3·87	1·53
		Lalbagh	0·42	1·02	...	...	0·07	...	1·72	3	3·23	0·45	3·98	1·02	3·98	1·02
		Azimganj	0·15	3·05	...	...	...	...	1·80	3	5·00	0·31	5·58	1·23	5·58	1·23
		Jangipur	...	2·38	...	...	...	...	0·85	2	3·23	0·27	3·95	1·01	3·95	1·01
		Lalgola	0·10	...	...	...	...	...	...	1	0·10	0·49	1·10	1·13	1·10	1·13
		Akhriganj	0·13	2·62	...	...	0·14	...	0·55	4	3·44	?	5·10	?	5·10	?
		Patkabari	1·05	...	...	...	...	...	2·40	2	3·45	?	6·35	?	6·35	?
NORTH BENGAL	Pabna	Pabna	0·55	...	...	...	...	...	2·78	2	3·33	1·38	5·10	3·00	5·10	3·00
		Sirajganj	0·08	...	...	...	...	...	0·13	1	0·21	0·93	0·61	2·40	0·61	2·40
	Bogra	Sherepore	0·15	...	...	...	...	...	1·60	2	1·75	0·67	3·83	1·33	3·83	1·33
		Nowkhilla	...	...	...	...	...	...	0·53	1	0·53	1·24		1·92		1·92
		Bogra	0·48	0·10	...	...	0·20	...	0·20	4	0·98	0·84	2·33	2·00	2·33	2·00
		Panchbibi	0·20	0·70	...	0·80	...	...	1·32	4	3·02	0·81	3·42	1·46	3·42	1·46
	Rajshahi	Boalia	0·07	3·79	...	...	0·07	...	0·53	2	4·46	0·47	4·88	1·21	4·88	1·21
		Nator	0·77	0·92	...	...	0·02	...	0·10	3	1·81	0·88	2·42	1·83	2·42	1·83
		Naugaon	...	0·38	...	...	0·04	...	2·50	2	2·92	0·36	3·82	0·48	3·82	0·48
		Lalpore	...	...	...	...	...	...	0·73	1	0·73	?		?		?
		Manda	0·63	...	...	...	...	...	...	1	0·63	?		?		?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 29th of April 1893 —*contd.*

Meteorological Division.	District.	Station.	Sunday, 23rd.	Monday, 24th.	Tuesday, 25th.	Wednesday, 26th.	Thursday, 27th.	Friday, 28th.	Saturday, 29th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April.
			RAINFALL.													
NORTH BENGAL—*concld.*	Malda ...	Malda ...	...	2·15	...	...	0·16	...	0·78	3	3·09	0·19	3·52	0·82	3·52	0·82
		Chanchal ...	...	0·13	...	...	0·28	...	0·56	3	0·97	0·19	1·12	0·77	1·12	0·77
		Gajol ...	...	0·19	...	...	0·56	0·05	2·00	3	2·80	?	3·79	?	3·79	?
		Sibganj	...	...	...	...	0·15	0·18	0·08	2	0·41	?	1·31	?	1·31	
	Dinajpur ...	Mohadebpore	...	...	...	...	0·50	...	1·50	2	2·00	0·44	2·60	0·93	2·60	0·93
		Churaman ...	...	...	...	...	0·28	...	1·07	2	1·35	0·31	1·35	0·49	1·35	0·49
		Raiganj ...	...	0·25	...	...	0·67	0·43	1·31	4	2·66	0·62	2·82	1·66	2·82	1·66
		Dinajpur* ...	0·38	...	0·72	...	0·61	...	1·20	4	2·86	0·79	3·91	1·57	3·91	1·57
		Balurghat ...	...	0·42	...	...	...	...	1·42	2	1·84	0·59	1·84	0·79	1·84	0·79
		Thakurgaon ...	1·28	...	...	0·76	1·89	...	0·40	4	4·33	?	5·19	?	5·19	?
	Rangpur ...	Bhawanigunge (*Gyabanda*)	...	0·26	...	...	1·17	...	0·80	3	2·23	1·27	3·79	2·53	3·79	2·53
		Rangpur ...	1·04	0·08	0·44	...	1·35	...	0·75	4	3·66	1·59	6·41	2·74	6·41	2·74
		Kurigaon ...	1·60	0·53	0·20	...	2·10	0·53	0·47	6	5·42	2·40	12·45	4·33	12·45	4·33
		Bagdogra (*Nilphamari*)	2·72	0·18	...	...	1·21	...	0·33	4	4·44	1·77	5·96	2·94	5·96	2·94
		Ulipore ...	0·17	0·12	...	...	1·75	...	0·71	4	2·75	?	7·25	?	7·25	?
		Sundergunge ...		0·20	...	...	0·31	0·50				?		?		?
	Jalpaiguri ...	Jalpaiguri	0·05	...	...	2·17	0·39	...	1·10	3	3·71	1·70	4·60	3·84	4·60	3·84
		Alipore Dooar	1·34	...	...	0·93	0·30	...	...	3	2·57	?	8·26	?	8·26	?
		Fallacotta ...	0·23	0·10	...	1·65	0·31	...	1·31	5	3·62	?	9·08	?	9·08	?
		Debiganj ...	0·90	...	...	...	0·76	...	0·20	3	1·86	?	2·74	?	2·74	?
		Bhagatpore (*Nagrakatta*)	1·16	0·02	...	1·70	0·06	...	1·68	3	4·62	?	10·48	?	10·48	•
	Kuch Bihar	Dinhatta ...	0·74	1·84	0·20	0·12	1·80	0·51	0·81	7	6·02	2·13	10·33	3·64	10·33	3·64
		Kuch Bihar ...	1·32	1·16	0·14	1·27	1·53	0·17	0·65	7	6·24	2·15	12·38	4·97	12·38	4·97
		Mickliganj ...	0·68	0·35	0·23	0·24	0·65	0·30	0·83	7	3·30	2·29	5·00	3·87	5·00	3·87
		Mathabhanga	0·55	...	...	0·81	1·78	0·03	0·40	4	3·57	2·25	7·46	3·75	7·46	3·75
	Darjeeling ...	Buxa ...	0·46	0·47	...	0·54	...	0·49	0·81	5	2·77	3·53	14·07	8·23	14·07	8·23
		Siliguri ...	2·57	0·02	...	1·81	0·05	0·05	0·80	3	5·30	2·07	9·37	3·08	9·37	3·08
		Darjeeling ...	0·16	2·23	0·16	0·05	0·19	0·15	0·46	6	3·40	1·65	8·09	4·25	8·09	4·25
		Kalimpong ...	...	0·24	0·03	0·09	...	...	0·24	2	0·60	1·51	3·38	2·96	3·38	2·96
		Kurseong ...	0·38	0·14	...	1·52	...	0·04	1·08	4	3·16	?	7·17	?	7·17	?
		Pedong ...				0·32	0·06	0·16	0·25							
EAST BENGAL	Chittagong ..	Cox's Bazar ...	0·28	0·02	0·25	...	...	...	...	2	0·53	1·08	0·57	2·09	0·57	2·09
		Chittagong ...	1·00	...	0·60	...				2	1·60	1·00		2·59		2·59
		Kutubdia ...	1·30	0·05								?		?		?
		Satkanya ...	0·49	...	0·41							?		?		?
		Kodala ...										?		?		?
		Fenoa ...	1·66	0·06	...							?		?		?
		Mirsarai ...	1·99	0·07		0·13						?		?		?
		Chandpur ...	0·60	...	0·36							?		?		?
	Chittagong Hill Tracts.	Rangamati ...	1·66	...	...	0·16	...	...	...	2	1·82	1·06	2·43	3·04	2·43	3·04
		Bundarban ...	0·78	0·05	0·35							?		?		?
	Backergunge	Patuakhali ...	0·50	0·21	0·03	...	...	...	...	2	0·74	1·72	2·40	2·82	2·40	2·82
		Pirojpur ...	0·35	0·15	...	...	...	...	...	2	0·50	0·79	1·34	2·37	1·34	2·37
		Barisal ...	0·79	0·05	...	...	..	...	0·59	2	1·43	0·96	2·88	3·10	2·88	3·10
		Gournaddi ...	0·78	0·04	...	0·50	...	...	0·52	3	1·84	?	3·73	?	3·73	?
		Bhola ...	0·50	0·15	0·08	...	0·60	...	0·65	4	1·98	1·44	2·13	3·25	2·13	3·25
		Daulatkhan ...	0·51	...	0·36	...	...	...	0·57	3	1·44	?	1·44	?	1·44	?
		Bauphal ...	0·77	0·55								?		?		?
	Noakhali ..	Noakhali ...										1·51		3·67		3·67
		Fenny ...	3·10	0·05	...	...	...	...	0·12	2	3·27	1·26	3·53	3·98	3·53	3·98
		Harishpore ...	0·50	0·21								?		?		?
		Ramganj ...	0·15	...	0·09	...	...	...	2·18	2	2·42	?	3·87	?	3·87	?
	Faridpur ...	Madaripur ...	0·82	0·32	...	0·62	...	...	1·19	4	2·95	1·27	4·27	3·29	4·27	3·29
		Faridpur ...	1·04	0·03	...	0·04	...	...	1·98	2	3·09	1·56	7·94	3·45	7·94	3·45
		Goalundo ...	1·16	0·05	...	...	...	...	1·91	2	3·12	1·92	5·98	3·62	5·98	3·62
	Dacca	Munshiganj ...	0·20	...	...	...	...	...	2·93	2	3·13	1·75	4·10	4·66	4·10	4·66
		Dacca ...	0·05	...	...	...	...	...	3·18	1	3·23	1·53	4·69	4·23	4·60	4·23
		Narayanganj...	0·11	...	0·09	...	...	...	3·87	2	4·07	2·17	4·64	4·19	4·64	4·19
		Manikganj ...	0·25	...	...	...	...	...	0·65	2	0·90	1·79	2·14	3·66	2·14	3·66
		Joydebpore ...	0·07	...	0·05	...	...	...	1·05	1	1·17	?	4·00	?	4·00	?
	Hill Tippera	Agartola ...										1·49		4·68		4·68
	Tippera	Comilla ...	0·11	...	0·10	...	...	...	1·68	3	1·89	1·43	2·78	4·57	2·78	4·57
		Chandpore ...	0·73	...	...	...	...	...	2·38	2	3·11	1·39	6·65	4·07	6·63	4·07
		Brahmanbaria	...	...	...	...	...	...	1·12	1	1·12	1·58	2·82	4·72	2·82	4·72
		Ramchandrapore	...	...	...	...	...	...	1·50	1	1·50	?	2·30	?	2·30	?
		Nasirnagar ...	...	...	1·55							?		?		?
		Daudkandi ...	0·20	...	...	...	...	...	3·40	2	3·60	?	4·28	?	4·28	?
		Kasba ...										?		?		?
		Laksham ...										?		?		?
	Mymensingh.	Kishorganj ...	...	...	...	...	...	...	0·86	1	0·86	1·80	2·97	4·47	2·97	4·47
		Atia (*Tangail*)	0·26	...	...	...	...	...	1·28	2	1·54	1·56	2·24	2·92	2·24	2·92
		Mymensingh ...	...	0·02	...	0·03	...	...	1·45	1	1·50	1·45	5·43	3·52	5·43	3·52
		Jamalpur ..	...	...	...	...	...	...	0·61	1	0·61	1·13	2·76	2·82	2·76	2·82
		Netrakona ...										1·60		3·93		3·93
		Subornakhally	...	...	...	...	...		0·07	Nil	0·07	?	0.57	?	0·57	?
		Durgapore ...	...	...	...	..	...	0·09				?		?		?
		Sherepore Town	...	0·13	...	0·19	...	0·45				?		?		?
		Dewanganj ...	...	0·64	...	...	...	0·54	0·66			?		?		?
NORTH BIHAR	Purnea ...	Kishanganj ...	1·12	...	...	...	0·38	0·27	0·23	4	2·00	1·29	2·52	1·83	2·52	1·83
		Araria ...	...	...	...	..	2·13	...	0·60	2	2·73	0·60	3·41	1·32	3·41	1·32
		Purnea ...	...	...	...	...	2·00	1·82	0·02	2	3·84	0·49	4·51	1·14	4·51	1·14
		Gondwara (*Korah*)	...	...	...	...	...	1·06	0·15	2	1·21	?	1·46	?	1·46	?
		Barsoe ...	...	0·53	...	...	0·71	...	0·97	3	2·51	?	2·51	?	2·51	?
		Forbesganj ...	...	0·91	...	...	1·34	...	1·13	3	3·38	?	3·91	?	3·91	?
		Kaliaganj ...	0·56	...	0·28	1·20	0·27	0·27	0·73	6	3·31	?	3·82	?	3·82	?
	Bhagalpur ...	Madhipura ...	...	...	...	...	0·05	...	...	Nil	0·05	0·52	0·05	0·85	0·05	0·85
		Bongaon (*Sufabad*).										?		?		?
		Supaul ...	...	...	...	...	...	...	0·90	1	0·90	0·29	0·90	0·68	0·90	0·68
		Protabganj ...	...	...	...	...	0·85	...	1·35	2	2·20	?	2·20	?	2·20	?
		Bhagalpur ..	...	1·53	...	...	0·29	...	1·36	3	3·78	0·19	3·96	0·68	3·96	0·68
		Banka ...	...	1·52	...	...	0·53	...	0·42	3	2·27	0·17	2·27	0·52	2·27	0·52
		Colgong ...	...	1·05	...	...	0·33	...	0·96	3	2·34	?	2·35	?	2·35	?
	Darbhanga ...	Tajpur ..	...	0·42	...	...	0·09	...	0·13	2	0·64	0·15	0·64	0·32	0·64	0·32
		Darbhanga ...	...	0·21	...	...	0·31	...	0·65	3	1·18	0·25	1·19	0·56	1·19	0·56
		Madhubani ...	...	...	...	...	...	...	0·62	1	0·62	0·43	0·62	0·85	0·62	0·85
		Bahera ...	0·19									?		?		?
		Roshera ...	...	...	...	...	...	...	0·20	1	0·20	?	0·20	?	0·20	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 29th of April 1893—concld.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 23rd.	Monday, 24th.	Tuesday, 25th.	Wednesday, 26th.	Thursday, 27th.	Friday, 28th.	Saturday, 29th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April.
NORTH BIHAR—concluded	Muzaffarpur...	Sitamarhi ...	...	...	...	0·29	...	0·11	...	2	0·40	0·40	0·52	0·98	0·52	0·98
		Muzaffarpur	0·02	0·02	...	...	0·54	...	0·50	2	1·08	0·29	1·08	0·53	1·08	0·53
		Hajipur ...	0·02	...	...	...	1·85	...	0·01	1	1·88	0·07	1·88	0·18	1·88	0·18
		Paru	...	...	...	1·35	...	1·31	...	2	2·66	?	2·66	?	2·66	?
		Mahwa (Chitwarra.)	...	...	...	0·45	...	1·60	...	2	2·05	?	2·05	?	2·05	?
		Sauhar ...	...	...	...	...	0·45	...	0·20	2	0·65	?	0·80	?	0·80	?
		Pupri										?		?		?
	Champaran	Motihari ...	0·04	...	...	...	1·83	...	0·54	2	2·41	0·30	2·41	0·68	2·41	0·68
		Bettiah	...	...	...	...	...	0·30	0·33	2	0·63	0·28	0·78	0·67	0·78	0·67
		Bagaha ...	...	...	...	...	1·00	...	1·31	2	2·31	?	2·31	?	2·31	?
		Kurhurwa	...	...	...	...	...	...	0·56	1	0·56	?	0·56	?	0·56	?
	Saran	Gopalganj	0·12	...	...	...	...	...	...	1	0·12	0·04	0·12	0·09	0·12	0·09
		Siwan ...	...	...	...	0·38	...	...	...	1	0·38	0·10	0·38	0·20	0·38	0·20
		Chupra ...	...	...	...	...	...	...	0·06	Nil	0·06	0·03	0·06	0·21	0·06	0·21
SOUTH BIHAR	Shahabad ...	Buxar ...	...	...	...	...	...	0·04	0·02	Nil	0·06	0·01	0·06	0·19	0·06	0·19
		Dehri ...	...	...	...	...	...	...	...	Nil	Nil	Nil	Nil	0·11	Nil	0·11
		Bhabhua	...	...	...	...	...	...	...	Nil	Nil	0·04	Nil	0·13	Nil	0·13
		Sasseram ...	...	...	...	...	...	...	...	Nil	Nil	0·02	Nil	0·18	Nil	0·18
		Arrah	...	...	...	...	...	0·05	...	Nil	0·05	0·01	0·05	0·19	0·05	0·19
		Mohanea	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Khiri ...										?		?		?
		Ageaon ...	...	...	...	...	0·10	...	...	1	0·10	?	0·10	?	0·10	?
		Ramagar ...	...	...	...	...	0·17	...	...	1	0·17	?	0·17	?	0·17	?
		Koath ...	...	...	...	...	...	0·03	...	Nil	0·03	?	0·03	?	0·03	?
		Sikroul ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Bassowan ...										?		?		?
		Monaharpur	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Gaya ...	Aurangabad ...	...	...	...	...	...	...	...	Nil	Nil	0·09	0·07	0·23	0·07	0·23
		Gaya ...	...	...	...	...	...	...	0·60	1	0·60	0·11	0·68	0·31	0·63	0·31
		Nawadah ...	...	...	...	...	...	...	...	Nil	Nil	0·13	Nil	0·29	Nil	0·29
		Jahanabad	...	...	...	...	0·12	...	0·28	2	0·40	Nil	0·70	0·16	0·70	0·16
		Arwal	...	...	...	...	...	...	0·08	Nil	0·08	?	0·08	?	0·09	?
		Daudnagar ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Sherghati										?		?		?
		Rajauli	...	...	...	...	...	...	0·97	1	0·97	?	0·97	?	0·97	?
		Pakri Barawan	...	...	...	...	0·24	...	...	1	0·24	?	0·24	?	0·24	?
	Patna ...	Patna	0·03	...	...	...	1·84	...	0·03	1	1·90	0·05	1·90	0·21	1·90	0·21
		Dinapore ...	0·03	...	...	...	0·46	...	0·03	1	0·52	0·02	0·55	0·22	0·55	0·22
		Bihar	...	...	...	...	0·90	...	0·04	1	0·94	0·05	1·01	0·21	1·01	0·21
		Barh	...	...	...	...	0·33	...	0·31	2	0·64	0·01	0·68	0·09	0·68	0·09
		Bickram										?		?		?
		Hilsa	...	...	...	1·18	...	0·20	...	2	1·38	?	1·38	?	1·38	?
	Monghyr ...	Begusarai	...	...	...	...	0·39	...	0·41	2	0·80	0·12	0·80	0·30	0·80	0·30
		Monghyr ...	...	...	...	...	1·20	...	0·11	2	1·31	0·09	1·31	0·36	1·31	0·36
		Jamui	...	...	...	...	0·12	...	...	1	0·12	0·14	0·12	0·45	0·12	0·45
		Sheori	...	...	...	...	...	...	2·45	1	2·45	?	2·45	?	2·45	?
		Shaikpura ...	...	...	...	...	0·32	...	...	1	0·32	?	0·32	?	0·32	?
		Chakai Bamda	...	...	...	...	0·30	...	...	1	0·30	?	0·30	?	0·30	?
	Sonthal Parganas.	Rajmahal	...	1·65	0·25	...	0·64	...	1·03	4	3·57	0·19	3·80	0·88	3·80	0·88
		Godda	...	0·91	...	...	0·42	...	0·12	3	1·45	0·09	1·45	0·48	1·45	0·48
		Pakour ...	...	1·39	...	...	0·64	...	0·08	2	2·11	0·17	3·24	0·44	3·24	0·44
		Naya Dumka	0·34	...	...	...	0·74	...	0·02	2	1·10	0·31	1·16	0·94	1·18	0·94
		Deoghur	...	1·50	...	...	1·07	...	...	2	2·57	0·35	2·57	0·86	2·57	0·86
		Jamtara ...	0·24	0·03	...	...	0·52	...	0·21	3	1·00	0·24	1·00	0·40	1·00	0·49
		Belbodda ...	...	1·37								?		?		?
		Nanihat ...	...	...	1·00	0·50	0·36	...	...	2	1·86	?	1·86	?	1·86	?
CHOTA NAGPUR	Hazaribagh ...	Pachamba (Giridih). ...	...	...	...	...	1·08	...	0·08	1	1·16	0·13	1·16	0·49	1·16	0·49
		Hazaribagh	0·11	0·16	...	...	...	0·10	...	3	0·37	0·11	0·42	0·36	0·42	0·36
		Sumtaguran	...	...	...	...	0·14	0·08	...	1	0·22	0·12	0·22	0·25	0·22	0·25
		Mahudi Hills	...									0·01		0·10		0·10
		Dumaria Hill	...									Nil		Nil		Nil
		Barhi	...	...	...	...	...	...	0·22	1	0·22	?	0·22	?	0·22	?
		Chatra ...	...	...	...	...	...	0·03	...	Nil	0·03	?	0·05	?	0·05	?
		Kasiyatoha	...	...	...	0·23	0·65	...	0·17	3	1·05	?	1·07	?	1·07	?
		Ramgar ...	...	...	...	...	...	0·23	...	1	0·23	?	0·38	?	0·38	?
	Lohardaga	Lohardaga ...	0·38	...	...	...	...	...	...	1	0·38	0·03	0·38	0·23	0·38	0·23
		Ranchi ...	...	0·27	0·29	...	0·07	...	0·25	3	1·88	0·13	1·88	0·55	1·88	0·55
		Silli ...	0·15	...	0·35							?		?		?
	Palamau ...	Palamau (Daltanganj). ...	...									0·02		0·30		0·30
		Alumati	...	...	0·45			...				?		?		?
		Husainabad	...					...				?		?		?
		Garhwa	...									?		?		?
	Singhbhum.	Chaibassa	0·15	0·16	0·10	...	...	0·04	...	3	0·45	0·13	0·80	0·74	0·80	0·74
		Chakardharpur.	0·08	0·09	0·10	0·30	...					?		?		?
		Ghatsila	...	1·40	...	...	...	...	...	1	1·40	?	1·40	?	1·40	?
		Baharagura	...	0·75	0·21	...	...	0·30				?		?		?
		Gailkera ...	0·15	...	...	...	...	...	...	1	0·15	?	0·17	?	0·17	?
		Kalikapur ...	0·21	...	...	...	...	0·25	...	2	0·46	?	0·46	?	0·46	?
	Manbhum ...	Purulia	0·28	0·08	...	...	...	1·32	0·77	3	2·45	0·21	2·45	0·75	2·45	0·75
		Gobindpur	...	...	...	...	...	...	0·50	1	0·50	0·12	0·50	0·57	0·50	0·57
		Raghunathpore	...	...	...	...	...	...	0·90	1	0·90	?	0·90	?	0·90	?
		Barahabhum	0·15	0·75	...	...	0·30	0·80	...	4	2·00	?	2·25	?	2·25	?
		Jhalda	0·12	...	...	...	0·73	0·44	...	3	1·29	?	1·29	?	1·29	?
		Chas	0·39	...	...	...	1·39	0·23	0·33	4	2·16	?	2·16	?	2·16	?
		Pandra ...	0·29	0·50	...	...	0·20	...	0·90	4	1·89	?	1·89	?	1·89	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the 2nd May* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 29TH APRIL 1893.

FAIRLY settled weather prevailed at the beginning of the week in all districts, except East and North Bengal, where rain was falling in local showers. The pressure distribution was very nearly normal over the greater part of the province, but there was a shallow low-pressure area to the south-west, and this was causing easterly winds in Lower Bengal.

During the first two days pressure rose considerably, and as the increase was rather greater towards the north, the relatively low readings continued in the south-west. After this, however, a double series of important changes commenced. A small cyclonic storm formed in the Andaman sea, and a little later a depression approached from the north-west. The cyclonic storm passed over Rangoon on the 27th, moving in a north-easterly direction, after giving rather stormy weather on the coast and heavy general rain in Lower Burma. Very large atmospheric oscillations followed, due to the recovery of pressure in Burma after the small storm passed away, and partly to the approach of the other depression from the west. Gradients from being very slight over the north of the Bay became in a short time much steeper than is usual at this time of the year. In consequence of the steeper gradients strong moisture-laden winds blew in all districts, and general rain fell except in Orissa and part of South-West Bengal. Rainfall was most general on the last day of the week, and heaviest in East Bengal. The depression from the west was then over the central districts, and was causing strong easterly winds at all stations to the east of it.

Pressure.—Changes during the week have been unusually large. The fairly rapid rise in the early part of the week brought readings to about a 10th of an inch above the normal. The fall which then set in caused a large defect during the remaining days of the week. The changes on the 27th, when the small storm was passing near Rangoon varied from a rise of a twentieth of an inch in the west of Bihar to a fall of ·176 inch at Rangoon, a relative fall of nearly a quarter of an inch. On the 28th, when pressure was rising in Burma, changes varied from a rise of ·157 inch at Rangoon to a fall of ·177 inch at Arrah, a relative change of a third of an inch in a direction opposite to that of the previous day. Defect then ranged from ·13 inch in the south of the Bay to ·25 inch at Dehree. On the 29th pressure was again rising, and readings were relatively lowest at some of the central stations.

Temperature.—Has been steadily below the normal by several degrees at all except a few stations in North Bihar, North Bengal, and East Bengal, where there has been at times a small excess. Means are everywhere below the normal, and the average defect for the large divisions varies from 2·3° in North Bihar to 6° in Chota Nagpur.

Rainfall.—Numerous showers have fallen in all districts. General heavy rain has fallen in North Bengal and parts of East Bengal, but in the extreme west of the province the falls were much lighter and more scattered, especially in the western districts of South Bihar. As the rainfall was due to thunder-storms, the amounts recorded at the rainfall stations are very various in amount, but the mean falls for the larger divisions are all above the normal. Excess is 1·64 inches in North Bengal, 1·04 inches in North Bihar, and in the other districts it varies from ·84 inch to ·39 inch. The amount received in South Bihar is nearly nine times the normal fall for the week, and in Chota Nagpur more than eleven times.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 29th of April 1893:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.						RAINFALL.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 1st April 1893.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	102·5	66·8	90·1	76·0	83·1	—3·1	0·75	0·36	+0·39	1·17	0·59	+0·58	1·00	1·19	1·00	1·19
South-West Bengal ...	104·7	67·5	93·1	73·6	83·4	—4·1	1·50	0·78	+0 72	1·97	1·11	+0 86	2·27	1 85	2·27	1·85
North Bengal	95·7	57·8	87·8	69·6	78·7	—2·9	2·77	1·13	+1·64	2 64	1·38	+1·26	4 41	2·20	4·41	2·20
East Bengal	93·3	67 0	87·0	71·3	79·1	—2·7	1·95	1·45	+0·50	2 00	1·83	+0·17	3·66	3 59	3 66	3 59
North Bihar	99·3	63·3	92·4	71·7	82·1	—2·3	1·37	0·33	+1·04	1·73	0·50	+1·23	1·48	0·69	1·48	0·69
South Bihar	103 4	65·7	96 7	73·8	85·4	—3 0	0·87	0·10	+0·77	1·32	0·23	+1·09	0·96	0·35	0·96	0·35
Chota Nagpur	104·3	61 2	94·8	69·5	82·1	—6·0	0 93	0·09	+0·34	2·14	0·14	+2·00	0 96	0·41	0·96	0·41

METEOROLOGICAL OFFICE, BENGAL,
The 2nd May 1893.

C. LITTLE,
for Meteorological Reporter to the Govt. of Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 29th April 1893, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 29th April 1893.			Week ending Saturday, the 30th April 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	195	63,825	1,035	155	46,570	793
Jute	3	850	13	7	2,675	19
Firewood	101	67,175	975	38	20,070	323
Other articles	656	1,93,350	3,012	565	1,28,855	1,776
Total ...	955	3,25,200	5,035	765	1,98,170	2,911

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 22nd April 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	263,003	2,66,547 15 0	34,06,844 20	7,42,868 2 0	18,903 7 0	10,28,319 8 0	73,222½	124,341½	197,563½
Or per mile of railway	......	165 8 1	......	461 4 3	11 11 10	638 8 2	......	......	......
For previous 15 weeks of half-year	4,484,675	50,50,089 12 0	4,46,01,776 30	1,00,54,465 11 0	2,76,736 1 0	1,53,81,291 8 0	1,157,086	1,682,625½	2,869,711½
Total for 16 weeks ...	4,747,678	53,16,637 11 0	4,80,08,621 10	1,07,97,333 13 0	2,95,639 8 0	1,64,09,611 0 0	1,230,308½	1,806,967	3,067,275½
Comparison.									
Total for corresponding week of previous year	275,023½	2,74,850 11 5	36,70,822 10	8,41,693 6 4	20,890 6 6	11,37,434 8 3	72,995	140,114	213,109
Per mile of railway corresponding week of previous year ...	......	170 10 7	......	522 10 1	12 15 6	706 4 2	......	......	......
Total for corresponding 16¾ weeks of previous year	4,759,977	52,78,288 0 4	4,66,62,310 30	1,09,55,552 15 7	3,07,431 2 3	1,65,41,272 2 2	1,280,685	1,777,384	3,058,069

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 22nd April 1893 on 22¼ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	20,055	5,151 14 0	11,082 30	426 5 0	12 0 0	5,590 3 0	881	87	968
Or per mile of railway	......	231 8 9	......	19 2 7	0 8 7	251 3 11	......	......	......
For previous 15 weeks of half-year	*352,022	*92,491 15 0	†1,86,889 0	†6,014 3 0	‡161 0 0	98,667 2 0	13,581	1,583	15,164
Total for 16 weeks ...	372,077	97,643 13 0	1,97,971 30	6,440 8 0	173 0 0	1,04,257 5 0	14,462	1,670	16,132
Comparison.									
Total for corresponding week of previous year	20,592½	5,205 8 4	15,679 20	682 0 0	14 0 3	5,901 8 7	890	78	968
Per mile of railway corresponding week of previous year ..	......	233 15 4	......	30 10 5	0 10 1	265 3 10	......	......	......
Total for corresponding 16¾ weeks of previous year ...	384,363½	99,885 11 10	3,15,700 0	10,927 12 9	190 9 6	1,11,004 2 1	14,550	1,825	16,375

* Added number of passengers 800 and Rs. 8 }
† Ditto Mds. 21 and „ 19 } on account of difference between the approximate and audited figures for the week ended 18th March 1893.
‡ Ditto „ 7 }

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 22nd April 1893, on 161⅝ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.*	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	15,635	13,348 1 0	58,022 30	10,040 5 0	46 0 0	23,434 6 0	6,510	3,232½	9,742½
Or per mile of railway	......	82 11 3	......	62 3 4	0 4 6	145 3 1	......	......	......
For previous 15 weeks of half-year	*287,759	*2,05,806 14 0	†8,96,934 10	†1,29,293 2 0	‡673 0 0	3,35,773 0 0	80,581½	51,273½	131,855
Total for 16 weeks ...	303,394	2,19,154 15 0	9,54,957 0	1,39,333 7 0	719 0 0	3,59,207 6 0	87,091½	54,506	141,597½
Comparison.									
Total for corresponding week of previous year	15,788	12,699 3 10	36,785 0	7,156 11 0	77 5 3	19,933 4 1	7,009	2,227	9,236
Per mile of railway corresponding week of previous year ...	......	78 10 11	......	44 5 5	0 7 8	123 8 0	......	......	......
Total for corresponding 16⅔ weeks of previous year	274,887½	2,19,503 8 4	7,19,232 10	1,36,324 4 0	1,204 1 9	3,57,031 14 1	1,00,881	36,582	137,463

* Added number of passengers 2,490 and Rs. 2,965 }
† Ditto Mds. 2,514 and deducted „ 1,141 } on account of difference between the approximate and audited figures for the week ended 18th March 1893.
‡ Ditto „ 20 }

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for the week ended 22nd April 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	156,910	73,980 0 0	5,98,987 0	81,220 0 0	11,070 0 0	1,66,270 0 0	27,786	29,226	57,012
Or per mile of railway	202	95 0 0	771 0	105 0 0	†2 0 0	202 0 0	......	......	......
For previous 15 weeks of half-year*	2,757,013	13,28,012 0 0	1,10,89,789 0	14,46,900 0 0	2,32,720 0 0	30,07,632 0 0	425,233	427,223	852,506
Total for 16 weeks ...	2,913,923	14,01,992 0 0	1,16,88,866 0	15,28,120 0 0	2,43,790 0 0	31,73,902 0 0	453,069	456,449	909,518
Comparison.									
Total for corresponding week of previous year	147,612	71,795 0 0	5,93,227 0	75,203 0 0	12,474 0 0	1,59,472 0 0	27,245	29,103	56,348
Per mile of railway corresponding period of previous year ...	190	92 0 0	763 0	97 0 0	†2 0 0	191 0 0	......	......	......
Total to corresponding date of previous year	2,721,510	13,47,466 0 0	97,86,460 0	12,87,784 0 0	2,30,823 0 0	28,66,073 0 0	443,297	473,549	916,846

* Audited up to week ending 25th February 1893.
† Excluding steamer earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 22nd April 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	26,794	9,420 0 0	74,240 0	4,510 0 0	290 0 0	14,220 0 0	3,485	2,167	5,672
Or per mile of railway	214	76 0 0	594 0	36 0 0	2 0 0	114 0 0	......	......	......
For previous 15 weeks of half-year*	470,070	1,69,259 0 0	1,020,814 0	63,504 0 0	2,052 0 0	2,34,815 0 0	56,225	29,007	85,232
Total for 16 weeks ...	496,864	1,78,679 0 0	1,095,054 0	68,014 0 0	2,342 0 0	2,49,035 0 0	59,710	31,194	90,904
Comparison.									
Total for corresponding week of previous year	27,192	9,055 0 0	59,071 0	3,958 0 0	190 0 0	13,203 0 0	3,485	2,187	5,672
Per mile of railway corresponding week of previous year ...	218	72 0 0	473 0	32 0 0	2 0 0	106 0 0	......	......	......
Total to corresponding date of previous year	481,298	1,72,662 0 0	9,90,787 0	60,772 0 0	1,575 0 0	2,35,009 0 0	59,625	32,762	92,

* Audited up to week ending 25th February 1893.

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 22nd April 1893, on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	13,830	4,550 0 0	7,222 0	720 0 0	120 0 0	5,300 0 0	2,527	737	3,264
Or per mile of railway ...	161	53 0 0	83 0	8 0 0	2 0 0	63 0 0	......	...	......
For previous 15 weeks of half-year*	289,952	88,543 0 0	2,40,248 0	21,641 0 0	2,580 0 0	1,15,764 0 0	37,516	11,287	48,803
Total for 16 weeks ...	303,782	93,093 0 0	2,47,470 0	25,361 0 0	2,700 0 0	1,21,154 0 0	40,043	12,024	52,067
Comparison.									
Total for corresponding week of previous year	14,913	4,738 0 0	25,530 0	1,027 0 0	180 0 0	5,945 0 0	2,489	737	3,224
Per mile of railway corresponding week of previous year ...	174	55 0 0	297 0	12 0 0	2 0 0	69 0 0	......	......	......
Total to corresponding date of previous year	279,378	90,897 0 0	2,60,711 0	17,388 0 0	2,504 0 0	1,10,789 0 0	40,616	11,798	52,444

* Audited up to week ending 25th February 1893.

BENGAL AND NORTH-WESTERN RAILWAY.

(Includes the Tirhut State Railway.)

Approximate return of traffic for the week ending 22nd April 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	88,600	33,210	5,52,660	82,400	11,100	1,26,710	14,364	20,628	34,992
Or per mile of railway ...	117·20	43·93	731·03	109·00	14·68	167·61	......	...	......
For previous 15 weeks of half-year*	1,491,632	6,38,555	67,84,894	9,95,798	1,76,838	18,11,191	212,746	284,339	497,085
Total for 16 weeks ...	1,580,232	6,71,765	73,37,554	10,78,198	1,87,938	19,37,901	227,110	304,967	532,077
Comparison.									
Total for corresponding period of previous year on 755 miles open	97,868	37,063	5,36,392	87,839	15,476	1,40,398	11,584	27,219	38,803
Per mile of corresponding week of previous year	129·63	49·00	710·45	116·37	20·50	185·96	......	......	......
Total to corresponding date of previous year	1,523,907	6,80,735	57,84,081	8,72,945	1,81,698	17,36,398	196,313	309,677	505,990

* Includes audited figures up to 4th March 1893.

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 15th April 1893	11,403	0	0
Corresponding period of 1892	13,064	0	0
Decrease	1,661	0	0
Receipts per mile for the week ending 15th April 1893	223	9	5
Corresponding period of 1892	256	2	5
Decrease	32	9	5
Receipts from 1st January to 15th April 1893	1,58,338	0	0
Corresponding period of 1892	1,54,395	0	0
Increase	3,943	0	0

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OFFICIAL PAPERS.

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LIBERALITY OF THE MAHARAJA OF CHOTA NAGPUR.

No. 49T.M., dated Darjeeling, the 5th May 1893.

From—J. A. BOURDILLON, ESQ., Offg. Secretary to the Government of Bengal, Municipal Department,

To—The Commissioner of the Chota Nagpur Division.

I AM directed to acknowledge the receipt of your letter No. 8M., dated the 17th April 1893, with which you forward a copy of a letter from the Honorary Secretary to the Dufferin Fund Committee, Ranchi Branch, reporting that the Maharaja of Chota Nagpur has made a donation of Rs. 2,000 to the Fund on the occasion of the recent visit of His Honour the Lieutenant-Governor to Chota Nagpur. The amount is intended to defray part of the cost of building a zenana hospital to be attached to the Charitable Dispensary at Ranchi.

2. In reply, I am directed to say that the Lieutenant-Governor accepts the donation, and to request that you will be so good as to convey to the donor an expression of His Honour's thanks for his liberality and public spirit. This letter will be published in the *Calcutta Gazette*.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 6th May 1893.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.			
	BURDWAN DIVN.		
1	Burdwan May 6, '93 Kalna ... Katwa ... Raniganj ..	4·05 1·69 3·12 2·70	Weather—cool for the time of year and stormy. Ploughing going on since the recent rain. Fodder and water sufficient. Prices of common rice :— Srs. Burdwan ... ... 10 to 13 per rupee. Kalna ... ... 10 to 13 per rupee. Katwa ... ... 13 per rupee. Raniganj ... ... 13 per rupee.
2	Bankura „ 6, '93 Vishnupur ...	1·61 2·5	Weather—cloudy with occasional storms. Ploughing going on. Sugarcane is being planted. Fodder and water-supply sufficient. Price of rice 11½ seers per rupee both at Sadar and Vishnupur.
3	Birbhum „ 6, '93 Rampur Hát ...	1·09 0·93	Weather—cloudy with seasonable showers of rain. Sky still overcast. Cool for the time of year. Ploughing of land is briskly going on. No crops to report upon. Fodder is scanty but water sufficient. State of cattle normal. Price of rice stationary, being 12 to 14½ seers per rupee.
4	Midnapore „ 6, '93	1·69	Rain all over the district. Ploughing and sowing operations going on. Prices of common rice :— Srs. Sadar ... ... 11 per rupee. Contai ... ... 14 per rupee. Tamluk ... ... 12 per rupee. Garhbeta ... ... 11 to 11½ per rupee.
5	Hooghly „ 6, '93 Serampore ... Jahanabad ...	0·96 1·67 2·80	Weather—changeable and stormy; very cool for the season. Cultivation continues and will be considerably facilitated by the rain. Water level still remains very low, the soil absorbing all the rain that falls. Prices of common rice :— Srs. Sadar ... ... 10 to 11 per rupee. Serampore ... ... 10 to 11½ per rupee. Jahanabad ... ... 12 to 12½ per rupee.
6	Howrah „ 6, '93 Ulubaria ...	1·49 2·25	Weather—cool for the time of year. Paddy and jute being sown. Condition of cattle good. Fodder and water-supply sufficient. Price of rice 10 to 11½ seers per rupee.
	PRESIDENCY DIVN.		
7	24-Parganas „ 6, '93	2·54	Weather—seasonable. Sowing of *aus* and jute commenced. No cattle-disease. Sufficient fodder and water. Prices of common rice :— Srs. C. Sadar ... ... 10 to 13 8 per rupee. Basirhat ... ... 12 5 per rupee. Barrackpore ... ... 11 12 per rupee. Dum-Dum ... ... 11 10 per rupee. Barasat ... ... 10 9 per rupee. Diamond Harbour ... ... 13 0 per rupee.
8	Nadia „ 6, '93 Kushtia ... Meherpur ... Chuadanga ... Ranaghat ...	2·17 5·27 2·64 0·53 1·98	Weather—cool for the time of year. Sowing of paddy proceeding briskly everywhere. Sugarcane doing well. Ample fodder and water for cattle. Prices stationary.
9	Khulna „ 6, '93 Bagerhat ... Satkhira ...	2·08 1·14 2·73	Weather—hot and rainy. Harvesting of *boro* continues; outturn estimated at 12 annas in Bagerhat. Land is being prepared for *aman* and *aus* and jute is being sown. Common rice sells at 10½ seers per rupee at Satkhira and at 13 seers per rupee at Sadar and Bagerhat. Fodder and water for cattle sufficient.
10	Jessore „ 6, '93 Jhenida ... Magura .. Narail ... Bangaon ...	4·72 4·42 4·57 5·17 0·99	Weather—cloudy with occasional showers and storms in the afternoon. The heavy rainfall of the week has retarded the sowing of *aus* and *aman* in low lands, but has benefited the paddy previously sown. No more rain wanted for the present. *Til*, jute and indigo promising. Plenty of fodder and water for cattle except in a few places in thana Sharsha.
11	Murshidabad „ 6, '93	0·33	Weather—seasonable; at times cloudy. Sowing of *aman* and *aus* paddy continues. Indigo and *til* are promising. The recent rain has done good to the *bhadoi*, jute and mulberry plants. Fodder sufficient for cattle. Three cases of cattle-disease reported from Kandi. Coarse rice sells at 13 seers per rupee.

Division	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL—*concld.*					
CHITTAGONG DIVN.	12	Chittagong	May 6, '93	5·71	Weather—seasonable. Prospects of crops good. *Aus* cultivation going on. Prices stationary. Condition of cattle generally good. Supply of fodder sufficient.
	13	Noakhali	„ 6, '93	24·31	Weather—hot, alternating with heavy rain. Serious damage has been done by heavy rain to *rabi* crops that are still on the ground and to young paddy shoots. Fodder and water sufficient. No cattle-disease to any serious extent. Common rice sells at 12 to 13 seers per rupee.
	14	Tippera	„ 6, '93	10·11	Weather—on the whole favourable to cultivation, but rain unusually heavy for the season. *Boro* paddy being harvested. Standing crops on high ground improved by late rain. Jute and *til* somewhat damaged in low lands. Sowing interrupted.
	15	Chittagong Hill Tracts.	„ 4, '93	4·85	Weather—hot and rainy. *Jum* burning has been retarded a great deal owing to the early fall of rain. Sowing in *jums*, however, commenced in some places. Condition of cattle generally good. Common rice being sold at:— Srs. Rangamati ... ... 10 } per rupee. Bandarban ... ... 9¾ } per rupee. Manicksury ... ... 16 } per rupee.
DACCA DIVN.	16	Dacca	„ 6, '93	4·71	Weather—cloudy and rainy. Heavy rain fell in Narayanganj. Harvesting of *boro* paddy, *cheena* and *kaon* going on *Aman*, *aus* and jute thriving. Fodder available. No cattle-disease. Common rice selling at from 10 to 12 seers per rupee.
	17	Faridpur Goalundo Madaripur	„ 6 '93	3·55 6·68 5·23	Weather—very unsettled and wonderfully cool for the time of year. State of young crops good. *Boro* paddy being reaped with a good outturn. Cultivation and sowing of low lands much retarded by the heavy rain. Common rice sells at from 10 to 12 seers per rupee. Cattle-pox still prevalent in three thanas. Fodder available, and otherwise condition of cattle good.
	18	Backergunge Patuakhali Bhola	„ 6, '93	7·75 1·36 12·87	A succession of thunderstorms with heavy rain. The heavy rain has damaged the *aus* plants. Common rice selling at from 9 to 12 seers per rupee. Fodder and water sufficient.
	19	Mymensingh	„ 6, '93	5·01	Weather—cool, cloudy and stormy. State and prospects of crops good. *Boro* paddy not fully harvested in all parts of the district. In the Netrakona subdivision the outturn of *boro* crop is expected to be 16 annas. Common rice selling at from 11 to 14 seers per rupee. Health of cattle good. Supply of fodder and water sufficient.
RAJSHAHI DIVN.	20	Dinajpur Thakurgaon	„ 6, '93 ...	2·83 7·70	Weather—cloudy and rainy during the whole week with occasional breaks. The rainfall has been excessive. No more rain wanted at present. Sowing of *bhadoi* and jute going on. Price of rice unchanged. Cattle in good condition. Fodder and drinking water plentiful.
	21	Rajshahi Nator Naugaon	„ 6, '93	1·42 3·50 3·34	Weather—very cool for time of year, owing to heavy falls of rain. Prospects of standing crops excellent. Agricultural operations much facilitated by late rain; but a break in the weather would now be advantageous. Supply of water and fodder ample. No cattle-disease anywhere. Price of rice varies from 11 to 15 seers per rupee.
	22	Rangpur Gaibanda Nilphamari Kurigram Ulipur	„ 6, '93	2·32 3·66 1·22 2·50 2·31	Weather—unsettled. Prospects of *bhadoi* crop favourable. Price of common rice 12 seers per rupee.
	23	Bogra Sherpur Nowkhila	„ 6, '93	2·14 0·42 2·87	Weather—stormy and unsettled. Prospects good. Lands are being prepared for *aman*. *Aus* and jute are doing well. Common rice sells at 13½ seers per rupee. Fodder and water sufficient.
	24	Pabna	„ 6, '93	3·57	Weather—seasonable, with occasional showers. The rain has done good to the rice and sugarcane crops. Price of rice at Sirajganj Rs. 3-10 to Rs. 5 per maund and at Pabna 12 seers per rupee. Condition of cattle good. Water-supply and fodder sufficient.
	25	Darjeeling Siliguri	„ 6, '93 ...	0·89 1·43	Weather—wet and cloudy in afternoons. Mornings fine. *In the hills*:—Wheat and barley being harvested. Potatoes, *kangni*, *bhadoi*, *marua* and *bhutta* progressing favourably. *In the terai*:—Jute and *bhadoi* coming up. Fodder and water sufficient. Prices of coarse rice.— Srs. Hills ... ... 10 } per rupee. Terai ... ... 12 } per rupee.
	26	Jalpaiguri	„ 6, '93	1·91	Weather—cloudy and rainy with occasional breaks. Untimely rain has impeded the growth of jute and *bhadoi* cultivation. Price of rice unchanged. Fodder and water sufficient. No cattle-disease reported.

No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.			
Bhagalpur Divn.			
27	Monghyr May 6, '93	1·70	Weather—cloudy with occasional showers of rain; cool during the week. Lands being ploughed for *bhadoi*. *Cheena* almost ripe. Prices of coarse rice:— Srs. Sadar ... ... 13 to 15; Begusarai ... ... 14½; Jamui ... ... 12½ } per rupee.
	Begusarai ...	0·97	
	Jamui ...	1·65	
28	Bhagalpur " 6 '93	2·75	Weather—cool; cloudy and heavy showers. The heavy rain in the Sadar sub-division has done damage to the gram and wheat still lying on the threshing-floor, otherwise prospects are favourable.
	Madhipura ...	0·42	
	Supaul ...	1·53	
29	Purnea " 6, '93	0·88	Weather—cloudy and remarkably cold for the season. *Bhadoi*, jute and *aghani* sowings in progress. Seeds germinating well. The heavy rain has been beneficial, but no more is required. Fodder and water plentiful. Prices stationary.
	Kishanganj ...	1·85	
	Araria ...	1·74	
30	Malda " 6, '93	1·68	Weather—cool and cloudy throughout the week. Threshing of *rabi* crops drawing to a close. Rain has benefited the *bhadoi* crops already sown. Prospect of *boro* rice continues favourable. It is being reaped in some places. Price of coarse rice varies from 11 to 15 seers per rupee. No want of fodder or drinking water.
	Chanchal ...	1·33	
	Shibganj ...	2·69	
	Gajole ...	3·59	
31	Sonthal Parganas " 6, 93	*	Weather—cloudy and cool with storms. A severe thunderstorm with strong wind, rain and hail on the 3rd instant. The storms have damaged the mango crop. *Boro* paddy in Rajmahal is doing well. Prices much the same. Fodder and water plentiful.
	Deoghur ...	1·05	
	Godda ...	1·50	
	Jamtara ...	1·88	
	Pakur ...	2·73	
	Rajmahal ...	2·64	
Patna Division.			
32	Patna " 6, '93	1·13	Weather—unseasonable; cloudy. Recent rain expected to do harm to the crops not yet brought home. Threshing still going on. Sugarcane and millets doing well. Opium weighment about to be finished. Prices of food-grains generally stationary. Common rice sells at:— Srs. Sadar ... ... 15½; Barh ... ... 11½; Dinapore ... ... 15 } per rupee.
	Barh ...	1·16	
	Dinapore ...	0·35	
33	Gaya " 6, '93	0·76	Weather—cloudy and unsettled with several thunderstorms. The rain has done much good to the young sugarcane, but damaged what *rabi* crops are lying on the threshing-floors. Prices remain about the same. Fodder and water-supply sufficient.
	Nawada ...	0·58	
	Jahanabad ...	0·70	
	Aurangabad ...	Nil	
34	Shahabad " 6, '93	2·07	Weather—unsettled; frequent storms with rain from the north-west. The rainfall in the north has benefited the sugarcane, millet and Indian-corn, but great damage has been done to the mango crop, which will be a failure throughout the district.
	Buxar ...	0·21	
35	Darbhanga " 6, '93	3·08	Weather—occasionally cloudy and stormy. Heavy rain at head-quarters on the 4th instant. The rainfall of the week has greatly benefited the paddy, *mung* and indigo crops. It has also enabled the cultivators to proceed with the cultivation for *bhadoi* crops. Mango crop is reported to have been slightly damaged by hail. Fodder for cattle sufficient. Prices almost stationary.
	Madhubani ...	1·93	
	Samastipur ...	1·01	
36	Muzaffarpur " 6, '93	1·04	Weather—unsettled and cloudy. *Marua, cheena, kado*, paddy and *makai* on low lands being sown. The rainfall has facilitated the preparation of lands for the *bhadoi* and rice sowings. No disease among cattle. Fodder and water sufficient.
	Sitamarhi ...	1·39	

* Figures not furnished.

Division	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR—*concld.*				
PATNA DIVISION—*concld.*	37	Saran May, 6, '93	1·08	Weather—first part of the week fine, latter part stormy. East wind. Agricultural prospects good. Prices almost stationary. Water and fodder ample. Prices of common rice :— Srs. c. Chapra ... ... 13 0 } per rupee. Siwan ... ... 12 8 Gopalganj 13 7
	38	Champaran „ 6, '93	0·65	Weather—cool on account of rainfall. Prospects of indigo and food-crops have much improved owing to the rain which fell during the week. Opium weighments at Sadar have been finished; those at Ekderi about to be commenced.
ORISSA.				
ORISSA DIVN.	39	Cuttack „ 6, '93	0·78	Weather—unsettled. Lands being ploughed. Supply of fodder and wated ample. Current prices of common rice :— Srs. c. Srs. c. Sadar ... ... 10 8 to 14 7 } per rupee. Kendrapara ... ... 15 12 to 20 0 Jajpur ... ... 15 12 to 18 6 Banki 17 0
	40	Puri „ 4, '93	1·23	Weather—hot. Lands are being cultivated for the ensuing *sarad* crop. Harvesting of *dalua* paddy still going on. Miscellaneous crops good. Prices of common rice stationary.
	41	Balasore „ 6, '93	3·60	Weather—very stormy and cool. Ploughing continues, though somewhat impeded by heavy rain of last few days. *Dalua* rice ripening. Prices stationary.
CHOTA NAGPUR.				
South-West Frontier Agency.				
CHOTA NAGPUR DIVN.	42	Hazaribagh May, 6, '93	0·83	Weather—seasonable. Sugarcane doing well. Prospects of mango fair. Cattle-disease in some thanas. Common rice selling at from 11 to 14 seers per rupee. Fodder and water sufficient.
	43	Lohardaga „ 6, '93	1·59	Weather—cool with occasional storms of rain. Ploughing going on. Sowing of *gora* paddy has commenced.
	44	Palamau „ 5, '93	Nil	Weather—seasonable: great heat. *Rabi* harvest being completed. *Mahua* crop good. Rice selling at from 13¼ to 15 seers per rupee. No deficiency of fodder or water.
	45	Singhbhum „ 6, '93	0·96	A week of storms and rain and very cool weather. The *mahua* harvest is over, and the outturn has been about 12 annas. No cattle-disease reported. Water and fodder plentiful. Common rice selling at 12 seers per rupee.
	46	Manbhum „ 6, '93 Gobindpur ...	0·78 0·50	Weather—cloudy and stormy. Weather extraordinarily cool for the time of year. The *mahua* crop on the whole has been a good one. Sugarcane doing well. Rice 10 to 13 seers per rupee. Fodder and water-supply sufficient.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 9th May, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the

QUANTITIES PER RUPEE IN

	Number.	DISTRICTS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.			JOWAR OR CHOLUM. (*Sorghum Vulgare.*)		
			Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
BENGAL.			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
BURDWAN DIVISION.	1	Burdwan ..	13 8	13 8	11 8	...	...	19 0	10 0	10 2	11 4	12 12	12 0	13 8	...	...	...
	2	Bankura ..	12 0	12 0	12 0	18 0	18 0	16 0	10 0	10 0	12 4	11 8	11 8	14 0		...	...
	3	Birbhum ..	11 0	10 4	10 8	9 8	9 8	...	10 8	10 8	11 0	12 12	13 8	12 12	...	...	...
	4	Midnapore ...	11 0	11 0	11 0	...	...	...	10 0	10 0	10 0	12 8	12 12	13 0	...	...	...
	5	Hooghly ...	11 8	11 8	13 0	11 0	11 0	...	8 0	8 0	8 0	10 0	10 0	12 0	...	...	...
	6	Howrah ...	...	...	...	...	...	...	10 0	9 0	9 4	...	10 8	11 8	...	...	...
PRESIDENCY DIVISION.		Calcutta .	12 0	12 4	11 0	18 13	17 0	14 8	7 6	7 4	7 14	10 0	10 0	10 7	20 0	20 0	15 13
	7	24-Parganas ...	12 0	11 8	11 4	18 0	18 0	16 0	8 0	8 0	8 0	12 0	12 0	12 0	16 0	16 0	...
	8	Nadia ..	14 6	14 6	11 13½	20 5	17 8	17 12½	9 11	10 3	10 2½	11 3½	12 2	11 10	...	...	...
	9	Khulna ...	...	...	...	...	...	...	10 12	10 10	10 8	13 0	12 14	12 12	...	...	...
	10	Jessore .	12 0	10 0	10 0	...	...	...	10 4	10 0	10 0	13 4	13 0	13 0	...	...	...
	11	Murshidabad ...	13 0	13 0	12 0	...	...	..	10 0	10 0	9 0	12 0	13 0	12 0	...	...	...
CHITTAGONG DIVISION.	12	Chittagong ...	10 0	10 0	9 4	...	...	..	11 0	11 0	8 8	13 4	13 0	10 14	...	...	...
	13	Noakhali ...	...	..	...	...	...	...	9 5	9 14	12 0	12 0	12 6	13 0	...	...	...
	14	Tippera ...	11 0	11 0	14 0	...	...	...	9 8	9 8	8 8	10 12	10 12	13 14	...	...	...
	15	Chittagong Hill Tracts.	...	...	...	...	...	...	...	...	...	10 0	10 0	10 0	...	...	...
DACCA DIVISION.	16	Dacca ..	11 0	11 0	11 0	26 0	26 0	...	9 8	10 0	10 0	10 8	11 0	13 0	...	...	...
	17	Faridpur ..	16 0	16 0	14 0	20 0	20 0	40 0	7 0	8 0	11 0	10 0	12 0	13 4	...	...	..
	18	Backergunge ...	...	...	...	...	...	...	10 4	10 8	9 12	11 10	11 10	10 4	...	...	...
	19	Mymensingh .	9 8	9 8	10 0	...	...	...	10 0	10 0	10 0	11 0	11 0	13 12	..	...	...
RAJSHAHI DIVISION.	20	Dinajpur ...	13 3	12 0	10 13	20 0	20 0	18 0	9 6	9 9	9 8	13 3	14 0	12 0	...	...	...
	21	Rajshahi ...	14 4	14 4	12 0	24 0	24 0	19 8	10 8	10 8	9 12	11 10	12 0	10 14	...	...	...
	22	Rangpur	12 12	12 12	9 1	...	...	...	10 0	10 0	9 1	11 0	12 0	11 5	...	...	...

A In the subdivisions the retail prices of salt per rupee are :—Kalna 10 seers, Katwa 11 seers, and Raniganj 10½ seers.
B At Vishnupur the retail price of salt is 11 seers per rupee.
C At Rampur Hát the retail price of salt is 11 seers per rupee.
D In the subdivisions the retail prices of salt per rupee are :—Contai 10½ seers, Tamluk 11½ seers.
E At Bhaddreswar the retail price of salt is 11 seers 6 chitaks per rupee.
F At Ulubaria the retail price of salt is 11 seers per rupee.
G In the mufassal marts the retail prices of salt per rupee are :—Chetla Hát 12 seers 5 chitaks, Baduria 11 seers 7 chitaks.
H In the subdivisions the retail prices of salt per rupee are :—Bahadurkhali 10½ seers, Chuadanga 10 seers, Meherpur 10½ seers, and Ranaghat 10½ seers.
I In the subdivisional marts the retail prices of salt per rupee are :—Bagerhat 8 seers and Satkhira 11 seers.
J In the subdivisions the retail prices of salt per rupee are :—Jhenida 9 seers 9 chitaks, Narail 9 seers 10 chitaks, and Bangaon 10 seers 11 chitaks.

Head-quarters Station Bazars of the Districts of Bengal on the 30th April, 1893.

Indian-corn or Maize. (*Zea Mays.*) Present return.	Indian-corn Next preceding return.	Indian-corn Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus Indicus.*) Present return.	Arhar Next preceding return.	Arhar Corresponding return of last year.	Firewood. Present return.	Firewood Next preceding return.	Firewood Corresponding return of last year.	Salt. Present return.	Salt Next preceding return.	Salt Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt. Present return.	Wholesale Salt Next preceding return.	Wholesale Salt Corresponding return of last year.	Districts.	Number.	
															BENGAL.		
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
...	...	...	22 0	20 0	17 0	106 0	105 0	100 0	11 2½ [A]	11 2½	11 7	3 6 8	3 6 8	3 6 0	Burdwan	1	Burdwan Division.
17 0	17 0	18 0	12 0	12 0	14 0	320 0	320 0	220 0	11 0 [B]	11 0	11 4	3 10 0	3 10 0	3 9 6	Bankura.	2	
...	...	...	12 0	12 0	11 4	250 0	250 0	200 0	10 12 [C]	10 12	10 8	3 12 6	3 12 6	3 10 0	Birbhum.	3	
...	...	...	19 0	19 0	10 0	240 0	240 0	120 0	11 7 [D]	11 7	10 8	3 7 0	3 7 0	3 12 0	Midnapore.	4	
...	...	...	11 0	12 0	11 0	140 0	120 0	120 0	11 0 [E]	11 0	10 0	3 6 0	3 6 0	3 12 0	Hooghly.	5	
...	...	...	10 10	12 8	12 8	105 0	95 0	100 0	10 10 [F]	11 0	10 8	3 8 0	3 8 0	3 6 0	Howrah.	6	
20 0	18 4	15 12	21 5	13 1	14 15	85 0	85 0	86 13	9 8	9 8	11 4	4 0 0	4 0 0	3 4 7	Calcutta.		
...	...	...	21 0	21 0	17 0	100 0	100 0	100 0	11 0 [G]	11 0	11 0	3 4 6	3 4 6	3 5 0	24-Parganas.	7	Presidency Division.
...	...	...	20 8	20 8	17 14½	128 0	128 0	128 0	10 0 [H]	10 0	10 10	3 8 0	3 7 0	3 10 0	Nadia.	8	
...	...	...	10 0	11 6	...	160 0	160 0	140 0	10 8 [I]	9 4	9 0	3 12 0	3 12 0	4 0 0	Khulna.	9	
...	...	...	16 0	15 0	18 0	120 0	120 0	160 0	9 14 [J]	9 14	9 2	3 10 0	3 10 0	3 10 0	Jessore.	10	
...	...	...	20 0	20 0	17 0	200 0	200 0	200 0	10 8 [K]	10 8	10 8	3 7 0	3 7 0	3 12 0	Murshidabad.	11	
...	...	...	...	...	...	106 0	106 0	110 0	10 0 [L]	10 0	9 8	3 12 0	3 12 0	4 0 0	Chittagong.	12	Chittagong Division.
...	...	...	...	...	9 0	...	...	...	10 0 [M]	10 0	8 0	3 14 0	3 14 0	4 8 0	Noakhali.	13	
...	...	...	12 0	11 5	8 0	...	...	...	10 13½ [N]	10 13½	9 0	3 12 0	3 12 0	4 0 0	Tippera.	14	
...	...	...	...	...	...	240 0	240 0	240 0	8 0	8 0	8 0	4 8 0	4 8 0	4 12 0	Chittagong Hill Tracts.	15	
...	...	...	16 0	16 0	14 0	120 0	130 0	120 0	10 0 [O]	10 0	10 0	3 9 0	3 9 0	3 8 0	Dacca.	16	Dacca Division.
...	...	...	...	...	...	...	...	...	10 12 [P]	10 12	9 12	3 12 0	3 12 0	3 14 0	Faridpur.	17	
...	...	...	Musuri. 8 6	8 8	...	80 0	80 0	80 0	10 8 [Q]	10 8	10 0	3 8 0	3 8 0	3 10 0	Backergunge.	18	
...	...	...	13 0	13 0	12 0	120 0	120 0	...	10 0 [R]	10 0	10 4	4 0 0	4 0 0	3 14 0	Mymensingh.	19	
...	...	...	24 0	18 13	16 0	160 0	160 0	160 0	10 8	10 0	10 4	4 0 0	4 0 0	3 14 0	Dinajpur.	20	Rajshahi Division.
...	...	...	20 14	21 0	20 6	240 0	240 0	240 0	9 9 [S]	9 9	9 9	3 10 8	3 10 8	3 10 8	Rajshahi.	21	
...	...	...	8 0	8 0	9 0	160 0	160 0	100 0	9 0 [T]	9 0	10 0	4 0 0	4 0 0	4 0 0	Rangpur.	22	

K In the subdivisions the retail prices of salt per rupee are :—Kandi 11 seers and Jangipur 10½ seers.
L At Cox's Bazar the retail price of salt is 8 seers per rupee.
M At Fenny Hát the retail price of salt is 9 seers per rupee.
N In the subdivisions the retail prices of salt per rupee are :—Chandpur 9 seers and Brahmanbaria 9 seers 2 chitaks.
O In the mufassal marts the retail prices of salt per rupee are :—Madanganj 10 seers, Manikganj 9 seers 13 chitaks, Mirkadim 10 seers, and Munshirhat 10 seers.
P At Madaripur and Goalundo the retail price of salt is 10 seers per rupee.
Q In the subdivisions the retail prices of salt per rupee are :—Pirojpur 10½ seers, Patuakhali 9 seers, and Bhola 9 seers.
R In the Netrakóna, Kishorganj, Kagmari, and Jamalpur subdivisions the retail price of salt is 10 seers per rupee.
S In the subdivisions the retail prices of salt per rupee are :—Nator 9 seers and Naugaon 9 seers 9 chitaks.
T In the subdivisions the retail prices of salt per rupee are :—Nilphamari 10 seers, Kurigram 8 seers, and Gaibanda 10 seers.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the Head-quarters

QUANTITIES PER RUPEE IN

Division	Number.	DISTRICTS.	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum. (Sorghum Vulgare.) Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
BENGAL—*continued.*			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Rajshahi Division—concld.	23	Bogra ...	10 0	10 0	11 4	...	...	...	8 4	9 12	9 12	12 12	12 12	12 12	...	...	...
	24	Pabna	15 12	15 12	13 8	22 8	22 8	...	6 0	6 0	7 2	12 4	12 4	13 2	...	...	...
	25	Darjeeling	8 0	8 0	8 0	10 0	10 0	8 0	5 0	5 0	5 0	10 0	10 0	9 0	..	...	...
	26	Jalpaiguri	11 0	10 0	10 0	13 0	13 0	15 0	10 0	10 0	6 12	12 0	13 4	11 0	...	...	...
BIHAR.																	
Bhagalpur Division.	27	Monghyr ...	14 11 to 16 13	14 11 to 15 12	12 9 to 14 2	21 0 to 23 1	21 0 to 22 1	18 6 to 19 15	7 13 to 10 8	9 7	8 14	12 9 to 13 10	13 10	10 8 to 11 5	17 13	18 14	16 9 to 17 13
	28	Bhagalpur ...	14 10	15 2	12 10	18 15	18 15	16 6	12 10	12 10	10 1	15 2	15 2	11 6	...	...	...
	29	Purnea (Kasba)	16 0	20 0	16 0	...	...	16 0	11 0	12 0	10 0	13 0	14 0	12 0	...	...	...
	30	Malda (English Bazar).	15 0	14 0	13 4	...	...	...	9 0	10 8	10 0	13 0	14 0	11 0	...	...	...
	31	Sonthal Parganas.	11 0	11 0	11 0	...	...	...	10 0	11 8	10 0	14 0	14 0	12 0	...	...	...
Patna Division.	32	Patna ...	14 8 / 13 4	Red. 14 8 / White 13 4	14 0 / 13 0	22 0	22 0	21 0	10 0	10 0	10 8	15 8	16 0	12 8	24 0	24 0	20 8
	33	Gaya ...	14 0	14 8	13 0	20 0	20 0	18 0	9 8	9 8	9 0	13 4	13 4	10 12	19 0	18 4	...
	34	Shahabad ...	13 0	13 0	13 8	18 0	18 0	18 0	8 0	8 0	8 0	13 12	14 0	11 0	...	...	...
	35	Darbhanga ...	13 3	12 1	14 4	19 0	19 0	17 9	10 8	9 14	9 14	13 8	14 5	12 5	...	...	...
	36	Muzaffarpur ...	14 0	14 0	11 0	21 0	24 0	17 0	8 0	8 0	10 0	14 0	14 0	11 0	...	...	...
	37	Saran ...	13 12	12 10	13 8	19 4	20 0	13 8	10 0	11 0	9 0	13 12	14 8	11 14	...	...	...
	38	Champaran ...	11 12 / ...	New. 11 0 / Old. 10 8	12 8	19 4	18 0	18 0	9 0	8 12	8 0 to 9 0	15 0	15 4	12 0 to 12 8	...	...	...
ORISSA.																	
Orissa Division.	39	Cuttack ...	13 2	13 2	10 13	...	...	...	10 8	10 8	9 3	14 7	14 7	13 2	...	...	...
	40	Puri ...	9 3	9 3	10 8	...	...	...	9 3	9 3	10 8	15 12	15 12	13 4	...	...	...
	41	Balasore ...	11 0	11 0	11 0	10 0	10 0	10 0	10 0	10 0	11 0	15 0	15 0	14 0	...	...	...
CHOTA NAGPUR.																	
Chota Nagpur Division.	42	Hazaribagh ...	13 0	12 0	12 0	15 0	14 0	14 0	7 0	7 0	8 0	12 8	12 8	13 8	...	...	...
	43	Lohardaga ...	12 0 / 7 0 to 8 0	Red. 12 0 / White. 7 0	12 0 / 7 4 to 9 0	18 0	17 0	12 0	10 0 to 11 0	12 0	12 0	12 0 to 13 8	13 8 to 15 0	13 4 to 15 0	...	...	...
	44	Palamau ...	13 8	14 10	12 6	23 10	27 0	14 1	10 11	12 15	12 6	14 1	13 8	14 1	...	...	...
	45	Singhbhum ...	12 0	12 0	14 0	11 0	12 0	20 0	8 0	10 0	12 0	11 0	13 0	14 0	...	...	...
	46	Manbhum	13 8	13 0	11 8	16 0	16 0	17 0	9 0 to 11 0	9 0 to 10 0	12 0	11 8 to 14 0	11 8 to 13 0	17 0	...	...	...

U At Sirajganj the retail price of salt is 11¼ seers per rupee.
V At Alipur the retail price of salt is 8 seers per rupee.
W At Begusarai and Jamui subdivisions the retail price of salt is 10 seers per rupee.
X In the Banka, Madhipura, and Supaul subdivisions the retail price of salt is 10 seers per rupee.
Y In the subdivisions the retail prices of salt per rupee are—Kisnanganj 10½ seers and Araria 10 seers.
Z In the subdivisions the retail prices of salt per rupee are :—Deoghur 10½ seers, Godda 9 seers, Jamtara 9 seers, Pakur 10½ seers, and Rajmahal 10 seers.
a In the Bihar and Dinapur subdivisions the retail price of salt is 10 seers per rupee.

CALCUTTA,
The 9th May, 1893.

Station Bazars of the Districts of Bengal on the 30th April, 1893—(concluded).

Indian-corn or Maize. (*Zea Mays.*) Present return.	Indian-corn or Maize. Next preceding return.	Indian-corn or Maize. Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus indicus.*) Present return.	Arhar. Next preceding return.	Arhar. Corresponding return of last year.	Firewood. Present return.	Firewood. Next preceding return.	Firewood. Corresponding return of last year.	Salt. Present return.	Salt. Next preceding return.	Salt. Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt. Present return.	Wholesale Salt. Next preceding return.	Wholesale Salt. Corresponding return of last year.	Districts.	Number.	
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
															BENGAL—*continued.*		
...	...	...	...	...	...	90 0	90 0	90 0	9 10	9 10	9 12	3 13 4	3 13 4	3 14 8	Bogra.	23	Rajshahi Division—*concld.*
...	...	...	22 8	22 8	15 0	200 0	200 0	200 0	[U] 10 8	10 8	9 12	3 10 0	3 10 0	3 12 0	Pabna.	24	
11 0	11 0	12 0	8 0	8 0	8 0	120 0	120 0	120 0	8 0	8 0	8 0	4 10 0	4 10 0	5 0 0	Darjeeling	25	
...	...	...	10 0	9 0	8 0	200 0	200 0	160 0	[V] 10 0	10 0	10 0	4 0 0	4 0 0	4 0 0	Jalpaiguri.	26	
															BIHAR.		
21 0 to 23 1	21 0 to 22 5	16 0 to 17 13	19 14 to 21 0	19 6	16 12 to 18 1	147 0 to 168 0	127 0 to 168 0	147 0 to 189 0	[W] 10 8 to 11 0	11 0	10 8 to 10 12	3 7 6	3 7 6	3 8 0	Monghyr.	27	Bhagalpur Division.
21 7	21 7	16 12	18 12	15 12	17 10	137 8	151 8	164 0	[X] 10 11	10 11	10 11	3 12 0	3 12 0	3 12 0	Bhagalpur.	28	
...	...	16 0	16 0	16 0	13 0	320 0	320 0	...	[Y] 10 0	10 0	9 0	3 10 2	3 10 2	4 7 0	Purnea.	29	
...	...	...	11 0	12 0	...	160 0	140 0	120 0	10 0	10 0	10 0	4 0 0	4 0 0	3 10 0	Malda	30	
20 0	21 0	13 0	23 0	23 0	16 0	200 0	200 0	200 0	[Z] 10 8	10 8	10 0	3 10 3	3 10 3	3 10 3	Sonthal Parganas	31	
22 0	22 0	18 0	22 8	22 8	20 8	130 0	130 0	120 0	[a] 11 8	11 8	11 8	3 8 0	3 8 0	3 8 0	Patna.	32	Patna Division.
19 0	19 4	...	19 0	19 4	19 0	120 0	120 0	160 0	[b] 10 0	10 0	10 0	3 12 0	3 12 0	3 14 0	Gaya.	33	
20 0	20 0	...	20 0	20 0	18 0	160 0	160 0	140 0	[c] 11 0	10 0	10 8	3 12 0	4 0 0	...	Shahabad.	34	
22 8	23 8	17 0	21 8	18 11	17 9	176 0	176 0	160 0	10 0	10 0	11 0	3 14 0	3 14 0	3 6 0	Darbhanga.	35	
21 0	21 0	16 0	21 0	19 0	19 0	160 0	160 0	160 0	[d] 11 0	11 0	11 0	3 10 0	3 10 0	3 10 0	Muzaffarpur.	36	
20 8	21 6	18 0	20 12	19 0	19 0	210 0	210 0	160 0	[e] 10 8	10 8	10 4	3 11 6	3 11 9	3 13 0	Saran.	37	
21 8	21 8	18 0	19 0	16 0	Old. 14 0 New 20 0	160 0	160 0	160 0	[f] 10 8	10 8	10 8	3 12 0	3 12 0	3 12 0	Champaran.	38	
															ORISSA.		
...	...	...	18 6	18 6	16 6	80 0	80 0	80 0	[g] 9 4	9 4	11 0	3 10 0	3 10 0	3 12 0	Cuttack.	39	Orissa Division.
...	...	...	15 12	15 12	14 7	80 0	80 0	80 0	9 3	11 8	12 0	4 0 0	3 5 0	3 6 0	Puri.	40	
...	...	...	10 12	10 12	...	160 0	160 0	140 0	[h] 11 0	11 0	10 8	3 6 0	3 6 0	3 14 0	Balasore.	41	
															CHOTA NAGPUR.		
17 8	16 0	17 8	17 8	16 0	17 0	240 0	240 0	240 0	[i] 9 0	9 0	9 0	3 13 6	4 4 0	4 0 0	Hazáribágh.	42	Chota Nagpur Division.
20 0	20 0 to 21 0	20 0	Big. 13 0 Small. 16 0	Big. 13 0 Small. 18 0	Big. 12 0 Small. 15 0	140 0	140 0	140 0 to 160 0	9 8	9 8	9 12	4 2 0	4 2 0	4 1 0	Lohardaga.	43	
...	23 10	16 14	33 12	27 0	17 0	...	...	...	8 7	9 0	8 1	...	...	...	Palámau.	44	
...	...	...	14 0	16 0	16 0	100 0	100 0	160 0	9 0	9 0	9 0	4 6 0	4 6 0	4 4 0	Singhbhum.	45	
18 0	18 0	...	18 0	18 0	17 0	...	...	...	10 10	10 10	10 10	3 11 0	3 11 0	3 12 0	Manbhum.	46	

b In the subdivisions the retail prices of salt per rupee are :—Jahanabad 10 seers, Nawada 9 seers, and Aurangabad 10¼ seers.
c In the subdivisions the retail prices of salt per rupee are :—Sasaram 10½ seers, Buxar 10½ seers, and Bhabhua 10 seers.
d In the subdivisions the retail prices of salt per rupee are :—Sitamarhi 11 seers and Hajipur 10½ seers.
e At Siwan the retail price of salt is 11 seers 5 chitaks per rupee.
f At Bettia the retail price of salt is 10 seers per rupee.
g In the subdivisions the retail prices of salt per rupee are :—Jajpur 9 seers, Kendrapara 9 seers, and Banki 11½ seers.
h At Bhadrak the retail price of salt is 9 seers per rupee.
i At Giridih the retail price of salt is 11 seers per rupee.

Published for general information.

H. H RISLEY,
Secretary to the Govt. of Bengal.

PRICES-CURRENT (wholesale) of Food-grains, Firewood, and Salt

Number.	MARTS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE COMMON.		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A P	R. A P	R. A. P.	R A. P.
1	Calcutta ...	3 5 0	3 4 0	3 5 3	2 2 0	2 5 0	2 7 2	5 6 0	5 9 0	4 13 4	4 0 0	4 0 0	3 9 2
2	Sirajganj ...	2 12 0	3 0 0	3 1 0	...	...	...	6 0 0	5 0 0	5 4 0	3 8 0	3 8 0	3 1 0
3	Dacca ...	3 10 0	3 10 0	3 10 0	1 8 0	1 8 0	1 4 0	4 4 0	4 0 0	4 0 0	3 13 0	3 8 0	3 0 0
4	Narayanganj*	...	...	...	...	...	...	...	4 4 0	3 4 0	...	3 12 0	2 12 0
5	Chittagong	4 0 0	4 0 0	4 2 0	...	...	...	3 6 0	3 6 0	4 8 0	2 15 0	2 15 0	3 9 0
6	Patna ...	2 11 6 3 0 0	Red. 2 11 6 White. 3 0 0	2 13 3 3 1 0	1 13 0	1 13 0	1 14 6	4 0 0	4 0 0	3 13 0	2 9 0	2 8 0	3 3 0
7	Balasore ...	3 12 0	3 8 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 8 0	2 10 0	2 10 0	2 14 0
8	Puri ...	4 4 0	4 4 0	3 12 9	...	...	...	4 4 0	4 4 0	3 12 9	2 8 0	2 8 0	3 0 3
9	Cuttack ...	3 0 0	3 0	3 8 0	...	...	...	3 10 0	3 10 0	4 4 0	2 12 0	2 12 0	3 0 0

* Present return not received.

CALCUTTA,
The 9th May, 1893.

n the undermentioned Marts of Bengal on the 30th April, 1893.

GRAM, CHANA, CHHOLA, KADALAY OR SUNAGA. (*Cicer Arietinum.*)			INDIAN-CORN OR MAIZE. (*Zea Mays.*)			ARHAR OR THUR, CADJAN PEA. (*Cajanus indicus.*)			FIREWOOD.			SALT.			MARTS.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
2 13 0	2 12 0	2 6 9	2 0 0	2 0 0	2 4 6	1 14 0	3 0 0	2 6 11	0 7 0	0 7 0	0 6 0	4 0 0	4 0 0	3 4 7	Calcutta.
3 4 0	2 14 0	2 6 0	...	...	...	...	...	...	0 6 0	0 6 0	0 7 0	3 8 0	3 7 0	3 9 0	Sirajganj.
3 0 0	3 0 0	2 10 0	...	...	...	2 8 0	2 8 0	2 13 0	0 5 0	0 5 0	0 5 0	3 9 0	3 9 0	3 8 0	Dacca.
	3 8 0	3 4 0	...	...	...		3 0 0	3 8 0		0 6 0	0 8 0		3 10 0	3 8 0	Narayanganj.
3 8 0	3 8 0	3 8 0	...	...	...	...	...	...	0 6 0	0 6 0	0 5 0	3 12 0	3 12 0	4 0 0	Chittagong.
1 13 0	1 13 0	2 1 6	1 13 0	1 13 0	2 4 0	1 12 0	1 12 0	1 15 0	0 5 0	0 5 0	0 5 4	3 8 0	3 8 0	3 8 0	Patna.
2 14 0	2 14 0	2 12 0	...	...	...	3 10 0	3 10 0	...	...	...	...	3 6 0	3 6 0	3 14 0	Balasore.
2 4 0	2 4 0	2 12 3	...	...	...	2 8 0	2 8 0	2 12 3	0 8 0	0 8 0	0 8 0	4 0 0	3 5 0	3 6 0	Puri.
2 0 0	(Kalai.) 2 0 0	2 6 0	...	...	...	2 2 0	2 2 0	2 6 0	0 8 0	0 8 0	0 8 0	3 10 0	3 10 0	3 12 0	Cuttack.

Published for general information.

H. H. RISLEY,
Secretary to the Govt. of Bengal.

STATEMENT SHOWING THE STOCKS OF RICE IN AND AROUND CALCUTTA.

Names of Marts.	Stock in hand as compiled on—												
	1st week of May 1892.	1st week of June 1892.	1st week of July 1892.	1st week of August 1892.	1st week of Sept. 1892	1st week of Oct. 1892.	1st week of Nov. 1892	1st week of Dec. 1892	1st week of Jan. 1893.	1st week of Feb. 1893.	1st week of March 1893.	1st week of April 1893.	1st week of May 1893.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Baliaghata	10,25,000	12,28,000	9,62,000	8,39,000	6,74,000	4,96,500	4,39,000	3,16,000	3,34,000	4,05,000	6,19,000	9,04,000	13,32,000
Ultadanga	85,900	73,900	65,800	65,900	70,900	65,100	57,300	57,800	65,200	78,700	99,500	1,06,500	1,15,000
Chitpur, Golabaree, Kumartooly, Hatkhola, and Oulpi Ghat.	7,83,000	7,61,300	7,20,400	6,56,300	6,41,400	5,63,300	5,84,800	5,40,700	5,64,700	7,01,900	6,54,500	6,46,600	6,43,000
Pathuriaghatta, Posta, and Jorabagan.	5,000	4,000	3,000	4,000	3,700	3,000	2,500	2,000	3,000	8,000	3,500	3,000	2,000
Tollygunge, Chetla, Kidderpore, and Munshiganj.	1,41,500	1,37,200	1,12,100	1,43,400	96,500	93,600	51,100	40,600	87,900	1,14,200	1,46,400	1,56,700	1,55,300
31 Minor bazars (estimated) ...	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000
Other retail shops, 3,129 in number (estimated).	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000
Baidyabati, Nawabganj, Bhadreshwar, and Chandernagore.	42,000	32,325	26,062	61,125	51,250	33,908	31,125	40,037	63,961	69,800	76,380	6,662	5,319
Total ...	25,77,400	27,26,725	23,79,362	22,59,725	20,27,750	17,45,408	16,35,825	14,67,137	16,08,761	18,67,600	20,89,280	23,13,462	27,42,619
On Railway premises on both sides of the river.	17,133 (on 3rd May 1892.)	12,011 (on 3rd June 1892.)	5,239 (on 3rd July 1892.)	1,322 (on 3rd August 1892.)	11,336 (on 3rd Sept. 1892.)	17,216 (on 8th Oct. 1892.)	9,774 (on 3rd Nov. 1892.)	24,557 (on 3rd Dec. 1892.)	35,589 (on 3rd Jan. 1893.)	32,791 (on 3rd Feb. 1893.)	22,643 (on 3rd March 1893.)	23,773 (on 3rd April 1893.)	10,934 (on 3rd May 1893.)
On boats unloaded ... By Port Commissioners' returns.	28,662 (2nd to 4th May 1892.)	25,598 (1st to 3rd June 1892.)	27,288 (1st to 3rd July 1892.)	25,889 (1st to 3rd August 1892.)	18,308 (1st to 3rd Sept. 1892.)	27,678 (6th to 8th Oct. 1892.)	13,606 (1st to 3rd Nov. 1892.)	38,882 (1st to 3rd Dec. 1892.)	47,638 (3rd to 5th Jan. 1893.)	40,930 (1st to 3rd Feb. 1893.)	41,298 (1st to 3rd March 1893.)	25,720 (1st to 3rd April 1893.)	21,378 (1st to 3rd May 1893.)
On boats unloaded ... By Canal returns	17,050 (2nd to 4th May 1892.)	37,916 (1st to 3rd June 1892.)	21,650 (1st to 3rd July 1893.)	17,415 (1st to 3rd August 1892.)	27,069 (1st to 3rd Sept. 1892.)	24,097 (6th to 8th Oct. 1892.)	15,777 (1st to 3rd Nov. 1892.)	16,296 (1st to 3rd Dec. 1892.)	1,30,459 (3rd to 5th Jan. 1893.)	1,20,600 (1st to 3rd Feb. 1893.)	1,99,575 (1st to 3rd March 1893.)	76,791 (1st to 3rd April 1893.)	34,169 (1st to 3rd May 1893.)
Grand total of Stocks ...	26,40,245	28,02,250	24,33,539	23,04,351	20,84,463	18,14,399	16,74,982	15,66,872	18,22,447	20,61,921	23,52,796	24,39,746	28,09,100
Probable stock available for exportation by sea.	15¾ lakhs	17¾ lakhs	13[illegible] lakhs	12½ lakhs	10¼ lakhs	7¼ lakhs	6½ lakhs	5 lakhs	7½ lakhs	10 lakhs	13 lakhs	13¾ lakhs	17¾ lakhs

STATISTICAL DEPARTMENT,
The 8th May, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

Abstract of the results of Meteorological Observations taken at the Alipore Observatory in the month of April 1893.

	Inches.	Date.	Hour.
The mean pressure of the month	29·740		
The average pressure of April from 24 years' registers ...	29·752		
The highest pressure in the month	29·960	11th	10
The lowest pressure in the month	29·493	30th	16
The range of pressure	0·467		
	Hours.		
The total number of hours of bright sunshine during the month	254·3		
The maximum possible number of hours of sunshine ...	378·9		
	°		
The mean temperature of the month	83·6		
The average temperature of April from 24 years' registers ...	84·7		
The highest temperature in the month	96·5	18th.	
The lowest temperature in the month	69·7	23rd.	
The range of temperature during the month	26·8		
The mean daily range of temperature	17·2		
The greatest range of temperature in one day	21·6	23rd.	
	Per cent.		
The mean humidity of the month	75		
The average humidity of April from 24 years' registers ...	69		
	Inches.		
The mean vapour tension of the month	0·855		
The average vapour tension of April from 9 years' registers ...	0·861		
The mean cloud proportion of the month	3·36		
The average cloud proportion of April from 16 years' registers ...	2·68		
The total rainfall of the month	0·17		
The total rainfall indicated by a Beckley's self-registering rain-gauge (mouth of the gauge about 52 feet above the ground)	0·17		
The average fall of April from 48 years' registers ...	2·81		
The greatest fall in 24 hours	0·10	28th.	
	Days.		
The number of rainy days in the month	4		
The average number of rainy days in April from 24 years' registers	8		
	°		
The mean maximum equilibrium temperature of solar radiation during the month	149·1		
The mean difference of sun and air temperatures	56·8		
The greatest sun temperature	157·9	22nd.	
The greatest excess of sun over air temperature	61·9	25th.	
The mean temperature of the nocturnal radiation thermometer on woollen cloth	70·6		
The mean depression of the nocturnal radiation thermometer below the minimum air temperature at 4 feet above the ground	4·6		
The greatest depression of the nocturnal radiation thermometer below the minimum air temperature	6·7	23rd.	
	Miles.		
The mean movement of the wind per day	135·9		
The greatest movement of the wind in one day	261·0	9th.	
The greatest movement of the wind in one hour	19·0	28th, 3 to 4 P.M.	

The number of hours with winds from each of the 8 points—

N. 2, N.E. 14, E. 22, S.E. 82, S. 322, S.W. 208, W. 4, N.W. 4, Calm 62.

The results of observations at the Alipore Observatory are not rigorously comparable with the registers of past years (at the Park Street Observatory). The barometer is about 3 feet higher at Alipore, and, other things being equal, reads therefore ·003 lower. The diurnal range of temperature is also greater at Alipore, and the mean temperature apparently about 0·2 lower; and, finally, the thermometer which furnished the record of temperature at the Surveyor-General's Office during 20 years and upwards is found to read 0·6 higher than the Kew standard thermometer, which is the standard of reference at the present Observatory.

J. H. Gilliland,

For Meteorological Reporter to the Govt. of India.

Meteorological Office, India;
Calcutta, the 8th May 1893.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS. Air Pressure. Mean barometric height, 8 A.M. reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. Prevailing direction.	Mean wind velocity.	Temperature. Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri ..	29·736	29·691	—	SW	350	89·7	3rd May	72·6	6th May	88·4	79·1	83·8
		Gopalpore .	29·733	29·694	—·031	SSW	494	89·2	4th, 6th ,,	72·3	6th ,,	88·6	78·2	83·4
		False Point .	29·747	29·710	—·028	SWly	339	89·0	4th ,,	71·1	4th ,,	88·2	78·5	83·4
	Cuttack	Cuttack ...	29·667	29·689	—·023	SWly	125	102·7	1st ,,	72·8	6th ,,	97·4	78·9	88·1
	Balasore	Balasore ...	29·691	29·694	—·022	SW	234	97·5	30th Apl. & 1st May.	67·8	6th ,,	91·8	76·0	83·9
South-West Bengal.	Midnapore	Midnapore ..	29·610	29·705	—·009	S	291	99·3	30th April	69·2	4th ,,	95·0	75·7	85·4
	24-Parganas	Calcutta ..	29·736	29·703	—·021	S	113	93·6	2nd, 3rd May.	69·7	4th, 5th ,,	90·9	73·9	82·4
		Saugor Island	29·732	29·701	—·011	SWly	429	91·2	3rd, 4th May.	73·0	4th ,,	89·3	78·3	83·8
	Howrah													
	Hooghly													
	Nadia	Krishnagar ..	29·714	29·710	—·004	Sly	145	94·8	30th April & 1st May.	70·2	4th ,,	90·7	73·5	82·1
	Khulna													
	Jessore	Jessore ..	29·733	29·713	—·026	SEly	124	91·5	3rd ,,	70·9	4th, 6th ,,	87·9	73·5	80·8
	Burdwan ...	Burdwan ..	29·668	29·714	—·005	Sly	95	96·1	1st ,,	69·2	4th ,,	92·5	74·0	83·3
		Raniganj ...	29·420	29·703	—·011	SE	85	100·7	1st ,,	68·9	4th ,,	95·9	73·4	84·7
	Bankura	Bankura ..	29·432	29·682	—·008	Calm & SE.	109	98·6	30th April	69·1	4th ,,	93·4	73·9	83·7
	Birbhum													
	Murshidabad	Berhampore..	29·706	29·723	—·008	SEly	99	93·2	1st May	70·8	4th ,,	88·7	73·9	81·3
North Bengal.	Pabna	Sirajganj ..	29·737	29·733	—·017	NE	76	90·1	3rd ,,	67·7	6th ,,	85·1	70·2	77·7
	Bogra	Bogra ..	29·721	29·735	+·007	NE & SE	103	90·2	3rd ,,	67·2	6th ,,	85·6	69·6	77·6
	Rajshahi	Rampur Boalia.	29·701	29·721	—·008	SE	107	92·1	1st ,,	68·2	4th ,,	86·5	70·7	78·7
	Malda	Malda ..	29·702	29·735	—	NE	87	92·1	3rd ,,	67·5	4th ,,	86·9	70·9	78·9
	Dinajpur	Dinajpur ...	29·685	29·758	—·034	ENE	119	90·1	3rd ,,	67·8	5th ,,	84·7	70·2	77·5
	Rangpur	Rangpur ..	29·689	29·767	+·012	ENE	99	79·8	5th ,,	66·7	5th ,,	84·2	68·7	76·5
	Jalpaiguri	Jalpaiguri	29·552	29·794	+·020	E	85	89·4	3rd ,,	66·1	5th ,,	84·6	69·0	76·8
	Kuch Bihar													
	Darjeeling	Darjeeling ...	22·942	—	—·012	Ely	117	64·6	3rd ,,	45·7	6th ,,	58·5	47·5	53·0
	Sikkim	Gnatong	19·171	—	—	ESE		47·9	2nd ,,	24·1	3rd, 5th, 6th May.	43·4	25·0	34·2
East Bengal.	Chittagong	Chittagong ...	29·738	29·773	—·027	Ely	107	89·2	3rd ,,	67·1	1st May	85·6	71·7	78·7
	Chittagong Hill Tracts	Demagiri ...	Observations not received.											
	Backergunge	Barisal ..	29·771	29·729	—·026	Calm	77	90·3	1st, 3rd, 4th May.	69·9	1st, 6th ,,	87·2	72·2	79·7
	Noakhali	Noakhali ...	29·758	29·748	—·008	SE	130	88·0	3rd ,,	67·4	1st ,,	84·1	72·2	78·1
	Faridpur	Faridpur ...	29·759	29·754	—·011	SEly	98	89·0	3rd ,,	65·9	30th April	84·7	71·7	78·2
	Dacca	Dacca ...	29·764	29·734	—·024	Ely	140	91·1	3rd ,,	69·2	1st May	85·4	72·1	78·8
	Tippera	Comilla ...	29·772	29·756	—·012	E	124	91·3	3rd ,,	67·3	1st ,,	84·9	70·1	77·5
	Mymensingh	Mymensingh	29·744	29·759	—·022	ENE	145	89·7	3rd ,,	67·6	4th ,,	82·9	70·5	76·7
North Bihar.	Purnea	Purnea ...	29·664	29·743	+·020	Nly	63	90·3	2nd ,,	67·2	6th ,,	88·4	70·8	79·6
	Bhagalpur	Bhagalpur ...	29·613	29·728	+·026	Calm & Ely.	69	92·2	3rd ,,	68·0	6th ,,	87·3	70·9	79·1
	Darbhanga	Darbhanga ..	29·507	29·718	—·009	ESE	152	93·0	3rd ,,	67·7	5th ,,	88·6	71·7	80·2
	Muzaffarpur	Muzaffarpur	29·584	29·718	—	ESE	160	95·7	3rd ,,	65·7	5th ,,	90·1	71·7	80·9
	Champaran	Motihari ...	29·535	29·718	+·007	ESE	171	94·2	3rd ,,	65·8	5th ,,	90·3	70·5	80·4
	Saran	Chapra .	29·564	29·700	+·012	ESE	174	98·3	3rd ,,	64·6	5th ,,	93·1	71·9	82·5
South Bihar.	Shahabad	Dehri ...	29·345	29·649	—·031	Ely	221	105·9	1st ,,	67·5	5th ,,	98·9	73·5	86·2
		Buxar ...	29·486	29·680	—·006	NE	274	106·0	4th ,,	62·4	5th ,,	97·5	72·5	85·0
		Arrah ..	29·537	29·679	+·003	NE	100	99·9	3rd ,,	66·0	5th ,,	94·4	73·2	83·8
	Gaya . ..	Gaya ...	29·332	29·661	—·025	SEly	162	103·5	1st ,,	66·2	5th ,,	96·9	74·1	85·5
	Patna	Bankipore ..	29·564	29·700	—·002	E & NE	180	97·0	3rd ,,	64·3	5th ,,	92·1	71·8	82·0
	Monghyr													
	Sonthal Parganas ...	Naya Dumka	29·256	29·705	0	ESE	72*	99·7	1st ,,	67·9	6th ,,	91·9	72·7	82·3
Chota Nagpur.	Hazaribagh	Hazaribagh	27·729	29·673	—·022	SSW	272	98·7	1st ,,	65·3	4th ,,	96·0	68·7	81·2
	Lohardaga	Ranchi ...	27·616	29·676	—·019	SW	204	96·5	1st ,,	63·4	3rd ,,	92·3	67·9	80·1
	Palamau													
	Singhbhum ...	Chaibassa .	28·976	29·681	+·005	SW	71	104·8	1st ,,	71·0	3rd ,,	98·3	73·7	86·0
	Manbhum													
Assam.	Sibsagar	Sibsagar ..	29·493	29·787	—·042	NE		86·6	3rd ,,	61·8	4th ,,	80·2	66·6	73·4
	Goalpara	Dhubri .	29·710	29·731	—·023	NE	187	86·7	3rd ,,	66·9	5th, 6th ,,	81·2	68·4	74·8
	Cachar .	Silchar ...	29·727	29·784	—·030	SE		90·5	3rd ,,	67·8	30th April	84·4	69·7	77·1

* Mean of 6 days.

Explanation.—*Summary.*—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period. The *humidity* of the atmosphere is expressed as percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01 rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station district, *i.e.*, from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one of

for the week ending Saturday, the 6th of May 1893.

Variation from normal mean.	Mean 8 A.M., temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	DISTRICT OBSERVATIONS. Rainfall. Of week. Mean for district.	Of week. Normal mean.	Of week. Average number of rainy days.	Of week. Normal number of rainy days.	Since 1st of month. Mean for district.	Since 1st of month. Normal mean.	Since 1st of month. Variation.	Since 1st April 1893. Mean for district.	Since 1st April 1893. Normal mean.	Since 1st April 1893. Variation.	DISTRICT.
—	82·7	82	5·0	1·32		0·25		0·40		0·24			1·24		Puri.
+1·0	82·5	87	1·6	0·59											
—1·5	83·4	82	6·9	2·51											
—2 8	84·7	71	5·1	1·63		0·30		0·43		0·27			1·32		Cuttack.
—2·0	82·8	83	3·1	3·71		0·84		1·60		0·76			2·35		Balasore.
—2 2	81·5	81	4·4	1·46	2·27	1·26	2·25	1·49	2·27	0·81	+1·46	4·02	2·80	+1·22	Midnapore.
—2·0	81·6	80	5·1	2·54	2·19	1·39	2·86	1·67	2·19	1·16	+1·03	3·26	3·12	+0·14	24-Parganas.
—1·4	83·5	79	7·3	2·19											
					2·48	1·30	2·50	1·55	2·48	1·29	+1·19	2·76	2·93	—0·16	Howrah.
					1·62	1·46	2·00	1·66	1·62	1·41	+0·21	3·34	3·20	+0·14	Hooghly.
—2·9	79·5	80	5·6	2·17	1·47	1·54	2·20	1·92	1·22	1·42	—0·20	6·10	4 14	+1·96	Nadia.
					2·37	1·77	3·00	1·55	2·33	1·63	+0·70	4·51	4·67	—0·16	Khulna.
—3·5	80·0	87	5·9	4·72	3·13	1·74	3·40	2·14	2·74	1·52	+1 22	6·86	4 87	+1·99	Jessore.
—3·5	80·1	80	6·9	4·05	2·93	1·21	1·65	1·59	2·09	1·13	+1·86	4·10	3·09	+1·01	Burdwan.
—3·4	80·0	83	1·9	1·92											
					1·70	0·77	2·50	1·43	1·70	0·66	+1·04	3·82	1·77	+2·05	Bankura.
—7·4	79·8	81	6·7	1·61	1·18	0·50	2·00	1·18	1·16	0·47	+0·69	2·24	1·63	+0·62	Birbhum.
—4·2	76·2	93	7·3	0·33	0·78	0·97	2·00	1·49	0·73	0·92	—0·19	4·91	2·21	+2·70	Murshidabad.
—3·1	75·9	87	7·1	5·49	3·59	1·55	4·00	2·19	3·27	1·45	+1·82	6·44	4·26	+2·18	Pabna.
—3·7	75·9	85	3·7	4·22	5·18	1·35	3 75	1·76	3·92	1·32	+2·60	7·95	3 02	+4·03	Bogra.
—3·6	77·2	86	6·3	1·30	2·60	1·05	2 67	1·56	2·62	1·01	+1·61	6·40	2·22	+4·18	Rajshahi.
—	76·0	85	6·7	1·68	1·25	0·73	2·00	1·38	0·96	0·58	+0·38	3·58	1·54	+2·04	Malda.
—3 0	74·9	83	5·3	3·27	2·47	0·89	3·40	1·30	1·86	0·89	+0·97	4·78	1·86	+2·92	Dinajpur.
—1·3	75·0	83	1·6	2·32	1·99	1·98	2·80	2·41	1·37	1·82	—0·45	9·15	5·12	+4·03	Rangpur.
					1·91	1·88	2·00	2·85	[illegible]	1·80	—1·16	6·51	5·72	+0·79	Jalpaiguri.
—0·4	74·4	82	5·0	1·30	2·07	2·16	3·50	2·59	1·99	2·03	—0·04	10·86	6·24	+4·62	Kuch Bihar.
—1·5	54·3	80	6·3	0 89	1·04	1·76	2·50	2·50	0·67	1·59	—0·92	9·77	6·39	+3·38	Darjeeling.
—	38·0	84	4·4	1·74											Sikkim.
—1·4	77·4	88	7·1	6·23	3·77	2·57	2·50	2 43	2·97	2·19	+0·60	5·24	4·91	+0·33	Chittagong.
					5·70	2·81	4·00	3 05	2·92	2·50	+0·42	10·42	5·85	+4 57	Chittagong Hill Tracts.
—2·0	79 4	81	8·4	9·44	6·71?	1·75	3·75	2·16	4·12	1·52	+2·60?	8·90?	4 63	+4·27?	Backergunge.
—2·3	79·4	52	8·9	24·31?	15·59?	2·98	4·50	3·00	3·44	2·39	+1·05?	18·00?	6·81	+11·19?	Noakhali.
—3·4	77·5	88	5·1	3·55	3·82	1·87	4·00	2·36	2·88	1·67	+1·21	9·60	5·32	+4·48	Faridpur.
—3·1	77·2	89	7·1	5·16	5·75	2·14	4·25	2·55	4·69	2·09	+2·60	7·94	6·33	+1·61	Dacca.
—3·1	75·3	92	7·3	10·08	6·71	2·65	4·50	2·66	5·40	2·38	+3 02		7·16		Tippera.
—1·8	76·1	85	5·3	5·01	4·64	2·26	4·40	2·68	4·03	2·05	+1·98	8·80	5·80	+3·00	Mymensingh.
—3·0	75·7	88	2·4	1·54	1·34	0·94	2·67	1·31	1·06	0·83	+0·23	4·74	2 37	+2·37	Purnea.
—5·0	76·6	85	7·7	2·75		0·57		0·96		0·49			1·25		Bhagalpur.
—4·3	76·3	82	6·0	3·08	2·47	0·40	2·38	0·73	2·47	0·39	+2·08	3·28	0·97	+2·31	Darbhanga.
—	76·6	85	5·1	1·04	1·31	0·30	2·00	0·53	1·09	0·27	+0·82	2·47	0·88	+1·59	Muzaffarpur.
—2·8	77·3	78	5·4	0·65	0·52	0·55	2·00	0·59	0·87	0·54	+0·33	2·04	1·23	+0·81	Champaran.
—4·4	77·6	84	4·3	1·08	0·98	0·48	2·00	0·52	0·98	0·49	+0·49	1·18	0·65	+0·53	Saran.
—3·2	81·4	67	0·6	0·53											
—3·0	80·1	70	1·3	0·43	0·54	0·11	1·20	0·22	0·54	0·11	+0·43	0 56	0·27	+0·29	Shahabad.
—3·1	79·9	76	0·6	2·09							+0·43				
—4·9	79·1	73	3·9	0·76	0·63	0·13	1·50	0·32	0·63	0·12	+0·51	0·99	0·37	+0·62	Gaya.
—4·2	78·1	78	5·7	1·13	1·23	0·23	2·00	0·39	1·26	0·22	+1·04	2·27	0·42	+1·85	Patna.
					1·92	0·96	2·33	0·60	1·59	0·33	+1·26	2·66	1·32	+1·34	Monghyr.
—3·3	77·8	78	5·9	1·75	1·95	0·53	2·05	1·05	1·92	0·48	+1·44	4·16	1·22	+2·94	Sonthal Parganas.
—5·1	76·7	69	1·6	0·77		0·29		0·55		0·30			0·52		Hazaribagh.
						0·17		0·51		0·15			0·58		Lohardaga.
—5·4	76 1	75	4·1	1·59	Nil	0·15	0·00	0·32	0·00	0·11	—0·11	3·23	0·45	+2·78	Palamau.
—5·3	80·9	71	5·0	0·96	0·96	0·50	2·00	0·73	0·96	0·48	+0·48	1·76	1·24	+0·52	Singhbhum.
					0·55	0 35	1·00	0·85	0·55	0·27	+0·28	2·03	0·96	+1·07	Manbhum.
—2·7	71·5	93	7 6	2·08											Assam.
—3·4	72·7	89	6·7	2·69											
—0·8	74·0	90	7·9	2·52											

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater.
The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of
for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the
which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 6th of May 1893.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 30th April.	Monday, 1st.	Tuesday, 2nd.	Wednesday, 3rd.	Thursday, 4th.	Friday, 5th.	Saturday, 6th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April to date.
ORISSA	Puri	Puri	...	...	...	...	0·02	...	0·57	1	0·59	0·15	0·59	0·15	0·66	0·76
		Khurda	...	...	...	...	0·78					0·31		0·30		0·96
		Banpur	...	...	...	...	0·72					0·25		0·24		0·76
		False Point	...	...	...	0·02	0·75	...	1·74	2	2·51	0·29	2·51	0·28	3·63	2·48
		Gop										?		?		?
		Satpara										?		?		?
		Pipli	...	...	...	...	1·00					?		?		?
	Cuttack	Jagatsingpore	...	...	...	1·10						0·22		0·19		0·88
		Banki	...	...	...	...	1·20					0·12		0·11		0·47
		Cuttack	0·16	...	...							0·36		0·35		1·71
		Kendrapara	...	...	...	0·02	0·80	...	1·46	2	2·23	0·18	2·28	0·18	3·10	1·25
		Jajpur	...	...	...	...	1·03	...	0·85	2	1·88	0·59	1·88	0·51	4·17	2·28
		Dharmsala				1·04						?		?		?
		Salipore	...	...	...	0·97						?		?		?
		Pal Lahara										?		?		?
	Balasore	*Akhyapada*	...	...	...	...	0·75	...	0·52	2	1·27	?	1·27	?		?
		Chandbali	...	...	...	...	0·78	...	1·33	2	2·11	0·58	2·11	0·57	3·26	1·52
		Bhadrak	...	...	...	...	...	1·30	0·45	2	1·75	0·58	1·75	0·56	2·86	2·39
		Soro										1·14		1·01		2·70
		Balasore	0·10	...	...	...	0·45	2·31	0·74	4	3·60	0·94	3·50	0·90		3·25
		Jellasore										0·76		0·52	5·24	1·85
		Baripodah	...	...	...	0·35	0·04	0·46	...	2	0·85	1·04	0·85	1·00	4·00	2·31
SOUTH-WEST BENGAL.	Midnapore	Contai	...	...	...	0·03	0·19	0·05	1·09	2	1·36	0·76	1·36	0·69		
		Tamluk	...	...	...	...	2·10	0·28	...	2	3·38	1·03	2·38	0·78	3·64	2·07
		Midnapore	...	...	...	0·03	1·16	0·50	...	2	1·69	1·49	1·69	0·90	3·53	2·49
		Ghatal	...	0·73	...	0·09	2·01	0·84	...	3	3·65	1·26	3·63	1·37	5·83	2·89
		Kukrahaty	...	...	...	...	2·58	1·23	0·14	3	3·95	?	3·95	?	4·99	3·01
		Garhbeta	...	...	...	...	0·50	...	...	1	0·50	?	0·50	?	2·69	?
		Panskura	...	..	0·10	0·77	0·15	0·15	...	4	1·17	?	1·17	?	1·55	?
		Dantoon	...	...	...	...	0·14	0·82	0·88	3	1·84	?	1·84	?	3·88	?
	24-Parganas	Saugor Island	...	...	...	0·03	0·35	1·42	0·39	3	2·19	0·79	2·19	0·78	3·35	?
		Diamond Harbour	...	...	...	0·62	2·12	1·30	0·70	4	4·74	1·16	4·74	1·07	5·16	2·04
		Canning Town	...	0·55	...	...	1·76	0·12	...	3	2·43	?	2·43	?	2·83	3·26
		Alipore (Observatory.)	...	0·11	...	0·08	2·01	0·34	...	3	2·54	1·22	2·54	1·12	2·71	?
		Barrackpore	...	...	...	...	0·25	...	...	1	0·25	1·32	0·25	1·28	2·18	2·81
		Dum-Dum	...	0·10	...	...	0·90	0·68	0·06	3	1·74	1·28	1·74	1·26	2·23	2·99
		Barasat	...	...	...	...	0·54	0·55	...	2	1·09	1·57	1·09	1·40	3·36	3·21
		Basirhat	...	0·15	0·98	...	0·59	1·04	0·02	4	2·78	1·30	2·78	1·24	3·75	3·34
	Howrah	Howrah	...	0·09	...	...	1·00	0·40	...	2	1·49	1·11	1·49	1·08	1·57	3·18
		Mohesreka	...	0·18	...	0·05	2·89	0·35	...	3	3·47	1·67	3·47	1·50	3·93	3·07
		Ulubaria	...	0·10	...	...	2·00	1·25	...	3	3·35	?	3·35	[illegible]	3·77	2·76
																?
	Hooghly	Serampore	...	...	...	0·01	0·42	0·10	...	2	0·53	1·33	0·55	1·28	2·47	
		Hooghly	...	...	...	...	0·81	0·04	0·14	2	0·96	1·72	0·96	1·71	2·70	3·07
		Jahanabad	...	...	0·53	2·80	...	...	...	2	3·38	1·34	3·38	1·25	4·05	3·41
																3·08
	Nadia	Ranaghat	0·07	0·04	...	...	1·35	...	...	1	1·46	1·20	1·39	0·97	2·62	
		Krishnagar	...	1·09	...	...	0·90	...	0·18	3	2·17	1·52	2·17	1·46	5·06	3·92
		Chuadanga	...	0·23	...	...	0·30	...	...	2	0·53	1·61	0·53	1·56	6·14	3·78
		Meherpore	0·74	...	...	...	0·27	...	...	2	1·01	1·84	0·27	1·71	7·70	4·30
		Kushtia	0·45	1·50	...	...	0·22	...	0·02	3	2·19	1·54	1·74	1·38	9·01	4·31
																4·34
	Khulna	Satkhira	...	...	...	...	2·53	0·48	0·18	3	3·19	1·57	3·19	1·39	6·29	
		Bagerhat	0·07	0·12	...	...	0·95	...	0·71	3	1·85	1·91	1·78	1·80	2·74	4·31
		Khulna	0·05	0·56	..	...	0·82	...	0·65	3	2·08	1·84	2·03	1·71	4·50	4·96
		Nakipur										?	1·34	?		4·75
		Rampal	0·21	...	...	...	0·74	...	0·60	3	1·55	?		?		?
																?
	Jessore	Narail	1·45	0·52	...	...	2·67	...	0·32	4	4·26	1·84	3·51	1·69	7·02	4·79
		Jessore	0·20	1·12	...	..	1·27	...	2·13	4	4·72	2·02	4·52	1·89	6·89	5·63
		Jhenidah	0·24	0·10	...	...	1·43	...	0·79	4	2·56	1·71	2·32	1·42	9·93	4·85
		Magura	0·05	0·65	...	...	1·48	...	0·03	2	2·21	1·83	2·18	1·64	7·50	5·52
		Bangaon	...	0·85	...	...	0·64	..	0·20	3	1·19	1·30	1·19	0·97	2·97	3·64
	Burdwan	Kalna	...	0·04	...	...	1·20	..	...	1	1·24	1·34	1·24	1·33	1·72	3·44
		Burdwan	...	...	...	0·18	3·87	...	..	2	4·05	0·98	4·05	0·93	5·41	3·10
		Katwa	...	...	...	...	2·59	...	0·91	2	3·50	1·31	3·50	1·19	4·99	2·74
		Raniganj	...	...	...	0·32	1·60	...	...	2	1·92	0·51	1·02	0·46	3·28	1·71
		Mankur	...	...	...	0·38	1·77	...	...	2	2·15	?	2·15	?	3·85	?
	Bankura	Bankura	...	...	...	0·78	0·80	0·03	...	2	1·61	0·74	1·61	0·62	3·29	2·07
		Vishnupur	...	...	.	1·18	1·32	...	..	2	2·50	1·15	2·50	1·00	2·97	2·52
		Maliara	...	...	...	0·55	1·33	...	0·51	3	2·39	0·69	2·39	0·55	3·61	1·38
		Khatra	...	...	...	0·23	...	0·05	...	1	0·28	0·49	0·28	0·36	3·45	1·09
		Indas	...	...	...	0·54	2·33	...	...	2	2·87	?	2·87	?	4·94	?
		Kotalpur	...	...	...	...	0·75	...	...	1	0·75	?	0·75	?	2·25	?
		Onda	...	...	1·80	1·90	...	...	...	2	3·70	?	3·70	?	6·42	?
		Gangajalghati	...	...	...	1·28	0·65	...	0·60	3	2·53	?	2·53	?	4·08	?
		Raipur	...	...	...	0·15	1·32	0·16	...	3	1·63	?	1·63	?	3·95	?
		Sonamukhi	...	...	...	0·70	1·27	...	...	2	1·97	?	1·97	?	4·73	?
	Birbhum	Suri	...	...	...	...	0·89	...	0·20	2	1·09	0·36	1·09	0·35	1·99	1·89
		Hetampore	...	...	...	0·03	0·43	...	0·41	2	0·87	0·55	1·87	0·43	1·72	1·41
		Rampur Hat	0·08	...	...	...	0·52	...	0·25	2	0·85	0·57	0·77	0·52	2·17	1·91
		Bolpur	...	...	...	...	1·80	...	0·05	1	1·85	?	1·85	?	3·29	?
		Murari	...	...	...	..	1·36	...	0·40	2	1·85	?	1·85	?	3·85	?
	Murshidabad	Kandi	...	...	...	...	0·28	...	0·06	1	0·34	0·68	0·34	0·54	3·24	2·16
		Berhampore	0·05	0·02	...	...	0·25	...	...	1	0·33	1·02	0·28	0·90	4·20	2·55
		Lalbagh	...	0·42	...	0·20	...	...	...	2	0·62	1·17	0·62	1·16	4·60	2·19
		Azimganj	0·24	0·20	...	...	0·35	...	...	3	0·79	0·89	0·55	0·58	6·37	2·12
		Jangipur	...	0·11	...	0·13	1·15	...	0·38	4	1·77	0·86	1·77	0·78	5·72	1·87
		Lalgola	...	...	...	...	0·90	...	...	1	0·90	1·17	0·90	1·15	2·00	2·30
		Akhriganj	...	0·03	...	...	0·40	...	...	1	0·43	?	0·43	?	5·53	?
		Patkabari	0·10	...	...	...	0·60	...	0·30	3	1·00	?	0·90	?	7·35	?
NORTH BENGAL	Pabna	Pabna	0·65	0·40	...	...	2·46	...	0·06	3	3·57	1·45	[illegible]	1·37	8·67	4·45
		Sirajganj	1·34	0·44	...	0·06	0·29	0·24	2·58	5	3·61	1·65	3·61	1·52	4·22	4·05
	Bogra	Sherepore	1·04	...	...	0·07	0·35	0·15	3·05	4	4·66	1·39	3·62	1·38	8·49	2·72
		Nowkhilla	1·27	...	...	...	1·07	0·90	[illegible]	4	6·26	1·30	4·99	1·36		3·31
		Bogra	1·56	.	...	...	0·38	0·18	2·10	4	4·22	1·75	2·68	1·69	6·55	3·75
		Panchbibi	1·20	...	...	...	0·49	...	3·90	3	5·59	0·86	4·39	0·83	9·01	2·32
	Rajshahi	Boalia	0·02	0·03	...	...	1·39	...	0·02	1	1·46	1·08	1·44	0·97	6·34	2·27
		Nator	0·20	0·40	...	1·45	1·35	...	0·39	5	3·70	1·64	3·50	1·61	6·12	3·47
		Naugaon	...	...	...	0·09	0·75	...	2·10	2	2·94	0·44	2·94	0·43	6·76	0·92
		Lalpore	0·12	0·48	...	1·30	0·10					?		?		?
		Manda	...	...	...	0·15	...	...	...	1	0·50	?		?		?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 6th of May 1893—contd.

Meteorological Division.	District.	Station.	Rainfall.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April.
			Sunday, 30th April.	Monday, 1st.	Tuesday, 2nd.	Wednesday, 3rd.	Thursday, 4th.	Friday, 5th.	Saturday, 6th.							
North Bengal—concld.	Malda ...	Malda ...	0·02	...	...	0·36	1·24	...	0·06	2	1·68	0·72	1·66	0·65	5·20	
		Chanchal ...	0·54	...	...	...	0·23	...	0·04	2	0·81	0·73	0·27	0·51	1·93	1·54
		Gajol ...	0·12	...	...	...	1·43	...	...	2	1·54	?	1·42	?	5·33	1·50
		Sibganj ..	...	...	...	1·02	1·39	...	0·26	3	2·67	?	2·67	?	3·98	?
	Dinajpur ...	Mohadebpore	...	...	...	0·35	0·70	...	1·25	3	2·25	0·92	2·25	0·91	4·85	?
		Churaman ...	0·38	...	...	...	...	...	0·22	2	0·60	0·67	0·22	0·60	1·95	1·85
		Raiganj ...	0·64	...	...	0·82	0·28	...	0·26	4	2·00	1·27	1·36	1·26	2·82	1·16
		Dinajpur ...	1·31	...	...	0·10	1·27	...	0·15	4	2·83	1·23	1·52	1·17	6·74	2·38
		Balurghat ...	0·72	...	...	0·43	1·54	...	2·96	4	4·65	0·36	3·93	0·32	6·49	2·80
		Thakurgaon ...	3·80	...	...	3·22	0·28	...	0·06	3	7·36	?	3·56	?	13·55	1·15
	Rangpur ...	Bhawanigunge (*Gyabanda*)	1·00	...	...	0·24	0·45	...	...	3	1·69	1·43	0·69	1·34	5·48	?
		Rangpur ...	0·74	...	...	...	0·36	...	0·22	3	1·58	1·90	0·58	1·71	7·90	3·96
		Kurigaon ...	0·29	...	...	0·17	1·05	...	0·49	4	2·00	2·65	1·71	2·37	14·42	4·64
		Gobindgunge	...	...	...	...	0·23	...	3·55	2	3·78	?	3·78	?		6·98
		Nagugra (*Vilphamari*)	0·71	...	...	0·06	0·12	...	...	2	0·89	1·95	0·18	1·85	6·85	?
		Ulipore ...	...	...	...	...	0·35	...	0·86	2	1·21	?	1·21	?	8·46	4·89
		Sundergunge...										?		?		?
	Jalpaiguri ...	Jalpaiguri ...	1·27	...	...	0·08	0·49	0·02	0·05	2	1·91	1·88	0·64	1·80	6·51	?
		Alipore Duar	0·68	...	...	0·53	0·82	...	0·03	3	2·06	?	1·38	?	9·32	5·72
		Fallacotta ...	1·48	...	...	...	0·75	...	...	2	2·23	?	0·75	?	11·31	?
		Debiganj ...	0·07	...	...	1·27	...	...	0·06	1	1·40	?	1·33	?	14·14	?
		Bhagatpore (Nagrakatta)	1·72	0·18	...	0·31	0·01	...	...	3	2·22	?	0·50	?	12·70	?
	Kuch Bihar	Dinhatta ...	0·27	...	...	0·35	0·77	0·81	0·55	5	2·73	2·31	2·48	2·36	13·08	5·95
		Kuch Bihar ...	0·04	...	...	0·30	1·00	0·45	0·17	4	1·96	2·77	1·92	2·50	14·34	7·74
		Mekliganj ...	...	...	...	1·30	0·48	...	...	2	1·78	1·70	1·78	1·59	6·78	5·57
		Mathabhanga	...	...	...	0·72	0·87	0·10	0·08	3	1·77	1·87	1·77	1·66	9·23	5·62
	Darjeeling ...	Buxa ...	0·68	0·39	...	...	1·04	0·08	...	3	2·19	3·17	1·51	2·88	16·26	
		Siliguri ...	0·27	0·04	...	0·21	0·05	...	...	2	0·57	0·77	0·30	0·66	9·94	11·40
		Darjeeling ...	0·28	0·03	...	...	0·26	0·32	...	3	0·89	1·84	0·61	1·70	8·93	3·85
		Kalimpong ...	0·25	0·03	...	...	0·22	...	...	2	0·50	1·22	0·25	1·10	3·88	6·11
		Kurseong ...	1·65	0·65	...	0·15	0·46	0·12	0·45	6	3·48	?	1·83	?	10·63	4·18
		Pedong ...	0·06	0·23	...	0·03	0·05	0·04	0·23	2	0·69	?	0·63	?	?	?
East Bengal	Chittagong ..	Cox's Bazar ...	...	1·53	...	...	0·30	...	...	2	1·83	2·19	1·83	1·88	2·51	?
		Chittagong ...	1·96	2·82	...	...	0·70	...	0·23	3	5·71	2·94	3·75	2·49	7·97	4·28
		Kutubdia ...	4·12									?		?		5·33
		Satkanya ...	0·59	1·97	...	...	0·62					?		?		?
		Kodala ...										?		?		?
		Fenoa ...	9·10	2·46		0·11	0·57					?		?		?
		Mirsarai ...	10·63	1·95	...	...	1·19	0·30	0·46	5	14·5		3·90	?	18·10	?
		Chandpur ...	...	...	1·90							?		?	8·13	?
	Chittagong Hill Tracts.	Rangamati ...	2·78	1·88	...	..	0·19	...	0·85	4	5·70	2·81	2·92	2·50	7·78	?
		Bandarban ...	1·85	1·42	...	0·88	0·33	0·32	0·75	6	5·55	?	3·70	?	4·48	5·85
	Backergunge	Patuakhali ...	...	1·08	...	...	0·25	0·03	0·72	3	2·08	1·71	2·08	1·62	5·00	?
		Pirojpur ...	0·89	0·31	...	...	0·69	...	1·77	4	3·66	1·55	2·77	1·53	10·63	4·53
		Barisal ...	2·24	2·70	...	...	1·80	...	1·61	4	7·75	1·50	5·51	1·24	13·94	4·22
		Gournaddi ...	6·20	2·45	...	...	0·94	...	1·48	4	10·07	?	4·87	?	15·47	4·60
		Bhola ...	7·22	4·10	...	...	0·90	...	1·12	4	13·34	1·95	6·12	1·69	21·05	?
		Daulatkhan ...	11·95	5·13	...	...	1·91	...	0·62	4	19·61?	?	7·66	?		5·20
		Bauphal ...	0·69									?		?		?
	Noakhali ..	Noakhali ...	20·67	2·38	...	...	0·77	...	0·49	4	24·31?	2·40	3·64	2·16	26·03	
		Fenny ...	3·64	0·56	...	...	0·59	0·42	1·75	5	6·87	3·47	3·27	2·62	10·40	6·16
		Harishpore ...	6·60	4·70								?		?		7·45
		Ramganj ...	3·35	1·05	...	...	0·78	...	0·57	4	5·76	?	2·40	?	9·63	? ?
	Faridpur ...	Madaripur ...	1·02	1·00	...	...	1·12	...	0·13	4	4·17	2·28	2·25	2·04	8·44	5·57
		Faridpur ...	1·24	1·35	...	...	0·52	0·06	0·38	4	2·31	1·59	2·31	1·41	10·25	5·04
		Goalundo ..	0·90	3·12	...	...	0·75	...	0·20	4	4·97	1·73	4·07	1·57	10·95	5·35
	Dacca ..	Munshiganj ...	0·83	2·08	...	...	1·46	0·09	1·80	4	6·26	2·16	5·43	2·05	10·36	
		Dacca ...	1·12	2·35	...	...	0·36	0·06	0·82	4	4·71	1·94	3·59	1·73	9·40	6·82
		Narayanganj...	1·06	2·38	...	...	0·59	0·34	0·74	5	5·41	1·99	4·35	2·24	10·05	6·17
		Manikganj ...	1·22	1·79	...	...	2·99	0·55	0·06	4	6·61	2·46	5·39	2·33	8·75	6·18
		Joydebpore ...	1·10	0·47	...	0·16	0·74	...	0·34	5	2·81	?	1·72	?	6·81	6·12 ?
	Hill Tippera	Agartola ...	...	...	...	...	0·28	2·78	1·13	3	4·19	2·94	4·19	2·63		
	Tippera ..	Comilla ...	0·73	1·39	...	0·79	0·93	5·31	0·96	6	10·11	2·85	9·38	2·42	12·89	7·62
		Chandpore ...	2·00	2·80	...	...	0·57	...	0·47	4	5·84	2·17	3·84	2·21	12·47	7·42
		Brahmanbaria	2·53	0·75	...	...	1·15	0·52	1·75	5	6·70	2·62	4·17	2·24	9·52	6·24
		Ramchandrapore ...	...	0·05	...	...	1·03	1·09	0·36	3	2·55	?	2·55	?	4·85	7·34
		Nasirnagar ...	1·50	1·10	...	...	0·50	0·75				?		?		?
		Daudkandi ...	0·32	1·75	...	...	0·25	0·20	...	4	2·52	?	2·20	?	6·80	?
		Kasba ...	1·54	1·10	0·08	0·10	2·60	2·29	1·00	6	8·63	?	7·08	?	10·42	?
		Laksham ...	3·10	1·85	...	...	...	0·85	1·23	4	7·03	?	3·93	?	8·08	? ?
	Mymensingh...	Kishorganj ...	2·05	0·15	...	...	0·42	0·54	2·07	5	5·23	2·50	3·18	2·08	8·20	
		Atia (*Tangail*)	0·98	0·23	...	0·35	...	1·12	2·37	5	5·05	1·96	4·07	1·75	7·29	6·97
		Mymensingh ...	1·50	0·02	...	...	0·84	1·43	1·22	4	5·01	2·09	3·51	1·84	10·44	4·88
		Jamalpur ...	1·68	...	...	...	0·80	0·51	1·18	4	4·17	1·93	2·49	1·81	6·93	5·61
		Netrakona ...	0·85	...	...	...	1·41	0·40	1·07	4	3·73	2·81	2·88	2·79	11·05	4·75
		Subornakhally	...	...	...	...	0·35	0·22	1·83	3	2·40	?	2·40	?	2·97	6·74
		Durgapore ...	1·35	0·60	...	...	...	1·60	0·60	4	4·15	?	2·80	?	5·55	?
		Sherepore Town	0·83	...	...	...	0·61	2·76	1·73	4	[illegible]	?	5·10	?	11·89	?
		Dewanganj ...	1·50									?		?		? ?
North Bihar	Purnea ..	Kishanganj ...	...	...	...	1·20	0·15	...	...	2	1·35	0·98	1·35	0·95	3·87	
		Araria ...	0·31	...	...	...	0·83	...	...	2	1·14	0·97	0·83	0·82	4·55	2·81
		Purnea ...	0·54	...	...	0·15	0·17	...	0·68	4	1·54	0·88	1·00	0·73	6·05	2·29
		Gondwara (Korah) ...										?		?		2·02 ?
		Barsoe ...	...	...	...	1·80	...	0·80	...	2	2·60	?	2·60	?	5·11	
		Forbesganj ...	...	...	...	...	0·80	...	...	1	0·80	?	0·80	?	4·71	?
		Kathaganj ...	0·05	...	...	0·50	1·00	...	...	2	1·55	?	1·50	?	5·37	? ?
	Bhagalpur ...	Madhipura ...	0·20	...	...	...	0·22	0·25	...	3	0·67	0·82	0·47	0·71	0·72	
		Bongaon (Sujabad).					0·22					?		?		1·67
		Supaul	0·29									0·89		0·76		?
		Protabganj ...	0·14	...	...	...	...	...	...	1	0·14	?	Nil	?	2·34	1·57
		Bhagalpur ..	...	...	...	0·57	1·28	0·65	0·25	4	2·75	0·38	2·75	0·34	6·71	?
		Banka ...	...	...	...	...	1·06	...	0·24	2	1·30	0·19	1·30	0·16	3·57	1·06
		Colgong ...	...	...	...	0·22	0·91	0·09	0·10	3	1·32	?	1·32	?	3·67	0·71 ?
	Darbhanga ...	Tajpur ...	...	...	...	...	1·80	0·85	...	2	2·65	0·28	2·65	0·27	3·20	
		Darbhanga ...	...	...	...	...	2·22	0·79	0·07	2	3·08	0·38	3·08	0·38	4·27	0
		Madhubani ...	0·39	...	...	1·58	...	0·10	...	3	1·68	0·55	1·68	0·51	2·30	0·69
		Bahera ..	...	...	...	...	2·17	0·41	...	2	2·58	?	2·58	?		1·94
		Roshera ...	...	...	...	...	0·62	0·31	...	2	0·93	?	0·93	?	13·1	·40 ?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 6th of May 1893—concld.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 30th April.	Monday, 1st.	Tuesday, 2nd.	Wednesday, 3rd.	Thursday, 4th.	Friday, 5th.	Saturday, 6th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April.
NORTH BIHAR —concluded.	Muzaffarpur...	Sitamarhi ...	0·65	...	...	0·63	...	...	...	2	1·23	0·39	0·63	0·34	1·80	1·37
		Muzaffarpur	...	..	...	...	0·46	0·50	...	2	0·96	0·32	0·96	0·31	2·04	0·85
		Hajipur ..	...	...	...	...	0·87	0·81	...	2	1·68	0·18	1·68	0·17	3·56	0·36
		Paru ..	...	...	...	0·11	...	0·58	...	2	0·69	?	0·69	?	3·35	?
		Mahwa (Chitwarra.)	...	...	...	0·07	0·38	...	...	1	0·45	?	0·45	?	2·50	?
											0·54	?	0·54	?	1·34	
		Siuhar ...	...	...	...	...	0·36	0·18	...	2		?		?		?
		Pupri ...														?
	Champaran ...	Motihari ...	...	...	...	...	0·47	0·18	...	2	0·65	0·35	0·65	0·32	3·06	1·03
		Bettiah ..	...	...	...	...	0·13	0·26	...	2	0·39	0·75	0·39	0·75	1·17	1·42
		Bagaha ...	...	...	...	...	0·92	0·54	0·10	3	1·56	?	1·56	?	3·87	?
		Burhurwa ..	...	...	...	...	0·71	0·48	...	2	1·19	?	1·19	?	1·75	?
	Saran ..	Gopalganj ...	...	...	...	...	..	0·70	0·11	2	0·81	0·91	0·81	1·10	0·93	1·08
		Siwan ...	...	...	...	...	0·95	0·11	...	2	1·06	0·28	1·06	0·24	1·44	0·48
		Chapra ...	...	...	...	...	0·58	0·45	0·05	2	1·08	0·18	1·08	0·15	1·14	0·39
		Sreepore ...	...	...	...	...	...	0·90	...	1	0·90	?	0·90	?	?	?
SOUTH BIHAR	Shahabad ...	Buxar ...	...	...	...	...	0·15	0·24	0·04	2	0·43	0·05	0·43	0·05	0·49	0·24
		Dehri ...	...	...	...	...	0·47	0·04	0·02	1	0·53	Nil	0·53	Nil	0·53	0·11
		Bhabhua ...	...	...	...	...	...	0·10	...	1	0·10	0·14	0·10	0·14	0·10	0·27
		Sasaram ...	...	...	...	...	.	...	...	...	...	0·11	...	0·11	...	0·29
		Arrah ...	...	...	...	1·00	0·61	...	0·03	2	1·66	0·23	1·66	0·23	1·71	0·42
		Mohanea ...	...	...	...	...	...	...	0·13	1	0·13	?	0·13		0·13	?
		Khiri ...	...	...	...	...	0·60	...	...	1	0·60	?	0·60	?		?
		Ageaon ...	...	...	...	0·63	...	0·35	...	2	1·00	?	1·00	?	1·10	?
		Ramagar ...	...	...	...	...	0·29	0·55	...	2	0·84	?	0·84	?	1·01	?
		Koath ...	..	...	...	0·54	...	...	...	1	0·54	?	0·54	?	0·57	?
		Sikroul ...	...	...	...	0·33	...	...	...	1	0·33	?	0·33	?	0·33	?
		Bassowan ...	...	...	...	...	..	...	0·05	Nil	0·05	?	0·05	?		?
		Monaharpur	...	...	...	...	..	0·41	...	1	0·41	?	0·41	?	0·41	?
	Gaya ...	Aurangabad ...	...	...	...	...	...	0·18	...	1	0·18	0·09	0·18	0·09	0·25	0·32
		Gaya ...	...	...	...	...	0·18	0·58	...	2	0·76	0·11	0·76	0·09	1·44	0·42
		Nawadah ...	...	...	...	0·53	0·05	0·21	...	2	0·79	0·24	0·79	0·21	0·79	0·53
		Jahanabad ...	...	...	...	...	0·09	0·70	...	1	0·79	0·08	0·79	0·08	1·49	0·24
		Arwal .	...	...	...	...	0·55	0·30	...	2	0·85	?	0·85	?	0·93	?
		Daudnagar ...	...	...	...	...	0·42	...	...	1	0·42	?	0·42	?	0·42	?
		Sherghati .										?		?		?
		Rajauli ...	...	0·10	...	...	...	0·30	...	2	0·40	?	0·40	.	1·37	?
		Pakri Barawan	...	...	...	1·20	...	0·46	...	2	1·66	?	1·66	?	2·10	?
	Patna ...	Patna ..	...	...	...	...	0·15	0·94	0·04	2	1·13	0·15	1·13	0·14	3·03	0·36
		Dinapore ...	...	...	...	...	0·32	0·66	0·07	2	1·05	0·17	1·05	0·14	1·60	0·39
		Bihar ...	...	...	...	...	0·40	0·75	...	2	1·15	0·24	1·15	0·23	2·16	0·45
		Barh ...	...	...	...	...	0·85	0·85	...	2	1·70	0·38	1·70	0·35	2·38	0·47
		Bickram ...	...	...	...	...	0·27	1·35	...	2	1·62	?	1·62	?		?
		Hilsa .	...	...	...	...	0·50	0·72	0·13	3	1·35	?	1·35	?	2·73	?
	Monghyr ..	Begusarai ...	...	...	...	0·17	1·23	0·77	...	3	2·17	0·37	2·17	0·33	2·97	0·67
		Monghyr ...	...	...	...	...	1·03	0·67	...	2	1·70	0·41	1·70	0·38	3·01	0·77
		Jamui .	...	...	...	0·03	1·50	0·36	...	2	1·89	0·29	0·89	0·29	2·01	0·74
		Gogri ..	...	...	...	...	3·18	0·75	..	2	3·93	?	3·93	?	6·38	?
		Shaikpura ...	...	...	...	...	1·56	...	0·70	2	2·26	?	2·26	?	2·58	?
		Chahai Bamda	...	0·02	...	...	1·12	0·44	...	2	1·58	?	1·58	?	1·83	?
		Chupreon ...	...	...	...	1·95	0·10	...	...	2	2·05	?	?	?	?	?
	Sonthal Parganas.	Rajmahal ..	...	...	...	0·61	1·00	...	0·06	2	1·67	0·91	1·67	0·82	5·47	1·79
		Godda	0·20	...	...	0·06	1·12	...	0·12	3	1·50	0·34	1·30	0·32	2·95	0·82
		Pakour ...	...	...	...	1·43	1·22	...	0·83	3	3·48	0·45	3·48	0·45	6·72	0·89
		Naya Dumka	...	...	...	...	1·53	...	0·22	2	1·75	0·65	1·75	0·56	2·91	1·59
		Deoghur	...	...	...	..	1·05	0·30	...	2	1·35	0·36	1·35	0·34	3·92	1·22
		Jamtara ...	...	...	...	1·13	0·54	...	0·30	3	1·97	0·48	1·97	0·30	2·97	0·95
		Belbodda ..	...	...	1·74	...	1·35	...	...	2	3·09	?	3·09	?	5·43	?
		Nanihat ..	...	...	...	...	2·15	...	...	1	2·15	?	2·15	?	4·01	?
CHOTA NAGPUR.	Hazaribagh ...	Pachamba (Giridih). ...	...	...	...	...	0·15	0·01	...	1	0·16	0·43	0·16	0·42	1·32	0·93
		Hazaribagh	...	...	...	0·45	0·31	0·01	...	2	0·77	0·21	0·77	0·21	1·19	0·57
		Semtaguraa										0·31		0·34		0·56
		Mahudi Hills										0·16		0·19		0·26
		Jhumra Hill										0·32		0·32		0·32
		Barhi	..	...	..	0·12	1·58	0·36	...	3	2·06	?	2·06	?	2·28	?
		Chatra ...	...	...	...	0·18						?		?		?
		Kraigdeha	...	...	...	...	0·55	0·29	...	2	0·84	?	0·84	?	1·91	?
		Ramgar ...	...	...	...	0·73	0·23	0·33	...	3	1·29	?	1·29	?	1·67	?
	Lohardaga ..	Lohardaga ...	...	...	0·14	...	0·49					0·04		0·03		0·27
		Ranchi ...	...	..	...	1·29	...	...	0·23	2	1·52	0·31	3·40	0·25	3·40	0·86
		Silli ...				0·30	...	0·10				?		?		?
	Palamau ...	Palamau (Daltanganj). ...	...	...	...	...	...	...	...	Nil	...	0·15	...	0·11		0·45
		Balumath ..	...	...	...	0·02	0·34					?		?		?
		Husainabad	...	...	...	..	...	...	...	Nil	...	?	...	?		?
		Garhwa	...	...	...	0·05	...	...	..	Nil	0·05	?	0·05	?	0·05	?
	Singhbhum ...	Chaibassa	...	...	...	0·18	...	0·70	0·08	2	0·96	0·50	0·96	0·48	1·76	1·24
		Chakardharpur.	...	...	...	...	...	1·00	...	1	1·00	?	1·00	?		?
		Ghatsila .	...	...	...	0·63	0·90	0·17	...	3	1·70	?	1·70	?	3·10	?
		Baharagura										?		?		?
		Gailkeira ...	...	...	0·40	...	0·11	0·90	...	3	1·41	?	1·41		1·58	?
	Manbhum ...	Kalikapur ...	...	...	...	0·35	0·20	0·16	0·15	4	0·86	?	0·86	?	1·32	?
		Purulia ...	...	...	...	0·08	...	0·70	...	1	0·78	0·44	0·78	0·35	3·23	1·19
		Gobindpur	..	...	...	...	...	0·27	0·05	1	0·32	0·26	0·32	0·19	0·82	0·83
		Raghunathpore	...	...	...	0·30	...	...	0·15	2	0·45	?	0·45	?	1·35	?
		Barahabhum	...	...	...	0·30	...	..	...	1	0·30	?	0·30	?	2·55	
		Jhalda	..	...	0·85	0·07	...	0·45	0·10	3	1·47	?	1·47		2·46	?
		Chas	..	...	...	0·67	...	...	...	1	0·67	?	0·67	?	2·83	
		Pandra ...	...	...	...	0·33	...	0·84	...	2	1·22	?	1·22	?	3·11	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the 9th May* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 6TH MAY 1893.

UNSETTLED weather, with local showers more or less heavy, has prevailed in most districts during the past week. The heavier rainfall has been irregularly distributed except in East and North Bengal, where it has been of almost daily occurrence. This rainfall appears to be due to the continuance for many days of the easterly winds, which were caused in the early part of the week by the low pressure over the western districts, and latterly by the unusual way in which the pressure recovered from the large defect which then prevailed. On the 1st of May it began to rise in North Bengal, and from there a wave of rising pressure spread towards the south-west. The rise was rapid on the 2nd in all the western districts of Bengal and as far south as Ganjam. On the 3rd the most rapid rise was in the Circars, while over the west of the Bay the increase was from brisk to rapid. In consequence of these changes the area of lowest pressure retreated southwards, and as gradients were moderately steep and ran from south-east to north-west, the circulation of winds was everywhere easterly. During the latter part of the week a fall set in from the west, and the low pressure area continued to the south-west of the province till the last day of the week, when it was shown over Lower Bengal. Westerly winds then prevailed as far north as Hazaribagh, and it seemed likely that more settled conditions were in rear of the depression. On Thursday the 4th the heaviest rainfall was in South-West Bengal, on the 5th it was light and scattered, and on the 6th, the last day of the week, it was most heavy in East Bengal.

Pressure.—The mean readings for the whole week differ very little from the normal, but the changes have been fairly large. At the beginning of the week there was defect everywhere, varying from ·1″ in the eastern districts to ·17″ in the west of Bihar. The rise that commenced on the 1st in North Bengal and spread southwards and westwards continued till the 4th, when the distribution was above the normal by about ·05″. The fall which then set in continued till the end of the week, when readings were relatively to the normal lowest in East Bengal and Assam.

Temperature—Has again been several degrees below the normal. At first the lowest readings were in East Bengal, where defect was more than 5,° while in the other districts it was about 3° except in Orissa, where there was a small excess. Large irregular changes followed the thunderstorms, and by the middle of the week the lowest temperatures were in Chota Nagpur. The defect there increased, and very low readings became general in all the western districts. The weekly means for the larger divisions are all below the normal by amounts varying from 1·1° in Orissa to 5·3° in Chota Nagpur. The defect in Bihar and South-West Bengal is about 3·5.° and in the eastern districts 2·5.°

Rainfall.—Scattered showers have fallen throughout the week, but in some districts, especially on Saturday, the 30th April, and Thursday, the 4th of May, the falls were much more general and more heavy. The days when the rainfall was most scattered were Tuesday the 2nd and Saturday the 6th in all districts The mean falls for the large divisions are all very much above the normal for the week, and excess varies from ·42 inch in Chota Nagpur to 3·95 inches in East Bengal. If the actual falls be expressed as a percentage of the normal, the numbers are—South Bihar 525, Orissa 300, Chota Nagpur and North Bihar 250, East Bengal 273, North Bengal 186, and South-West Bengal 158.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 6th of April 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 1st April 1893.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	102·7	67·8	90 9	78·1	84 5	—1·1	1·30	0·50	+1·00	1·69	0·91	+0·78	1·48	0·46	2·30	1·69
South-West Bengal ...	100 [illegible]	68·9	91·8	74·5	83·1	—3·4	1·94	1·23	+0 71	2·39	1·63	+0 76	1·93	1 15	4·21	3·08
North Bengal	92 1	66 2	85·4	69 9	77·7	—2·2	2·68	1·44	+1·24	3 20	1·93	+1·27	2 12	1·36	7·09	3·64
East Bengal	91·3	65 9	85·0	71 5	78·2	—2·4	6 23	2 28	+3·95	4·00	2·55	+1·45	3·88	2 03	9·89	5·87
North Bihar	99 3	64·6	89·6	71 2	80·4	—3·9	1·35	0·54	+0·81	2 28	0·80	+1·48	1·26	0·50	2·83	1·23
South Bihar	103·6	62 4	95 3	75·0	84·1	—3·6	1 26	0·24	+1·02	1·91	0 55	+1·36	1·20	0·25	2·22	0·59
Chota Nagpur	104·8	61·4	94·7	70·1	82·1	—5·3	0·70	0·28	+0·42	1·42	0·59	+0·83	0·70	0·27	1·66	0·69
Assam	96·5	61·8	81·9	68·2	75·1	—2·3										

METEOROLOGICAL OFFICE, BENGAL,
The 9th May 1893.

C. LITTLE,
Offg. Meteorological Reporter to the Govt. of Bengal.

Abstract of the Results of the Barometric and Thermometric Observations taken at 10 a.m. at the Meteorological Office, Chowringhee, in the month of April 1893.

		Date.
	Inches.	
The mean pressure at 10 A.M. during the month	29·807	
The mean temperature at 10 A.M. during the month	87·4°	
The highest temperature during the month	98·2	18th.
The lowest temperature during the month	69·8	23rd.
The absolute range of temperature during the month	28·4	
The mean daily range of temperature during the month ...	18·9	
The greatest range of temperature in one day during the month ...	22·2	11th, 12th and 23rd.
	°/o	
The mean 10 A.M. humidity during the month	68	
	Inches.	
The mean 10 A.M. vapour tension during the month	·883	
The total rainfall of the month	0·22	
The greatest fall in 24 hours	0·14	28th.
The number of rainy days in the month	1	

J. H. Gilliland,
For Meteorological Reporter to the Govt. of India.

Meteorological Office, India,
The 8th May 1893.

Results of the Meteorological Observations taken at the Alipore Observatory from 23rd to 29th April 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Temperature. Maximum.	Temperature. Range.	Temperature. Minimum.	Hygrometry. Mean wet bulb.	Hygrometry. Vapour tension.	Hygrometry. Dew point.	Hygrometry. Humidity.	Wind. Prevailing direction.	Wind. Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches.	°	%			Inches.	
April	23rd	147 7	3·5	29·747	80·5	91·3	21·6	69·7	71·6	0 658	66·8	64	SSE and variable	97	Nil	Chiefly cloudy. o.
„	24th	148 7	3·0	·791	80·1	88·6	18·5	70·1	72·3	·690	68·2	68	ESE and variable	83	0·04	Chiefly cloudy. o, d.
„	25th	152 5	8·6	·756	81·6	90 6	17·2	73·4	75·4	·800	72 5	75	SSW and calm ...	73	Nil	Partially cloudy.
„	26th	152 5	10·6	·672	83·2	91 9	18·0	73·9	76·4	·820	73·3	74	SSW, SSE and S	83	„	Ditto.
„	27th	151·4	11·0	·603	84 0	92·7	17·5	75 2	74·8	·739	70·2	63	S, SSW and SSE...	117	„	Ditto.
„	28th	145 5	7·4	·564	82·4	90·9	17·7	73 2	75·6	·794	72 3	72	SSW and variable	224	0·10	Chiefly cloudy. o, d, p.
„	29th	153 2	5·5	·573	86·0	93·3	17·0	76·3	80·0	·944	77·5	76	SSW and S and SSE.	203	Nil	Chiefly cloudy, o.

	Inches.
The mean pressure of the seven days	29·672
The average pressure of the corresponding period for 24 years, S.-G.'s Office ...	29·726
	Hours.
The total number of hours of bright sunshine	49·6
The maximum possible number of hours of sunshine	89·9
	°
The mean temperature of the seven days	82·5
The average temperature of the corresponding period for 24 years, S.-G.'s Office	84·8
The extreme variation of temperature	23·6
The maximum temperature	93·3
	Miles.
The highest velocity of the wind in one hour	19
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	70
The average relative humidity of the corresponding period for 24 years, S.-G.'s Office	72
	Inches.
The total fall of rain from 23rd to 29th April 1893	0·14
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	0·75
The total fall from 1st January to 29th April 1893	7·02
The average fall of the corresponding period for 24 years, S.-G.'s Office ...	4·71

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified, and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides, and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; d, drizzling rain; p, passing temporary showers.

J. H. GILLILAND,

For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;

Calcutta, the 1st May 1893.

Results of the Meteorological Observations taken at the Alipore Observatory from 30th April to 6th May 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Maximum.	Range.	Minimum.	Hygrometry. Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Wind. Prevailing direction.	Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
April	30th	146·2	8·4	29·567	85·3	91·3	10·4	80·9	79·6	0·941	77·4	78	SSW and variable	181	0·11	Partially cloudy, o, p.
May	1st	151·2	7·3	·605	84·5	93·7	20·1	73·6	77·4	·848	74·2	72	E by S, SSE and ESE.	101	Nil	Partially cloudy.
,,	2nd	152·5	8·6	·707	83·8	93·6	17·1	76·5	77·5	·862	74·7	75	ESE and SSE ...	73	0·08	Partially cloudy, t < p.
,,	3rd	151·4	7·0	·741	82·7	90·7	16·1	74·6	77·1	·857	74·6	77	SSW and variable	125	1·89	Partially cloudy, o, g, p, t, d.
,,	4th	147·3	9·9	·740	80·0	89·5	19·8	69·7	75·4	·825	73·4	81	SW and variable	105	0·46	Partially cloudy, o, g, d, p K.
,,	5th	135·2	2·3	·772	78·6	84·6	14·0	70·6	74·1	·783	71·9	80	SSW and calm ...	58	Nil	Chiefly cloudy, o, g, t.
,,	6th	142·5	9·5	·723	81·4	89·6	18·3	71·3	74·1	·746	70·4	70	Calm and variable	60	Nil	Partially cloudy, o, g, t < ⌒.

	Inches.
The mean pressure of the seven days	29·694
The average pressure of the corresponding period for 24 years, Surveyor-General's Office	29·705
	Hours.
The total number of hours of bright sunshine	53·0
The maximum possible number of hours of sunshine	90·8
	°
The mean temperature of the seven days	82·3
The average temperature of the corresponding period for 24 years, Surveyor-General's Office	85·3
The extreme variation of temperature	24·0
The maximum temperature	93·7
	Miles.
The highest velocity of the wind in one hour	18
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	76
The average relative humidity of the corresponding period for 24 years, Surveyor-General's Office	72
	Inches.
The total fall of rain from 30th April to 6th May 1893	2·54
The average fall of the corresponding period for 24 years, Surveyor-General's Office	0·74
The total fall from 1st January to 6th May 1893	9·56
The average fall of the corresponding period for 24 years, Surveyor-General's Office	5·45

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications, of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; d, drizzling rain; p, passing temporary showers; t, thunder; <, lightning; K, thunderstorm; ⌒, dew.

J. H. Gilliland,
For Meteorological Reporter to the Govt. of India.

Meteorological Office, Govt. of India;
Calcutta, the 8th May 1893.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 23rd to 29th April 1893.

Month	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature. Daily mean.	Maximum.	Range.	Minimum.	Hygrometry. Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	Rainfall at 10 A.M. for past 24 hours.
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
April ...	23rd ...	29·795	80·9	92 0	22 2	69 8	81·1	70·6	·610	64·6	58	Nil
" ...	24th ...	·859	80·4	90·5	20·2	70·3	82 6	77·5	·877	75·2	79	0·06
" ...	25th ...	·814	82·7	92 0	18·7	73·3	86·1	77·5	·830	73 6	67	Nil
" ...	26th ...	·746	84·2	94·0	19·7	74·3	87·1	79·0	·883	75 4	69	"
" ...	27th ...	·672	85·2	94·5	18 7	75·8	89·4	78·5	·830	73 6	60	"
" ...	28th ...	·620	83·3	93 0	19·4	73·6	85·6	78·0	·858	74·6	70	0·14
" ...	29th ...	·639	85·9	95 0	18·2	76·8	87·1	81·5	1·012	79·6	78	Nil

		Inches.
The mean 10 A.M. pressure of the seven days	... ...	29·735
		°
The mean temperature of the seven days	... ...	83·2
The extreme variation of temperature	... ...	25·2
The maximum temperature	... ...	95·0
		%
The mean 10 A.M. relative humidity of the seven days	... ...	69
		Inches.
The total fall of rain from 23rd to 29th April 1893	... ...	0·20

The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 1st May 1893.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 30th April to 6th May 1893.

Month.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature. Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Hygrometry. Vavour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	Rainfall, past 24 hours.
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
April ...	30th ...	29·604	87·3	93·8	13·0	80·8	89·6	82·0	·992	79·0	71	......
May ...	1st ...	·653	84·9	95·0	20·2	74·8	87·1	80·5	·953	77·8	74	0·13
" ...	2nd ...	·778	85·7	95·0	18·7	76·3	89·6	80·5	·919	76·7	66	......
" ...	3rd ...	·796	82·5	91·2	17·4	73·8	88·4	79·5	·887	75·6	66	0·83
" ...	4th ...	·808	80·8	91·5	21·5	70·0	84·6	79·0	·917	76·6	77	1·42
" ...	5th ...	·816	78·9	87·0	16·2	70·8	84·6	79·5	·941	77·4	79	0·30
" ...	6th ...	·795	81·6	91·5	19·9	71·6	86·6	76·5	·778	71·7	62	0·01

		Inches.
The mean 10 A.M. pressure of the seven days	... ...	29·750
		°
The mean temperature of the seven days	... ...	83·1
The extreme variation of temperature	... ...	25·0
The maximum temperature	... ...	95·0
		%
The mean 10 A.M. relative humidity of the seven days	... ...	71·0
		Inches.
The total fall of rain from 30th April to 6th May 1893	... ...	2·69

The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 8th May 1893.

Vital statistics of the Districts of Bengal for the month of March 1893.

Divisions.	Districts.	Population under registration.	BIRTHS. Number registered.	BIRTHS. Ratio per 1,000 of population per annum.	DEATHS. Cholera. Number registered.	Cholera. Ratio per 1,000 of population per annum.	Small-pox. Number registered.	Small-pox. Ratio per 1,000 of population per annum.	Fever. Number registered.	Fever. Ratio per 1,000 of population per annum.	Dysentery and Diarrhœa. Number registered.	Dysentery and Diarrhœa. Ratio per 1,000 of population per annum.	Injury. Number registered.	Injury. Ratio per 1,000 of population per annum.	Other causes. Number registered.	Other causes. Ratio per 1,000 of population per annum.	Total of all causes. Number registered.	Total of all causes. Ratio per 1,000 of population per annum.	Average of corresponding month of previous five years. Number registered.	Average … Ratio per 1,000 of population per annum.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Burdwan ...	Burdwan	1,391,880	3,909	33·60	9	·07	56	·48	1,725	14·76	60	·48	9	·07	608	5·16	2,467	21·24	4,166	35·88	
	Bankura	1,069,668	2,703	30·24	2	·01	16	·12	909	10·08	20	·12	4	·03	394	4·36	1,315	15·00	2,387	26·76	
	Birbhum	797,833	2,868	43·08	23	·24	1	·01	1,213	18·60	9	·12	15	·12	486	7·20	1,777	26·64	2,555	38·40	
	Midnapore	2,631,516	7,024	31·92	154	·60	96	·36	3,242	14·76	131	·48	27	·12	894	3·96	4,344	20·64	7,090	32·28	
	Hooghly including Serampore	1,076,710	3,302	36·72	32	·36	...	...	1,393	15·48	134	1·44	36	·36	434	4·80	2,029	22·56	2,813	31·32	
	Howrah	721,211	2,185	36·24	98	1·56	...		604	9·96	199	3·24	26	·36	293	4·80	1,220	20·28	1,675	27·84	
Presidency ...	24-Parganas	1,892,033	4,846	30·72	68	·36	7	·03	1,835	11·76	82	·48	71	·36	342	2·16	2,425	15·36	4,153	26·28	
	Nadia	1,644,108	6,492	47·28	5	·03	5	·03	1,740	12·60	7	·01	32	·12	491	3·48	2,280	16·56	4,492	32·76	
	Jessore	1,888,827	7,986	50·64	15	·08	...		3,250	20·64	7	·03	55	·24	424	2·64	3,751	23·76	5,848	37·08	
	Murshidabad	1,250,946	4,999	47·88	4	·03	1	·008	3,302	22·08	7	·06	18	·12	378	3·60	2,710	25·92	3,321	31·80	
	Khulna	1,177,652	3,771	38·40	24	·24	...	...	1,310	13·56	2	·01	30	·24	356	3·60	1,752	17·76	2,774	28·20	
Rajshahi ...	Dinajpur	1,555,835	7,214	55·56	1	·007	...	...	3,083	23·76	2	·01	17	·12	216	1·56	3,319	25·56	5,068	39·00	
	Rajshahi	1,313,336	6,174	56·40	21	·12	41	·36	2,632	24·12	4	·03	16	·12	242	2·16	2,976	27·12	3,661	33·36	
	Rangpur	2,065,464	7,925	45·96	...	...	...	...	3,854	22·32	5	·02	18	·09	209	1·20	4,086	23·64	6,805	39·48	
	Bogra	817,494	3,356	49·20	...	...	14	·12	1,141	16·68	2	·02	17	·24	310	4·92	1,514	22·20	2,001	29·28	
	Pabna	1,362,392	4,914	43·20	...	...	39	·24	1,832	16·68	6	·04	19	·12	113	·96	2,009	17·64	2,725	24·00	
	Darjeeling	233,314	318	17·04	...	...	...	...	352	18·84	26	1·32	10	·48	91	4·80	479	25·68	553	29·64	
	Jalpaiguri	681,352	1,944	34·20	1	·01	...	...	1,200	21·12	2	·02	9	·12	15	·24	1,227	21·60	2,050	36·00	
Dacca ...	Dacca	2,420,656	8,270	40·92	253	1·20	133	·60	2,318	11·40	87	·36	44	·24	747	3·60	3,582	17·64	4,168	20·64	
	Faridpur	1,777,320	7,207	48·60	42	·24	13	·08	2,283	15·24	15	·09	23	·12	187	3·24	2,863	19·08	3,801	25·32	
	Backergunge ...	2,153,965	7,390	41·16	169	·84	1	·004	3,066	17·04	28	·12	62	·24	1,234	6·84	4,560	25·32	7,823	43·56	
	Mymensingh ...	3,472,186	8,975	30·96	528	1·80	39	·12	3,255	11·16	25	·08	27	·08	649	2·16	4,523	15·60	5,232	18·12	
Chittagong ...	Chittagong	1,290,167	3,983	37·08	74	·60	11	·09	2,285	21·24	31	·24	41	·36	251	2·28	2,693	24·96	2,597	24·12	
	Noakhali	1,009,693	4,346	51·60	23	·24	6	·06	1,730	20·52	10	·10	36	·36	288	3·36	2,095	24·84	2,521	29·88	
	Tippera	1,782,935	6,160	41·40	175	1·08	8	·04	1,879	12·60	27	·12	35	·12	429	2·88	2,553	17·16	3,442	23·16	
Patna ...	Patna	1,769,004	3,357	22·68	4	·02	56	·36	1,409	9·48	51	·24	48	·24	446	3·00	2,014	13·56	2,738	18·60	
	Gaya	2,138,331	4,070	22·80	22	·12	186	·96	2,341	13·08	10	·04	87	·48	336	1·80	2,972	16·56	3,269	18·24	
	Shahabad	2,063,337	5,684	33·00	2	·01	41	·12	2,673	15·48	16	·08	30	·12	581	3·36	3,352	19·44	2,801	16·20	
	Muzaffarpur	2,711,445	6,480	28·56	1	·003	5	·01	4,135	18·24	70	·24	37	·12	554	2·40	4,802	21·24	4,184	18·48	
	Darbhanga	2,801,955	5,790	24·72	3	·01	3	·01	4,015	17·16	113	·48	46	·12	482	2·04	4,662	19·92	4,462	19·08	
	Saran	2,467,477	6,714	32·64	...	...	8	·03	1,645	7·92	133	·60	72	·24	1,852	9·00	3,710	18·00	3,487	16·92	
	Champaran	1,859,465	3,413	21·48	...	...	6	·03	2,031	13·08	4	·02	39	·24	546	3·36	2,626	16·80	2,933	18·84	
Bhagalpur ...	Monghyr	2,036,021	3,813	22·44	...	...	30	·12	2,572	15·12	13	·07	45	·24	351	2·04	3,011	17·64	4,141	24·36	
	Bhagalpur	2,032,696	4,533	26·76	...	...	61	·36	3,231	18·96	18	·09	22	·12	372	2·16	3,704	21·84	4,592	27·00	
	Purnea	1,944,658	6,089	37·56	...	...	13	·07	3,412	21·00	12	·07	13	·07	60	·36	3,510	21·60	6,446	39·84	
	Malda	814,919	3,398	49·92	2	·02	1	·01	1,491	21·84	1	·01	5	·07	102	1·44	1,602	23·52	1,678	24·60	
	Sonthal Parganas	1,754,196	2,291	15·60	4	·02	32	·12	1,427	9·72	9	·06	10	·06	146	·96	1,606	10·92	2,414	16·44	
Orissa ...	Cuttack	1,937,671	3,821	23·64	100	·60	278	1·68	1,865	11·52	318	1·92	76	·36	1,110	6·84	3,747	23·16	4,920	30·36	
	Puri	944,998	1,964	24·84	93	1·08	312	3·96	476	6·00	170	2·04	27	·24	892	11·28	1,970	24·96	2,349	29·76	
	Balasore	994,625	2,388	28·80	79	·84	6	·07	739	8·76	244	2·88	34	·36	555	6·60	1,648	19·80	2,714	32·64	
Chota Nagpur.	Hazaribagh	1,164,321	2,853	29·40	...	...	39	·36	1,563	16·08	19	·12	43	·36	288	2·88	1,952	20·04	2,487	25·56	
	Lohardaga	1,128,865	2,989	31·68	...	...	27	·24	942	9·96	153	1·56	2	·01	653	6·84	1,776	18·84	2,051	21·72	
	Palamau	596,770	1,738	34·92	...	...	22	·36	1,030	20·64	0	·12	11	·12	204	4·08	1,276	25·56	1,368	27·48	
	Singhbhum	545,488	1,369	30·00	..	...	11	·24	460	10·08	17	·36	15	·24	122	2·64	625	13·68	822	18·00	
	Manbhum	1,193,328	2,117	21·24	40	·36	56	·48	963	9·72	20	·12	13	·12	284	2·76	1,381	13·80	2,407	24·12	
	Total ...	70,388,083	203,232	34·56	2,073	·24	1,680	·24	88,930	15·12	2,328	·36	1,381	·12	20,324	3·36	116,725	19·80	156,024	26·52	
Average of the corresponding month of previous five years			Not available, as birth registration in rural areas was only introduced from the commencement of 1892.		20,308	3·36	2,093	·24	107,853	18·36	3,918	·60	1,388	·12	20,404	3·48	156,024	26·52	...	...	
Difference + or —			......		−18,235	−3·12	−413	Equal	−18,914	−3·24	−1,590	−·24	−7	Equal	−140	−·12	−39,299	−6·72	...	...	

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,
The 6th May 1893.

H. J. DYSON, *Surgeon-Capt.*, F.R.C.S.,
Offg. Sanitary Commissioner for Bengal.

Vital Statistics of Towns in Bengal with a population of 20,000 and over during the month of March 1893.

DISTRICTS.		TOWNS.	Population under registration.	BIRTHS.		DEATHS.														AVERAGE OF CORRESPONDING MONTH OF PREVIOUS FIVE YEARS.		REMARKS.
						CHOLERA.		SMALL-POX.		FEVER.		DYSENTERY AND DIARRHŒA.		INJURY.		OTHER CAUSES.		TOTAL OF ALL CAUSES.				
				Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Burdwan ...	1	Burdwan	34,477	81	28·08	...	...	...	...	44	15·24	9	3·12	...	...	18	6·24	71	24·60	136	47·28	
Midnapore ...	2	Midnapore	32,264	55	20·40	...	...	...	...	36	13·32	4	1·44	...	...	21	7·80	61	22·68	122	45·36	
Hooghly ...	3	Hooghly and Chinsura	33,060	83	30·12	8	2·88	...	...	41	14·88	7	2·52	...	...	25	9·00	81	29·40	100	36·24	
	4	Serampore	35,952	73	24·36	12	3·96	...	...	43	14·28	19	6·24	3	·96	4	1·32	81	27·00	97	32·28	
Howrah ...	5	Howrah	116,606	178	18·24	26	2·64	...	...	58	5·88	33	3·36	5	·48	37	3·72	159	16·32	216	22·20	
24-Parganas...	6	Cossipore-Chitpur ...	31,423	58	22·08	...	...	...	...	11	4·20	5	1·80	...	...	8	3·00	24	9·12	92	35·04	
	7	Maniktala	32,865	35	12·72	...	...	...	...	22	7·92	...	...	2	·72	4	1·44	28	10·20	65	23·64	
	8	Barnagore	34,278	50	17·40	3	·96	...	...	19	6·60	5	1·68	3	·96	13	4·44	43	15·00	74	25·80	
	9	South Subarban ...	69,642	117	20·16	...	...	...	...	47	8·04	4	·60	4	·60	15	2·52	70	12·00	72	12·36	
	10	Khorda or South Barrackpore.	25,647	31	10·32	5	1·68	...	...	34	11·40	4	1·32	1	·24	...	...	44	14·76	60	26·88	
	11	Naihati	29,724	113	45·60	1	·36	...	...	23	9·24	4	1·56	6	2·40	7	2·76	41	16·44	69	27·84	
	12	Nawabganj or North Barrackpore.	20,980	39	22·20	3	1 68	...	...	28	15·96	8	4·56	1	·48	7	3·96	47	26·88	55	31·44	
Nadia ...	13	Krishnagar	25,500	111	52·20	..	...	...	...	35	16·44	3	1·32	1	·36	8	3·72	47	22·08	51	24·00	
	14	Santipur	30,437	126	49·56	..	...	...	...	46	18·12	...	...	...	...	5	1·92	51	20·04	46	18·12	
Murshidabad	15	Murshidabad City ...	35,576	80	26·88	...	...	...	...	61	20·52	...	...	...	...	6	1·92	67	22·56	113	38·04	
	16	Berhampore	23,515	65	35·12	...	...	...	...	23	11·64	...	...	2	·96	6	3·00	31	15·72	59	30·00	
Rajshahi ...	17	Rampur Boalia ...	21,407	64	35·76	...	...	...	...	37	19·44	4	2·16	1	·48	2	1·08	44	24·60	59	33·00	
Pabna ...	18	Sirajganj	23,267	82	42·24	...	...	...	...	32	16·44	...	...	...	...	2	·96	34	17·52	32	16·44	
Dacca ...	19	Dacca	83,633	205	29·40	7	·96	1	·12	70	9·96	12	1·68	2	·24	58	8·28	150	20·28	180	25·80	
Chittagong ...	20	Chittagong	24,069	57	28·32	2	·96	...	...	60	29·88	3	1·44	...	...	7	3·48	72	35·88	50	24·84	
Patna	21	Patna City	165,192	303	21·96	2	·12	1	·07	91	6·72	26	1·80	3	·12	78	5·64	204	14·76	233	16·92	
	22	Bihar	47,723	96	24·12	...	...	10	2·40	50	12·48	1	·24	3	·72	24	6·00	88	22·08	80	20·04	
	23	Dinapore	44,419	74	19·92	...	...	...	...	31	8·28	1	·24	...	...	17	4·56	49	13·20	47	12·60	
Gaya ...	24	Gaya	80,383	153	22·80	6	·84	3	·36	94	13·92	5	·72	8	1·08	27	3·96	143	21·24	241	35·88	
Shahabad ...	25	Arrah	46,905	126	32·16	...	...	1	·24	55	14·04	1	·24	1	·24	27	6·84	85	21·72	64	16·32	
	26	Sasaram	22,713	73	38·52	...	...	...	...	25	13·20	2	·96	1	·48	7	3·60	35	18·48	39	20·52	
Muzaffarpur	27	Muzaffarpur	49,192	121	29·40	...	...	...	...	91	22·08	5	1·20	1	·24	18	4·32	115	27·96	83	20·16	
	28	Hajipur	21,467	69	38·52	1	·48	...	...	29	16·08	8	4·44	...	...	13	7·20	51	28·44	53	29·52	
Darbhanga ...	29	Darbhanga	73,561	183	29·76	...	...	...	...	57	9·24	27	4·32	1	·12	68	11·04	153	24·84	148	24·12	
Saran	30	Chapra	57,352	117	24·48	...	...	1	·12	17	3·48	19	3·96	...	...	27	5·64	64	13·32	68	14·16	
Champaran ...	31	Bettiah	22,780	39	20·52	...	...	...	...	15	7·80	...	...	...	...	11	5·76	26	13·68	53	27·84	
Monghyr ...	32	Monghyr	57,077	166	34·80	..	...	1	·12	43	9·00	5	·96	2	·36	53	11·04	104	21·84	120	25·20	
Bhagalpur ...	33	Bhagalpur	69,106	137	23·76	...	...	19	3·24	91	15·72	7	1·20	...	...	52	9·00	169	29·28	146	25·32	
Cuttack ...	34	Cuttack	47,186	72	18·24	...	...	...	...	18	4·56	11	2·76	...	...	19	4·80	48	12·12	70	17·76	
Puri ..	35	Puri	28,794	42	17·40	2	·72	11	4·56	8	3·24	7	2·88	...	...	29	12·00	57	23·64	122	50·76	
Balasore ...	36	Balasore	20,775	46	26·52	8	4·56	...	...	19	10·92	5	2·88	...	...	8	4·56	40	23·04	40	23·04	
Lohardaga ...	37	Ranchi	20,306	48	28·32	...	...	...	...	18	10·56	...	...	1	·48	9	5·28	28	16·44	25	14·76	
		Total ...	1,649,273	3,568	25·92	86	·60	48	·24	1,525	11·04	254	1·80	52	·36	740	5·28	2,705	19·68	3,400	24·72	
		Average of the corresponding month of previous five years.	...	Complete average figures of past five years cannot be available.		487	3·48	147	·96	1,618	11·76	309	2·16	56	·36	783	5·64	3,400	24·72	...	...	
		Difference + or − ...	...	...	...	−401	−2·88	−99	−·72	− 93	−·72	−55	−·36	−4	Equal	−43	−·36	−695	−5·04	...	...	

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,
The 6th May 1893.

H. J. DYSON, *Surgeon-Capt.*, F.R.C.S.,
Offg. Sanitary Commissioner for Bengal.

Supplementary Vital Statistics of Districts for February 1893 received too late for publication with the figures of that month on the 3rd April 1893.

Divisions.	Districts.	Population under registration.	Births.		Deaths.														Average of corresponding month of previous five years.	
			Number registered.	Ratio per 1,000 of population per annum.	Cholera.		Small-pox.		Fever.		Dysentery and Diarrhœa.		Injury.		Other causes.		Total of all causes.			
					Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.	Number registered.	Ratio per 1,000 of population per annum.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Presidency ...	24-Parganas	1,892,033	4,050	25·68	124	·72	23	·12	2,075	13·20	110	·60	35	·12	315	2·16	2,712	17·16	3,615	21·72
Chota Nagpur ...	Lohardaga	1,128,885	2,281	24·24	8	·08	27	·24	882	9·36	100	·96	...	...	611	6·48	1,628	17·28	1,589	16·80
	Total	3,020,918	6,331	25·08	132	·48	50	·12	2,957	11·64	210	·72	35	·12	956	3·72	4,340	17·16	5,204	20·64
	Average of corresponding month of previous five years.	......	Not available, as birth registration in rural areas was only introduced from 1892.		670	2·64	71	·24	3,249	12·84	302	1·08	44	·12	868	3·36	5,204	20·64	...	...
	Difference + or −	......	....	.....	−538	−2·16	−21	−·12	−292	−1·20	−92	−·36	−9	Equal	+88	+·36	−864	−3·48	...	...
	Total for the Province ...	70,388,083	187,714	31·92	2,148	·36	1,466	·24	90,783	15·36	2,385	·36	976	·12	20,210	3·36	117,968	20·04	128,531	21·84
	Average of corresponding month of previous five years.	.....	Not available, as birth registration in rural areas was only introduced from 1892.		8,635	1·44	1,393	·12	94,212	15·96	3,764	·60	968	·12	19,529	3·24	128,531	21·84	...	...
	Difference + or −	......	......	......	−6,487	−1·08	+73	+·12	−3,459	−·60	−1,379	−·24	+8	Equal	+681	+·12	−10,563	−1·80	...	...
Districts.	*Towns.*																			
24-Parganas ...	Cossipore-Chitpur	31,423	50	19·08	2	·72	...	...	17	6·48	5	1·80	...	...	8	3·00	32	12·12	84	32·04
	Maniktala	32,865	34	12·36	2	·72	...	...	16	5·76	2	·72	...	...	4	1·44	24	8·76	48	17·52
	Barnagore	34,278	54	18·84	1	·24	...	...	30	10·44	8	2·76	...	...	11	3·84	50	17·40	73	25·44
	South Suburban	60,642	122	21·00	3	·48	...	...	38	6·48	13	2·16	1	·12	12	2·04	67	11·52	104	17·88
	Khordaha	35,647	38	12·72	2	·60	...	...	39	13·08	8	2·64	...	.	4	1·32	53	17·76	69	23·16
	Naihati	29,724	55	22·20	...	...	...	...	30	12·00	4	1·56	...	...	7	2·76	41	16·44	67	27·00
	Nawabganj	20,980	29	16·56	...	...	..	...	30	17·04	3	1·68	...	...	1	·48	34	19·44	46	26·28
Lohardaga ...	Ranchi	29,306	16	9·36	...	...	...	...	19	11·16	...	...	...	...	6	3·48	25	14·76	24	14·16
	Total ...	274,865	398	17·28	10	·36	...	...	219	9·48	43	1·80	1	·03	53	2·28	326	14·16	515	22·44
	Average of corresponding month of previous five years.	......	Complete average figures of past five years are not available.		97	4·20	14	·60	274	11·88	53	2·28	10	·36	67	2·88	515	22·44	..	...
	Difference + or − ...	......	......	......	−87	−3·84	−14	−·60	−55	−2·40	−10	−·48	−9	−·33	−14	−·60	−189	−8·28	...	
	Total of Towns with a population of 20,000 and over.	1,649,273	3,182	23·04	61	·36	51	·36	1,541	11·16	302	2·16	37	·24	629	4·56	2,621	18·96	3,019	21·96
	Average of corresponding month of previous five years.	......	Complete average figures of past five years are not available.		342	2·40	112	·72	1,427	10·32	353	2·52	52	·36	733	5·28	3,019	21·96	...	...
	Difference + or −	......	......	......	−281	−2·04	−61	−·36	+114	+·84	−51	−·36	−15	−·12	−104	−·72	−398	−3·00	...	...

Office of Sanitary Commissioner for Bengal,
The 6th May 1893.

H. J. DYSON, *Surgeon-Capt.*, F.R.C.S.,
Offg. Sanitary Commissioner for Bengal.

IRRIGATION DEPARTMENT, BENGAL.

Abstract statement showing Tollage on Canals in Bengal classed as Minor Works and Navigation for the month of March 1893, *as compared with that of the corresponding month of the previous year.*

CANALS.	TOLLAGE, 1892-93.						TOLLAGE, 1891-92.					
	During the month.			To end of the month.			During the month.			To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Calcutta and Eastern Canals	39,970	5	6	3,65,940	8	3	38,652	8	3	3,96,661	4	6
Tolly's Nala ...	9,594	9	6	91,005	11	6	8,473	9	0	1,12,520	14	9
Total ...	49,564	15	0	4,56,946	3	9	47,126	1	3	5,09,182	3	3
Orissa Coast Canal ...	9,663	1	6	55,992	9	6	8,033	6	0	59,104	8	9
Nadia Rivers ...	9,050	15	6	1,65,380	15	9	6,623	1	6	1,92,718	7	0
GRAND TOTAL ...	68,279	0	0	6,78,319	13	0	61,782	8	9	7,61,005	3	0

CALCUTTA,
The 8th May 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 6th May 1893, *as compared with the corresponding week of the previous year.*

NATURE OF CARGO.	WEEK ENDING SATURDAY, THE 6TH MAY 1893.			WEEK ENDING SATURDAY, THE 7TH MAY 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs
Rice and paddy	242	57,175	908	171	41,640	597
Jute	23	7,600	94	11	4,200	41
Firewood	106	60,550	857	76	37,625	569
Other articles	741	1,75,110	2,696	753	2,23,255	3,371
Total ...	1,112	3,00,435	4,555	1,011	3,06,720	4,578

EAST INDIAN RAILWAY.

Statement of Goods Traffic in Staples carried during the four weeks ending 25th March 1893, *as compared with the same period of* 1892.

Staples.	1892.		1893.		Increase.		Decrease.	
	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.
	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds	Rs.
Cotton, raw	87,499	53,260	87,866	62,232	367	8,972	...	...
Cotton twist and yarn—								
1.—European	8,817	8,116	8,010	8,597	...	481	807	...
2.—Indian	14,949	7,333	19,033	10,310	4,084	3,007	...	...
Cotton piece-goods—								
1.—European	1,21,685	1,59,585	1,15,191	1,24,556	...	...	6,494	35,029
2.—Indian	8,930	5,700	12,054	9,820	3,124	4,120	...	...
Drugs and chemicals—								
1.—Intoxicating other than opium	815	207	730	208	...	1	85	...
2.—Non-intoxicating	9,338	8,779	10,427	8,206	1,089	...	...	573
Dyes and tans—								
1.—Indigo	1,422	1,126	968	540	...	...	454	586
2.—Myrabolams	24,685	6,637	49,256	10,813	24,571	4,176	...	...
3.—Aniline dyes	309	284	296	245	...	...	13	39
4.—Cutch	1,394	462	1,325	494	...	32	69	...
5.—Paints and colours	20,359	4,682	8,127	2,857	...	...	12,232	1,825
6.—Others	4,407	2,960	2,026	1,115	...	...	2,381	1,845
Grains—								
1.—Wheat	5,24,822	1,55,898	2,55,207	98,030	...	...	2,69,615	57,868
2.—Rice	7,13,663	1,22,482	6,71,254	98,742	...	...	42,409	23,740
3.—Jawar and bajra	41,946	6,036	99,554	7,906	57,608	1,870	...	...
4.—Gram	73,743	26,125	1,67,909	72,193	94,166	46,068	...	...
5.—Indigo seed	25,552	7,729	48,804	16,668	23,252	8,939	...	...
6.—Seeds other than oil-seeds	38,350	14,169	47,609	15,379	9,259	1,210	...	...
7.—Others	2,39,435	54,713	3,51,272	93,861	1,11,837	39,148	...	...
Hides and skins—								
1.—Hides of cattle	50,081	33,736	74,928	45,320	24,847	11,584	...	...
2.—Skins of sheep, &c.	14,485	9,429	19,495	7,513	5,010	...	...	1,916
Horns	2,253	1,316	1,058	697	...	...	1,195	619
Jute—								
1.—Raw	14,826	5,214	34,234	9,729	19,408	4,515	...	...
2.—Gunny bags and cloth	1,13,793	55,859	1,24,024	67,080	10,231	11,221	...	...
Lac—								
1.—Stick	14,504	4,577	10,596	4,218	...	...	3,908	359
2.—Shell lac	12,984	10,445	12,973	9,800	...	...	11	645
Leather—								
1.—Unmanufactured	2,147	4,109	2,080	4,081	...	...	67	28
2.—Manufactured	4,494	4,762	4,663	5,984	169	1,222	...	...
Liquors—								
1.—Beer	7,212	4,235	7,537	4,255	325	20	...	...
2.—Wines	2,962	4,422	2,786	4,261	...	...	176	161
3.—Spirits	2,434	3,275	2,151	2,433	...	...	283	842
Metals—								
1.—Copper, unwrought	3,642	4,512	3,613	4,280	...	...	29	232
2.—Brass, unwrought	3,551	1,833	6,180	4,567	2,629	2,734	...	...
3.—Brass and copper, wrought	14,313	7,216	15,165	7,450	852	234	...	...
4.—Iron	2,03,918	71,395	2,41,907	88,960	37,989	17,565	...	...
5.—Tin	3,893	4,204	4,495	3,529	602	...	...	675
6.—Others	47,005	6,948	12,156	8,428	...	1,480	34,849	...
Oils—								
1.—Castor	3,214	756	3,641	926	427	170	...	...
2.—Kerosine	80,367	40,639	1,17,900	55,759	37,533	15,120	...	...
3.—Others	8,415	3,679	11,071	4,296	2,656	617	...	...
Oil-seeds—								
1.—Linseed	4,28,497	1,55,969	1,93,772	61,052	...	...	2,34,725	94,917
2.—Rape and mustard	2,02,447	93,394	3,58,656	94,608	1,56,209	1,114	...	...
3.—Til or jinjili	26,432	6,601	37,667	8,390	11,235	1,789	...	...
4.—Castor	87,855	23,613	79,366	22,734	...	...	8,489	879
5.—Poppy	11,658	4,551	3,007	784	...	...	8,651	3,767
6.—Others	15,005	4,821	19,268	3,979	4,263	...	...	842
Opium	1,334	1,184	708	670	...	...	626	514
Paper and pasteboard	8,641	5,809	9,415	5,677	774	...	...	132
Provisions—								
1.—Ghee	29,830	16,928	35,015	24,330	5,185	7,402	...	...
2.—Dried fruits and nuts	23,124	19,337	32,878	28,415	9,754	9,078	...	...
3.—Cocoanuts	6,606	3,100	4,565	2,266	...	...	2,041	834
4.—Turmeric	10,920	5,984	18,814	12,671	7,894	6,687	...	...
5.—Others	76,753	26,242	98,840	31,655	22,087	5,413	...	...
Salt	5,16,142	94,780	6,40,814	89,144	1,24,672	...	...	5,636
Saltpetre, &c.—								
1.—Saltpetre	76,757	33,950	53,197	22,246	...	...	23,560	11,704
2.—Borax	4,563	3,933	4,112	3,225	...	...	451	708
3.—Other saline substances	37,072	11,282	27,737	8,277	...	...	9,335	3,005
Silk, raw—								
1.—Foreign	7	20	96	6	89	...	...	14
2.—Indian	1,709	853	3,606	1,900	1,897	1,047	...	...
Silk piece-goods—								
1.—Foreign	39	96	4	4	...	...	35	93
2.—Indian	472	681	334	398	...	...	138	283
Spices—								
1.—Pepper	3,316	3,438	3,338	3,452	22	14	...	...
2.—Other	31,912	18,258	47,658	36,284	15,746	18,046	...	...
Sugar—								
1.—Drained	24,675	11,506	20,829	9,421	...	...	3,746	2,085
2.—Undrained	4,71,774	1,00,665	5,68,828	1,38,879	97,054	38,214	...	...
Stone and lime	3,43,883	60,790	2,77,071	44,552	...	...	66,812	16,238
Tea—								
1.—Foreign	3	4	3	1	...	...	...	3
2.—Indian	631	676	1,883	1,692	1,252	1,016	...	...
Timber, &c.—								
1.—Timber	1,34,852	22,199	64,311	10,930	...	...	70,541	11,269
2.—Firewood	31,065	2,602	37,614	4,222	6,549	1,620	...	...
Tobacco	75,415	35,020	70,709	35,659	...	639	4,706	...
Umbrellas	2,246	3,159	1,721	2,597	...	...	525	562
Wool—								
1.—Raw	2,804	3,650	1,820	1,986	...	...	984	1,664
2.—Piece-goods—								
a.—European	303	571	410	245	107	...	...	326
b.—Indian	2,710	2,696	1,615	1,888	...	...	1,095	808
3.—Shawls	5	13	...	...	...	...	5	13
All other articles of merchandise	5,74,930	1,73,870	6,38,253	2,41,660	63,267	67,790	...	...
Total ...	58,33,956	18,81,069	60,27,505	19,42,167	1,88,549	61,098	...	...
Military stores	18,078	24,018	33,137	71,849	15,059	47,831	...	...
Coal—								
1.—For public	41,83,194	6,18,675	45,71,088	6,59,559	3,87,894	31,884	...	...
2.—" Railway	5,80,344	72,443	6,99,370	84,426	1,19,026	11,983	...	...
Railway Materials—								
1.—For construction and revenue	7,59,612	35,248	11,88,684	46,042	4,29,072	10,794	...	...
Live-stock	...	6,265	...	8,022	...	1,757	...	...
Total ...	1,13,80,184	20,37,718	1,25,19,784	28,03,065	11,39,600	1,65,347	...	...

T. SIMPSON, *Assistant Auditor.*

TRAFFIC AUDIT OFFICE, GOODS DIVISION, JAMALPUR, *the 6th May* 1893.

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 29th April 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. a. p.	Mds. s.	Rs. a. p.	Rs. a. p.	Rs. a. p.			
Total traffic for the week ...	281,073	2,81,396 1 0	32,54,417 0	7,98,407 7 0	19,639 5 0	10,99,442 13 0	72,741	134,948½	207,689½
Or per mile of railway	......	174 11 8	......	495 12 0	12 3 1	682 10 9	......	......	......
For previous 16 weeks of half-year	4,748,139	53,05,909 11 0	4,83,01,193 10	1,07,96,817 13 0	2,96,155 8 0	1,63,98,883 0 0	1,257,008½	1,809,049½	3,066,058½
Total for 17 weeks ...	5,029,212	55,87,305 12 0	5,15,55,610 10	1,15,95,225 4 0	3,15,794 13 0	1,74,98,325 13 0	1,329,749½	1,943,998½	3,273,748
Comparison.									
Total for corresponding week of previous year	289,667	2,73,041 1 5	32,92,582 30	9,23,895 3 2	19,215 6 0	12,16,151 10 7	72,932	145,143	218,075
Per mile of railway corresponding week of previous year ...	......	169 8 7	......	573 10 9	11 14 11	755 2 3	......	......	......
Total for corresponding 17¾ weeks of previous year	5,049,644	55,51,329 1 9	4,99,54,893 20	1,18,79,448 2 9	3,26,646 8 3	1,77,57,423 12 9	1,353,617	1,922,527	3,276,144

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 29th April 1893 on 22½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. a. p.	Mds. s.	Rs. a. p.	Rs. a. p.	Rs. a. p.			
Total traffic for the week ...	*22,044	*5,605 10 0	13,149 0	523 3 0	13 0 0	6,141 13 0	876	98	968
Or per mile of railway ...	......	251 15 0	......	23 8 3	0 9 4	276 0 7	......	......	......
For previous 16 weeks of half-year	†372,209	†97,802 13 0	‡1,98,392 30	‡6,468 8 0	§175 0 0	1,04,446 5 0	14,462	1,670	16,132
Total for 17 weeks ...	394,253	1,03,408 7 0	2,11,141 30	6,991 11 0	188 0 0	1,10,588 2 0	15,338	1,762	17,100
Comparison.									
Total for corresponding week of previous year	20,045	5,099 15 5	11,259 20	489 1 0	15 9 0	5,604 9 5	864	104	968
Per mile of railway corresponding week of previous year	......	229 3 5	......	21 15 8	0 11 2	251 14 3	......	......	......
Total for corresponding 17¾ weeks of previous year ...	404,408½	1,94,985 11 3	3,26,959 20	11,416 13 9	206 2 6	1,16,608 11 6	15,414	1,929	17,343

* The increase is chiefly in pilgrim traffic from Tarkessur.
† Added number of passengers 132 and Rs. 159 }
‡ Ditto Mds. 12 and ,, 28 } on account of difference between the approximate and audited figures for the week ended 25th March 1893.
§ Ditto ,, 2 }

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 29th April 1893, on 161⅞ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. a. p.	Mds. s.	Rs. a. p.	Rs. a. p.	Rs. a. p.			
Total traffic for the week ...	*16,312	*12,505 3 0	70,255 20	10,298 4 0	53 0 0	22,854 7 0	6,194	2,792	8,986
Or per mile of railway	......	77 7 8	......	63 12 8	0 5 3	141 9 7	......	......	......
For previous 16 weeks of half-year	†303,260	†2,21,769 15 0	‡10,27,053 0	‡1,37,456 7 0	§758 0 0	3,59,984 6 0	87,091½	54,506	141,597
Total for 17 weeks ...	3,19,572	2,34,275 2 0	10,97,308 20	1,47,752 11 0	811 0 0	3,82,838 13 0	93,285½	57,298	150,583
Comparison.									
Total for corresponding week of previous year	14,852½	11,131 5 8	32,391 0	6,527 7 0	60 2 3	17,718 14 11	6,613	2,220	8,833
Per mile of railway corresponding week of previous year	......	68 15 6	......	40 7 1	0 5 11	109 12 6	......	......	......
Total for corresponding 17¾ weeks of previous year	289,[illegible]40	2,3[illegible],634 14 0	7,51,623 10	1,42,851 11 0	1,264 4 0	3,74,750 13 0	107,494	38,802	146,296

* The increase is principally due to outward traffic from Delhi, Panipat and Kalka stations.
† Deducted number of passengers 134 and Rs. 2,615 }
‡ Added Mds. 72,096 and deducted ,, 1,877 } on account of difference between the approximate and audited figures for the week ended 25th March 1893.
§ Ditto ,, 33 }

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for the week ended 29th April 1893, on 777 miles open.

	Coaching Traffic. Number of passengers.	Coaching Traffic. Coaching receipts.	Merchandise and Mineral Traffic. Weight carried.	Merchandise and Mineral Traffic. Receipts.	Other earnings.	Total earnings.	Traffic Train-miles run. Coaching.	Traffic Train-miles run. Merchandise.	Traffic Train-miles run. Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	166,991	85,700 0 0	6,95,937 0	99,380 0 0	24,670 0 0	2,09,750 0 0	27,708	29,654	57,362
Or per mile of railway	215	110 0 0	896 0	128 0 0	†14 0 0	252 0 0	......	......	.....
For previous 16 weeks of half-year*	2,894,163	13,97,168 0 0	1,17,24,102 0	15,24,005 0 0	2,43,660 0 0	31,64,833 0 0	456,269	454,189	910,458
Total for 17 weeks ...	3,061,159	14,82,868 0 0	1,24,20,039 0	16,23,385 0 0	2,68,330 0 0	33,74,583 0 0	483,977	483,843	967,820
Comparison.									
Total for corresponding week of previous year	146,627	75,953 0 0	6,17,983 0	84,404 0 0	23,088 0 0	1,83,445 0 0	26,589	28,399	54,988
Per mile of railway corresponding period of previous year ...	189	98 0 0	795 0	109 0 0	†12 0 0	219 0 0	......	......	......
Total to corresponding date of previous year	2,863,137	14,23,419 0 0	1,04,04,443 0	13,72,188 0 0	2,53,911 0 0	30,49,518 0 0	469,886	501,948	971,834

* Audited up to week ending 4th March 1893.
† Excluding steamer earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 29th April 1893, on 125 miles open.

	Coaching Traffic. Number of passengers.	Coaching Traffic. Coaching receipts.	Merchandise and Mineral Traffic. Weight carried.	Merchandise and Mineral Traffic. Receipts.	Other earnings.	Total earnings.	Traffic Train-miles run. Coaching.	Traffic Train-miles run. Merchandise.	Traffic Train-miles run. Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	28,263	9,730 0 0	74,437 0	4,650 0 0	50 0 0	14,430 0 0	3,541	2,131	5,672
Or per mile of railway	226	78 0 0	595 0	37 0 0	......	115 0 0	......	......	......
For previous 16 weeks of half-year*	495,010	1,78,935 0 0	11,00,397 0	67,848 0 0	2,342 0 0	2,49,125 0 0	59,781	31,105	90,886
Total for 17 weeks ...	523,273	1,88,665 0 0	11,74,834 0	72,498 0 0	2,392 0 0	2,63,555 0 0	63,332	33,236	96,558
Comparison.									
Total for corresponding week of previous year	26,552	9,532 0 0	66,377 0	3,792 0 0	105 0 0	13,429 0 0	3,541	2,131	5,672
Per mile of railway corresponding week of previous year ...	212	76 0 0	531 0	30 0 0	1 0 0	107 0 0	......	......	......
Total to corresponding date of previous year	507,850	1,82,194 0 0	10,57,164 0	64,564 0 0	1,680 0 0	2,48,438 0 0	63,166	34,893	98,059

* Audited up to week ending 4th March 1893.

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 29th April 1893, on 86 miles open.

	Coaching Traffic. Number of passengers.	Coaching Traffic. Coaching receipts.	Merchandise and Mineral Traffic. Weight carried.	Merchandise and Mineral Traffic. Receipts.	Other earnings (estimated).	Total earnings.	Traffic Train-miles run. Coaching.	Traffic Train-miles run. Merchandise.	Traffic Train-miles run. Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	15,255	4,710 0 0	14,262 0	1,440 0 0	190 0 0	6,340 0 0	2,487	737	3,224
Or per mile of railway	177	55 0 0	166 0	17 0 0	2 0 0	74 0 0	......	......	......
For previous 16 weeks of half-year*	303,782	93,166 0 0	2,47,470 0	24,932 0 0	2,654 0 0	1,20,752 0 0	40,043	12,024	52,067
Total for 17 weeks ...	319,037	97,876 0 0	2,61,732 0	26,372 0 0	2,844 0 0	1,27,092 0 0	42,530	12,761	55,291
Comparison.									
Total for corresponding week of previous year	13,727	4,386 0 0	26,281 0	828 0 0	348 0 0	5,562 0 0	2,497	727	3,224
Per mile of railway corresponding week of previous year ...	160	51 0 0	306 0	10 0 0	4 0 0	65 0 0	......	......	......
Total to corresponding date of previous year	293,105	95,283 0 0	2,02,092 0	18,216 0 0	2,852 0 0	1,16,351 0 0	43,143	12,525	55,668

* Audited up to week ending 4th March 1893.

BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

Approximate return of traffic for the week ending 29th April 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	99,130	37,660	5,90,940	89,390	12,410	1,39,460	13,671	21,772	35,443
Or per mile of railway	131·12	49·81	781·67	118·24	16·42	184·47	......	......	......
For previous 16 weeks of half-year*	1,586,670	6,76,178	73,39,455	10,79,579	1,88,810	19,44,567	226,011	306,119	532,130
Total for 17 weeks ...	1,685,800	7,13,838	79,30,395	11,68,969	2,01,220	20,84,027	239,682	327,891	567,573
COMPARISON.									
Total for corresponding period of previous year on 755 miles open	103,384	41,572	5,02,493	86,673	20,372	1,48,617	11,757	28,528	40,285
Per mile of corresponding week of previous year	136·93	55·06	745·02	114·80	26·98	196·84	......	......	......
Total to corresponding date of previous year	1,627,291	7,22,327	63,46,574	9,59,018	2,02,070	18,84,015	208,070	338,205	546,275

* Includes audited figures up to 11th March 1893.

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 22nd April 1893	13,577	0	0
Corresponding period of 1892	15,233	0	0
Decrease	1,656	0	0
Receipts per mile for the week ending 22nd April 1893	266	3	5
Corresponding period of 1892	298	11	0
Decrease	32	7	7
Receipts from 1st January to 22nd April 1893	1,71,915	0	0
Corresponding period of 1892	1,69,628	0	0
Increase	2,287	0	0

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 29th April 1893	15,863	0	0
Corresponding period of 1892	17,215	0	0
Decrease	1,352	0	0
Receipts per mile for the week ending 29th April 1893	311	0	8
Corresponding period of 1892	337	8	10
Decrease	26	8	2
Receipts from 1st January to 29th April 1893	1,87,778	0	0
Corresponding period of 1892	1,86,843	0	0
Increase	935	0	0

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CONTENTS.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 13th May 1893.

	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.				
Burdwan Divn.	1	Burdwan May 13, '93 Kalna ... Katwa ... Raniganj ...	3·39 Not received. 2·45 4·59	Weather—hot in day, cool at night. Ploughing going on. Sugarcane being transplanted. Prices of common rice— Srs. Burdwan ... ... 10 to 13 } per rupee. Katwa ... ... 13 } per rupee. Raniganj ... ... 13 } per rupee.
	2	Bankura „ 13, '93 Vishnupur ...	5·69 0·76	Weather—unsettled and generally cloudy; sky still overcast. The heavy rainfall of the week with hail has done some damage to *til* and mango crops. Fodder and water sufficient. Condition of cattle good. No change in prices.
	3	Birbhum „ 13, '93 Rampur Hát ...	0·99 0·78	Weather—fine and clear. Planting of sugarcane commenced. Ploughing going on briskly. Price of common rice 12 to 14½ seers per rupee.
	4	Midnapore „ 13, '93	1·91	Weather—unsettled; rainfall over 2" in Garhbeta and Contai and nearly 5" in Tamluk. Ploughing and sowing of early rice going on. Prices of common rice— Srs. Sadar ... ... 11 } per rupee. Contai ... ... 14 } per rupee. Tamluk ... ... 12 } per rupee. Garhbeta ... ... 11 } per rupee.
	5	Hooghly „ 13, '93 Serampore ... Jahanabad ...	0·73 1·83 1·63	Weather—variable and stormy; disproportionately little rain at the Sadar. Sowing of winter rice was temporarily stopped in Jahanabad by the heavy rain; elsewhere cultivation has been much facilitated and prospects are so far good. There is less cattle-disease. The difficulty about water in Pandua is less since the rain. Prices of common rice— Srs. Sadar ... ... 10 to 11 } per rupee. Serampore ... ... 10 to 11½ } per rupee. Jahanabad ... ... 11 to 12¼ } per rupee.
	6	Howrah „ 13, '93 Ulubaria ...	2·77 2·94	Weather—cool for the time of year. Sowing of jute and paddy continues. Condition of cattle good. Fodder and water-supply sufficient. Price of rice 10 to 11½ seers per rupee.
Presidency Divn.	7	24-Parganas „ 13, '93	2·61	Weather—hot and occasionally cloudy. Sowing of *aus* and jute commenced. Sufficient fodder and water. Prices of rice:— Srs. C. Sadarkpore ... ... 10 to 13 8 } per rupee. Barrac ... ... 11 12 } per rupee. Dum-Dum ... ... 11 10 } per rupee. Barasat ... ... 10 9 } per rupee. Diamond Harbour ... 12 4 } per rupee.
	8	Nadia „ 13 '93 Kushtia ... Meherpur ... Chuadanga ... Ranaghat ...	1·52 0·89 1·43 1·24 2·12	Weather—cool for the time of year. Sowing of paddy going on. Prices stationary. Fodder and water sufficient.
	9	Khulna „ 13, '93 Bagerhat ... Satkhira ...	0·97 3·41 2·03	Weather—stormy in the early part of the week, since bright and hot. Land is being prepared for *aman* and *aus* and jute are being sown. Sowings retarded in Satkhira by excessive rain. *Boro* harvest continues. Common rice sells at Sadar and Bagerhat 13 seers per rupee and at Satkhira 10 seers 10 chitaks per rupee. Fodder and water for cattle sufficient.
	10	Jessore „ 13, '93 Jhenida ... Magura ... Narail ... Bangaon ...	2·50 2·78 1·96 1·47 1 20	Weather—cloudy and rainy with occasional storms. Sowings in low lands have been retarded by the heavy rainfall of the week. No more rain is wanted for the present. *Til* and jute promising. Cattle-disease reported from parts of Bangaon and Magura. Fodder and water sufficient except in parts in thana Sarsha.
	11	Murshidabad „ 13, '93	1·13	Weather—seasonable. Prospects of mulberry, indigo and sugarcane good. *Aus* and *aman* paddy being sown. Fodder available for cattle. Common rice sells at 12 seers per rupee.

No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL—*concld.*				
Chittagong Divn.				
12	Chittagong	May 13, '93	1·51	Weather—seasonable. Prospects of crops good. *Aus* cultivation going on Prices stationary. Condition of cattle generally good. Supply of fodder sufficient.
13	Noakhali	" 13, '93	0·39	Weather—hot with occasional rain. *Rabi* crops on the ground greatly damaged. Sowing of *aus* recommenced after the late heavy rain. No cattle-disease. Fodder and water ample. Price of rice shows a slight tendency to rise.
14	Tippera	" 13, '93	1·95	Weather—hot with bright sun, alternating with cool stormy weather and rain. State of standing crops fair. Harvesting of *boro dhan* almost completed. Crops on low lands damaged by late heavy rain. Prices of rice unusually high.
15	Chittagong Hill Tracts.	" 12, '23	5·97	Weather—cloudy and rainy in the first part of the week; sunny in the latter part. Vegetables doing well. *Jum* burning having been retarded by early fall of rain is not yet over. Paddy, cotton and other seed grains are being sown in *jums* in some places. No cattle-disease reported. Common rice being sold at 10 seers per rupee.
Dacca Divn.				
16	Dacca	" 13, '93	1·04	Weather—seasonable. Harvesting of *cheena*, *kaon* and *boro* paddy nearly completed. Jute and rice plants doing well, but are being slightly damaged owing to heavy rainfall. Sowing and ploughing going on. The recent heavy rain interfered with cultivation of low-lying lands to some extent. Fodder available. No cattle-disease. Common rice selling at from 10 to 12 seers per rupee.
17	Faridpur	" 13 '93	0·73	Weather—seasonable. Crops sown doing well generally. The late heavy rain has prevented sowing, but the high lands will probably all be sown, whereas perhaps one-third of the low lands will not be sown at all. Some damage has also been done to the young paddy in places by the rain, and considerable harm done to the *til*. Common rice sells at from 11 to 12 seers per rupee. Some cattle-disease still in two thanas; otherwise cattle doing well and fodder available.
	Goalundo	...	0·42	
	Madaripur	...	2·41	
18	Backergunge	" 13, '93	2·72	Weather—cool. Thunderstorm with heavy rain in places. Prospects fair. The heavy rain has damaged the *aus* plants to some extent on low-lying lands. Cultivation has been but little interfered with. Common rice selling at from 9 to 13 seers per rupee. Fodder and water sufficient.
	Pirojpur	...	3·73	
	Patuakhali	...	1·80	
	Bhola	...	2·09	
19	Mymensingh	" 13, '93	1·59	Weather—fairly cool and cloudy for the greater portion of the week. Heavy rain all over the district State and prospects of crops good. The recent heavy rain as far as has been ascertained has not interfered with the cultivation of low-lying rice lands. Common rice selling at from 11 to 14 seers per rupee. Health of cattle good. Supply of water and fodder sufficient.
Rajshahi Divn.				
20	Dinajpur	" 13, '93	0·85	Weather—hot and occasionally cloudy. Standing crops doing well. Sugarcane has been sown to the extent of 16 annas. No more rain wanted for a few days. Prices of rice both at Sadar and Thakurgaon continue unchanged. Condition of cattle good. Fodder and drinking water sufficient.
	Thakurgaon	...	0·06	
21	Rajshahi	" 13, '93	1·11	Weather—showery and hot. Prospects of all standing crops good. The rain, which has been heavy for the time of the year, has not done any appreciable harm. There is no cattle-disease. Fodder and water are plentiful. Price of rice varies from 11 to 14 seers per rupee.
	Nator	...	1·57	
	Nauguon	...	3·30	
22	Rangpur	" 13, '93	0·52	Weather—fine and warm. *Aus* paddy and jute doing well. Common rice 11 to 13 seers per rupee.
	Gaibanda	...	2·25	
	Nilphamari	...	Nil	
	Kurigram	...	0·50	
	Ulipur	...	0·86	
	Govindganj	...	5·57	
23	Bogra	" 13, '93	3·43	Weather—unsettled. Sowing of *aus* and jute going on. Some slight damage is said to have been done to standing crops by heavy rain. General prospects good. Fodder and water sufficient.
	Sherpur	...	3·70	
	Nowkhila	...	5·01	
24	Pabna	" 13, '93	0·91	Weather—seasonable with rain almost every day. The incessant rain has retarded sowings on low lands and made weeding of grass difficult on high lands. Price of rice at Sirajganj Rs. 3-12 to Rs. 5-8 per maund, and at Pabna 12 seers per rupee. Water-supply and fodder sufficient.
25	Darjeeling	" 13, '93	1·14	Weather—fine and clear mornings; in afternoons sky cloudy and occasional showers. *In the hills* :—Barley and wheat in some places being harvested. Potatoes, *kangni*, *bhadoi*, *marua* and *bhutta* progressing favourably. *In the terai* :—Jute and *bhadoi* coming up. Prices of coarse rice— Srs. Hills ... ... 10 } per rupee. Terai ... ... 12 }
	Siliguri	...	2·29	
26	Jalpaiguri	" 13, '93	0·97	Weather—hot. The fair weather during the week improved the condition of jute and sowing of *bhadoi*. Common rice sells at 13 seers per rupee. Fodder and water-supply good.

	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
BHAGALPUR DIVN.	27	Monghyr May 13, '93 Begusarai ... Jamui ...	0·34 2·14 1·88	Weather—cool for the time of the year. The recent rain has been beneficial to sugarcane and indigo. *Rabi* and *cheena* doing well. Land is being prepared for paddy and *bhadoi*. No cattle-disease. Water-supply and fodder sufficient. Prices of common rice:— Srs. Sadar ... ... 13½ to 16 } per rupee. Begusarai ... ... 14 } per rupee. Jamui ... ... 12½ } per rupee.
	28	Bhagalpur „ 13, '93 Banka ... Madhipura ... Supaul ...	0·64 1·93 0·50 0·25	Weather—more settled, with hotter sun towards the end of the week. The light rain which has fallen in the north has done good to the *bhadoi* rice and *marua* seedlings. Indigo, sugarcane, and *boro* paddy have also been benefitted by the rainfall. Severe hail-storms in Banka caused some loss of life among the cattle. Common rice 14½ seers per rupee.
	29	Purnea „ 13, '93	0·76	Weather—still somewhat cloudy and cold for the season. Crop prospects generally good. Prices stationary.
	30	Malda „ 13, '93 Chanchal ... Shibganj ... Gazole ...	1·20 0 91 4·69 0·25	Weather—again getting hot; occasionally cloudy. Harvesting of *boro* rice has begun; outturn expected to be not less than 14 annas. *Bhadoi*, indigo and jute thriving well. Mango crop has been damaged 6 annas in Kaliachuk thana by heavy rain and stormy wind. Price of coarse rice varies from 11 to 15 seers per rupee. Supply of fodder and water ample.
	31	Sonthal Parganas „ 13, 93 Godda ... Jamtara ... Pakur ... Rajmahal ...	2·35 2·47 1·53 5·00 0·78	Weather—cloudy and cool with thunder-storms and showers. *Boro* paddy and sugarcane doing well. Ploughing well forward. Price of rice from 8 seers (Rajmahal 8 to 11) to 13 seers per rupee. Fodder and water sufficient.
PATNA DIVISION.	32	Patna „ 13, '93 Barh ... Dinapore ...	0·07 3·29 0·77	Weather—cooler for the season. The rain has benefitted the sugarcane and *cheena* crops, but has done much damage to the *rabi* crops stored in threshing-floors. Prices of common rice— Srs. Patna ... ... 15½ } per rupee. Barh ... ... 16¾ } per rupee. Dinapore ... ... 15 } per rupee.
	33	Gaya „ 13, '93 Nawada ... Jehanabad ... Aurangabad ...	1·02 0 92 2·09 0·96	Weather—clear, except at the very beginning of the week, but clouds still about. Sugarcane doing well. Prices as before. Fodder and water-supply sufficient.
	34	Shahabad „ 13, '93 Buxar ... Bhabhua ... Sasaram ...	0·49 1·13 0·97 1·40	Temperature much below normal: cool east winds prevail. Sugarcane has benefited by the recent rain and is promising. Mango crop very poor. Water and fodder abundant. Prices stationary.
	35	Darbhanga „ 13, '93 Samastipur ... Madhubani ...	0·93 1·42 1·88	Weather—occasionally cloudy with east wind: very unusual for this time of year. The late rain has greatly benefitted paddy, *cheena* and indigo crops, and also facilitated the ploughing for *bhadoi* sowings. Prices almost stationary. Fodder and water for cattle sufficient.
	36	Muzaffarpur „ 13, '93 Sitamarhi ... Hajipur ...	1·06 0·49 Not received.	Weather—unseasonable; occasionally cloudy and showery. The rain has damaged the *rabi* lying in the threshing-floors. Threshing is, however, going on. Paddy, *cheena*, *mung*, *kado*, and *sawan* being sown in low lands. Mango prospects favourably reported from the Sitamarhi subdivision. No cattle-disease. Fodder and water sufficient.

	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR—*concld.*				
Patna Division—*concld.*	37	Saran May, 13, '93 Siwan .. Gopalganj ..	0·03 1·17 1·02	Weather—cool and cloudy; east wind. Heavy local showers in the interior reported. Crops on the ground doing well. Prices of common rice :— Srs. c. Chapra ... ... 13 5 } Siwan ... ... 12 8 } per rupee. Gopalganj ... ... 13 7 } Fodder and water ample.
	38	Champaran „ 13, '93	0·86	Weather—cool for the season. Prospects of indigo and food-crops good. Opium weighments at Ekderi going on. Fodder and water plentiful.
ORISSA.				
Orissa Divn.	39	Cuttack „ 13, '93	3·99	Weather—unsettled with thunderstorms. Reaping of *dalua* rice nearly over. Supply of fodder and water sufficient. Price of rice stationary.
	40	Puri „ 11, '93 Khurda ...	2·30 3·65	Weather—cloudy with rain at intervals. Lands are being cultivated for the ensuing *sarad* crop. Miscellaneous crops doing well. Common rice sells at from 14 seers 7 chitaks to 17 seers 1 chitak per rupee.
	41	Balasore „ 13, '93	2·19	Weather—still cool and stormy. Ploughing continues. *Dalua* rice crop being harvested. Prices stationary.
CHOTA NAGPUR.				
South-West Frontier Agency.				
Chota Nagpur Divn.	42	Hazaribagh May, 13, '93 Giridi ...	1·37 3·06	Weather—rather unsettled and unusually cool. Sugarcane doing well. Mango prospects moderate. Ploughing in progress. Fodder and water sufficient. Prices of common rice :— Srs. Head-quarters ... ... 10 to 14 } Giridi ... ... 8 to 12 } per rupee.
	43	Lohardaga „ 13, '93	0·37	Weather—cool. Ploughing going on. *Don, gora dhan,* and *goondli* being sown.
	44	Palamau „ 12, '93	0·02	Weather—seasonable, but temperature below the normal. A little rain in some parts. *Rabi* harvest nearly completed. Cattle-disease in parts. Common rice sells at from 11 to 14¼ seers per rupee. Fodder and water sufficient.
	45	Singhbhum „ 13, '93	1·50	Another week of storms and rain and very cool weather. *Boro dhan* and cotton doing well. Land being ploughed for *bhadoi* sowing. Price of common rice 12 seers per rupee in Chaibassa market. Cattle-disease reported from Kolhan.
	46	Manbhum „ 13, '93 Gobindpur ...	0·95 2·55	Weather—still very stormy and cool. Prospects so far fair. Price of rice 10 to 13 seers per rupee. Fodder and water-supply sufficient.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 16th May, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

Meteorological Report of the Province of

Meteorological Division.	District.	Representative stations.	Air Pressure: Highest, 8 A.M., barometer reading.	Air Pressure: Lowest, 8 A.M., barometer reading.	Air Pressure: Mean, 8 A.M., reduced to 32°.	Air Pressure: Mean reduced to sea level and constant gravity, Lat. 45°.	Air Pressure: Variation from normal mean.	Wind: Mean direction at 8 A.M.	Wind: Mean velocity in miles daily.	Temperature: Highest of month.	Temperature: Lowest of month.	Temperature: Mean daily maximum temperature.	Temperature: Mean daily minimum temperature.	Temperature: Mean daily temperature.	Temperature: Variation from normal mean.	Humidity: Mean, 8 A.M., humidity.	Humidity: Variation from normal mean.
Orissa.	Puri	Puri	29·036	29·612	29·804	29·754	—	S46°W	340	94·7	72·6	87·1	78·5	82·9	—	84	—
		Gopalpur	29·933	29·606	29·800	29·761	—·020	S25°W	442	96·4	69·9	86·8	75·1	80·9	—0·7	88	—
		False Point	29·950	29·623	29·814	29·777	—·008	S26°W	367	97·0	67·0	87·3	77·2	82·3	—2·0	81	—11
	Cuttack	Cuttack	29·871	29·543	29·739	29·761	—·006	S30°W	125	105·1	70·3	98·9	77·1	88·0	—2·1	71	—1
	Balasore	Balasore	29·908	29·552	29·755	29·757	—·012	S47°W	215	102·5	66·8	93·1	74·9	84·0	—1·9	83	—
South-West Bengal.	Midnapore	Midnapore	29·823	29·467	29·663	29·759	—·003	S9°E	256	107·4	70·2	98·6	75·2	86·9	—2·3	75	—
	24-Parganas	Calcutta	29·958	29·594	29·793	29·760	—·005	S21°W	133	96·6	69·7	92·4	75·1	83·8	—1·8	80	—1
		Saugor Island	29·956	29·591	29·795	29·764	—·012	S4°W	412	97·2	71·0	88·7	79·0	83·9	—1·4	82	—10
	Howrah	......															
	Hooghly	......															
	Nadia	Krishnagar	29·936	29·561	29·762	29·758	+·012	S6°E	162	103·0	67·4	95·7	74·1	85·0	—0·4	79	—
	Khulna	......															
	Jessore	Jessore	29·960	29·591	29·783	29·763	—·007	S8°E	98	101·5	67·5	93·5	74·1	83·8	—2·4	86	—1
	Burdwan	Burdwan	29·834	29·407	29·714	29·761	+·002	S11°W	102	105·7	70·7	96·8	74·9	85·9	—2·1	78	+8
		Raniganj	29·617	29·243	29·460	29·747	—·015	S22°E	74	107·0	68·9	100·0	74·4	87·2	—1·2	63	—
	Bankura	Bankura	29·645	29·268	29·478	29·727	—·009	S	106	108·1	69·1	99·3	74·8	87·1	—1·4	66	—
	Birbhum	......															
	Murshidabad	Berhampore	29·919	29·533	29·739	29·755	—·002	S24°E	109	105·2	66·7	95·1	73·7	84·4	—2·9	89	+21
North Bengal.	Pabna	Sirajganj	29·935	29·538	29·782	29·778	+·009	S39°E	73	100·7	63·6	91·3	71·2†	81·3	—2·0†	85	—
	Bogra	Bogra	29·926	29·588	29·763	29·777	+·036	S82°E	97	102·8	62·2	91·8	70·9*	81·4*	—2·8	82	—
	Rajshahi	Rampur Boalia	29·912	29·633	29·735	29·755	+·006	S14°E	126	102·5	65·7	92·5	72·2	82·4	—1·6	84	—
	Malda	Malda	29·915	29·533	29·719	29·751	—	S33°E	94	103·7	65·2	93·6	71·3	82·5	—	80	—
	Dinajpur	Dinajpur	29·904	29·505	29·706	29·778	—·004	N77°E	131	103·1	63·8	90·7	71·1	80·9	—1·6	80	—
	Rangpur	Rangpur	29·902	29·494	29·709	29·787	+·014	N35°E	94	99·8	62·9	87·7	69·0	78·4	—1·4	85	—
	Jalpaiguri	Jalpaiguri	29·755	29·301	29·[illegible]56	29·806	+·029	S87°E	95	91·9	62·6	85·7	68·3	77·0	—0·9	80	—
	Kuch Bihár	......															
	Darjeeling	Darjeeling	23·084	22·817	22·961	—	+·012	S60°W	225	65·6	41·9	59·7	47·9	53·8	—0·4	89	+18
	Sikkim	Gnatong	19·331	19·[illegible]88	19·215	—	—	S40°E	94	55·6	15·1	4[illegible]·3	23·5	33·4	—	80	—
East Bengal.	Chittagong	Chittagong	29·927	29·626	29·768	29·823	—·011	S47°E	121	92·7	67·6	87·8	72·3	80·0	—1·0	84	—4
	Chittagong Hill Tracts	Demagri	Observations not received.														
	Backergunge	Barisal	29·994	29·649	29·830	29·788	+·005	S19°W	116	94·3	66·0	89·3	73·6	81·4	—0·6	84	—
	Noakhali	Noakhali	30·001	29·653	29·802	29·793	—·024	S9°E	147	94·7	63·1	84·4	69·7	77·1	—4·6	75	—
	Faridpur	Faridpur	29·978	29·626	29·802	29·796	+·001	S13°E	129	97·5	65·0	88·5	72·0	80·3	—3·0	87	—
	Dacca	Dacca	29·985	29·645	29·814	29·784	—·002	S24°E	186	96·1	65·7	90·2	73·1	81·7	—2·1	83	—4
	Tippera	Comilla	29·983	29·643	29·810	29·803	—·001	S39°E	144	95·3	64·4	89·7	71·3	80·5	—1·1	81	—
	Mymensingh	Mymensingh	29·943	29·597	29·784	29·799	+·013	S85°E	138	96·1	63·9	87·5	71·5	79·5	—1·5	85	—
North Bihar.	Purnea	Purnea	29·870	29·489	29·677	29·756	+·006	N76°E	73	105·3	63·3	94·4	70·8	82·6	—0·8	77	+20
	Bhagalpur	Bhagalpur	29·8[illegible]6	29·430	29·620	29·734	+·001	S85°E	50	106·3	66·0	96·5	71·8	84·3	0	66	—
	Darbhanga	Darbhanga	29·837	29·439	29·631	29·752	+·001	N77°E	140	102·8	66·4	94·1	71·9	83·0	—1·1	67	+7
	Muzaffarpur	Muzaffarpur	29·803	29·385	29·606	29·738	—	S87°E	137	103·7	65·3	95·5	70·8	83·2	—	72	—
	Champaran	Motihari	29·755	29·351	29·554	29·737	+·003	S87°E	167	104·2	62·3	95·6	69·1	82·4	+0·3	63	—
	Saran	Chapra	29·784	29·334	29·507	29·732	+·011	S63°E	141	105·3	64·4	98·1	72·0	85·1	+0·5	63	—
South Bihar.	Shahabad	Dehri	29·577	29·143	29·404	29·708	—·026	S14°W	70	107·2	65·6	100·7	73·9†	87·3†	+0·4†	46	—
		Buxar	29·712	29·247	29·531	29·724	—·013	N2[illegible]°E	112	1[illegible]6·5	6[illegible]·8	99·5	72·8	86·2	+0·3	49	—
		Arrah	29·708	29·339	29·581	29·723	+·002	S63°E	92	1[illegible]6·[illegible]	65·1	99·5	72·7	86·1	0	56	—
	Gaya	Gaya	29·564	29·200	29·393	29·721	—·023	S3°E	144	107·4	64·9	100·7	72·3*	86·4*	—2·4	64	+21
	Patna	Bankipore	29·7[illegible]5	29·364	29·597	29·732	—·010	S86°E	146	105·6	65·7	97·8	72·8	85·3	—1·8	55	+10
	Monghyr	......															
	Sonthal Parganas	Naya Dumka	29·473	29·092	29·290	29·734	—·001	S25°E	41†	106·2	67·4	97·7	73·7	85·7	—1·0	62	—
Chota Nagpur.	Hazaribagh	Hazaribagh	27·937	27·568	27·7[illegible]5	29·715	—·027	S32°W	221	102·2	62·8	95·9	70·3	83·1	—2·1	42	+
	Lohardaga	Ranchi	27·817	27·458	27·673	29·724	—·020	S2[illegible]°W	170	1[illegible]1·0	61·2	94·6	69·6	82·1	—2·2	56	—
	Palamau	......															
	Singhbhum	Chaibassa	29·193	28·817	29·040	29·745	+·007	S55°W	47	106·6	66·2	100·2	73·6	86·9	—2·8	63	—
	Manbhum	......															
Assam	Sibsagar	Sibsagar	29·711	29·331	29·524	29·820	—·029	N56°E	43	90·2	59·8	80·7	65·8	73·3	—1·2	93	+
	Goalpara	Dhubri	29·914	29·511	29·729	29·800	+·014	N55°E	196	95·5	61·4	83·7	69·2	76·5	—3·0	85	+
	Cachar	Silchar	29·931	29·528	29·778	29·835	+·002	[illegible]	88	93·5	61·4	87·3	67·8	77·6	—0·7	85	+

* Mean of 29 days.
† Mean of 28 days.

Bengal for the month of April 1893.

Cloud. Mean cloud amount, 8 A. M.	Cloud. Variation from normal mean, 8 A. M.	Rainfall.	District Observations. Rainfall. Of month. Mean of district.	Of month. Normal mean.	Of month. Variation from mean.	Of month. Number of rainy days.	Of month. Normal mean number of rainy days.	Since 1st April 1893. Mean of district.	Since 1st April 1893. Normal mean.	Since 1st April 1893. Variation.	Since 1st April 1893. Mean number of rainy days.	Since 1st April 1893. Normal mean number of rainy days.	District.
4·0 0·3 5·9	— — +2·8	0·07 1·16 1·18	0·37	0·98	−0·61	0·50	1·28	0·37	0·98	−0·61	0·50	1·28	Puri.
4·3	+3·0	0·59	0·72	1·06	−0·34	1·60	1·68	0·72	1·06	−0·34	1·60	1·68	Cuttack.
2·0	—	2·57		1·68			2·91		1·68			2·91	Balasore.
1·7	—	1·90	1·75	1·61	+0·14	3·00	2·60	1·75	1·61	+0·14	3·00	2·60	Midnapore.
3·7 6·4	+1·4 +1·8	0·17 1·16	1·07	1·96	−0·89	1·86	2·94	1·07	1·96	−0·89	1·86	2·94	24-Parganas.
			0·27	1·79	−1·52	1·00	2·91	0·27	1·79	−1·52	1·00	2·91	Howrah.
			1·45	1·99	−0·54	1·67	2·93	1·45	1·99	−0·54	1·67	2·93	Hooghly.
4·5	—	2·89	4·89	2·85	+2·04	5·40	3·95	4·89	2·85	+2·04	5·40	3·95	Nadia.
			2·18	3·15	−0·97	4·00	4·33	2·18	3·15	−0·97	4·00	4·33	Khulna.
6·5	+2·7	2·39	4·12	3·43	+0·69	4·80	4·82	4·12	3·45	+0·69	4·80	4·82	Jessore.
4·5 0·2	+2·7 —	1·36 1·31	1·11	2·16	−1·05	2·67	3·06	1·11	2·16	−1·05	2·67	3·06	Burdwan.
2·8	—	1·59	2·12	1·19	+0·93	3·75	2·12	2·12	1·19	+0·93	3·75	2·12	Bankura.
			1·13	1·21	−0·08	2·50	2·05	1·13	1·21	−0·08	2·50	2·05	Birbhum.
4·7	+2·6	3·92	3·61	1·39	+2·22	4·67	2·43	3·61	1·39	+2·22	4·67	2·43	Murshidabad.
5·4	—	2·49	4·12	2·95	+1·17	4·50	4·71	4·12	2·95	+1·17	4·50	4·71	Pabna.
3·1	—	3·69	4·04	1·82	+2·22	5·25	2·96	4·04	1·82	+2·22	5·25	2·96	Bogra.
3·7	—	5·04	3·78	1·41	+2·37	5·00	2·31	3·78	1·41	+2·37	5·00	2·31	Rajshahi.
2·9	—	3·54	2·60	0·98	+1·62	5·00	1·59	2·60	0·98	+1·62	5·00	1·59	Malda.
5·8	—	5·06	3·11	1·11	+2·00	4·80	1·96	3·11	1·11	+2·00	4·80	1·96	Dinajpur.
2·0	—	7·15	7·84	3·52	+4·32	9·00	4·41	7·84	3·52	+4·32	9·00	4·41	Rangpur.
5·9	—	5·35	5·87	4·08	+1·79	8·00	5·79	5·87	4·08	+1·79	8·00	5·79	Jalpaiguri.
			8·87	4·41	+4·46	12·75	5·97	8·87	4·41	+4·46	12·75	5·97	Kuch Bihar.
6·6	+1·0	8·37	9·10	4·86	+4·24	11·75	7·63	9·10	4·86	+4·24	11·75	7·63	Darjeeling.
3·9	—	12·08											Sikkim.
3·5	−1·6	4·43	2·45	2·93	−0·48	3·00	3·66	2·45	2·93	−0·48	3·00	3·68	Chittagong.
			7·50	3·56	+3·94	3·00	5·35	7·50	3·56	+3·94	3·00	5·35	Chittagong Hill Tracts.
5·6	—	6·91	4·78	3·12	+1·66	5·00	4·22	4·78	3·12	+1·66	5·00	4·22	Backergunge.
4·6	—	22·39?	14·78	4·55	+10·23	4·00	4·79	14·78	4·55	+10·23	4·00	4·79	Noakhali.
4·3	—	9·18	7·42	3·76	+3·66	8·00	5·63	7·42	3·76	+3·66	8·00	5·63	Faridpur.
6·4	+2·5	6·21	4·95	4·58	+0·37	5·75	6·41	4·93	4·58	+0·37	5·75	6·41	Dacca.
4·9	—	3·48	4·69	4·99	−0·30	5·50	6·09	4·69	4·99	−0·30	5·50	6·09	Tippera.
5·4	—	6·93	5·56	3·98	+1·58	7·00	5·85	5·56	3·98	+1·58	7·00	5·85	Mymensingh.
1·4	−0·2	5·05	3·76	1·62	+2·14	4·35	2·15	3·76	1·62	+2·14	4·35	2·15	Purnea.
1·8	—	3·78	1·87	0·81	+1·06	4·75	1·38	1·87	0·81	+1·06	4·75	1·38	Bhagalpur.
1·4	+0·6	1·21	0·95	0·69	+0·26	2·33	1·30	0·95	0·69	+0·26	2·33	1·30	Darbhanga.
1·8	—	1·66	1·38	0·65	+0·73	2·33	1·06	1·38	0·65	+0·73	2·33	1·06	Muzaffarpur.
2·2	—	2·41	1·57	0·77	+0·80	2·50	1·12	1·57	0·77	+0·80	2·50	1·12	Champaran.
1·4	—	0·09	0·21	0·25	−0·04	0·67	0·66	0·21	0·25	−0·04	0·67	0·66	Saran.
1·1 1·9 0·3	— — —	Nil 0·06 0·04	0·03	0·16	−0·13	0·00	0·45	0·03	0·16	−0·13	0·00	0·45	Shahabad.
1·4	+0·3	0·63	0·36	0·25	+0·11	1·00	0·52	0·36	0·25	+0·11	1·00	0·52	Gaya.
1·2	0	1·90	1·04	0·20	+0·84	1·25	0·62	1·04	0·20	+0·84	1·25	0·62	Patna.
			0·74	0·42	+0·32	1·67	0·83	0·74	0·42	+0·32	1·67	0·83	Monghyr.
1·1	—	1·16	2·24	0·75	+1·49	3·37	1·55	2·24	0·75	+1·49	3·37	1·55	Sonthal Parganas.
1·7	+0·3	0·12	0·46	0·28	+0·18	1·40	0·70	0·46	0·28	+0·18	1·40	0·70	Hazaribagh.
0·9	—	0·32	0·63	0·45	+0·18	2·00	0·73	0·63	0·45	+0·18	2·00	0·73	Lohardaga.
1·7	—	0·80	Nil	0·29	−0·29	0·00	0·68	Nil	0·29	−0·29	0·00	0·68	Palamau.
			0·80	0·67	−0·13	4·00	1·55	0·80	0·67	−0·13	4·00	1·55	Singhbhum.
			1·48	0·74	+0·74	2·00	1·76	1·48	0·74	+0·74	2·00	1·76	Manbhum.
6·8	−0·3	11·34											Sibsagar.
7·1	+4·5	7·5[illegible]											Goalpara.
6·2	+0·8	9·14											Cachar.

Table of Rainfall recorded at stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ORISSA ...	Puri ...	Puri ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Khurda ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Banpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		False Point ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gop ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Satpara ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Pipli ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cuttack ...	Jagatsingpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Banki ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Cuttack ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kendrapara .	...	...	...	...	0·02	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jajpur ...	...	...	...	...	0·02	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dharmsalla ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Salipur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Pal Lahara ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Balasore ..	Akhyapada ...	...	...	...	...	0·07	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chandbali ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bhadrak ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Soro ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Balasore ...	...	...	...	...	...	...	...	...	...	...	0·27	...	...	...	...	...	...	...	...	...
		Jellasore ...	...	...	...	0·46	...	...	...	...	...	...	0·04	...	...	...	...	...	...	...	...	...
		Baripada ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
SOUTH-WEST BENGAL.	Midnapore ..	Contai ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Tamluk ..	...	...	...	...	...	...	...	...	...	...	0·02	...	...	...	...	...	...	...	...	...
		Midnapore ...	...	...	...	...	...	...	...	...	...	0·16	0·11	...	...	...	...	...	...	...	...	...
		Ghatal ..	...	...	...	...	...	...	...	...	...	0·02	1·3[illegible]	...	...	...	...	...	...	...	...	...
		Kukrahaty ...	...	...	0·17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Garhbeta ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Panskura ...	...	...	...	...	...	...	...	...	...	0·02	0·04	...	...	...	...	...	...	...	...	...
		Dantoon ...								Not received.												
	24-Parganas...	Saugor Island	...	...	...	...	0·04	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Diamond Harbour.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Canning Town	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Alipore (Observatory)	...	...	...	...	...	...	...	...	...	0·02	...	...	...	...	...	...	...	...	...	...
		Barrackpore ..	...	...	...	...	...	...	...	...	...	...	0·58	...	...	...	...	...	...	...	...	...
		Dum Dum ..	...	...	...	...	...	...	...	...	...	0·19	...	...	...	...	...	...	...	...	...	...
		Barasat ...	...	...	...	...	0·65	...	...	...	...	...	0·81	...	...	...	...	...	...	...	...	...
		Basirhat	...	...	...	...	...	...	...	...	...	...	0·97	...	...	...	...	...	...	...	...	...
	Howrah ...	Howrah ...	...	...	...	...	...	...	...	...	...	0·05	...	...	...	...	...	...	...	...	...	...
		Mohesreka ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ulubaria ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hooghly ..	Serampore ...	...	...	...	...	...	...	...	...	...	0·05	0·64	...	...	...	...	...	...	...	...	...
		Hooghly .	...	...	...	...	...	...	...	...	...	...	0·93	...	...	...	...	...	...	...	...	...
		Jahanabad ...	...	...	...	...	...	...	...	...	...	0·02	...	...	...	...	...	...	...	...	...	...
	Nadia ..	Ranaghat .	...	...	...	...	0·44	...	...	...	...	0·10	0·03	...	...	...	...	...	...	...	...	...
		Krishnagar ..	...	...	...	...	1·14	...	...	...	...	...	0·03	...	...	...	...	...	...	...	...	...
		Chuadanga	...	0·22	...	...	0·32	0·02	...	...	...	0·37	0·36	...	...	...	...	...	...	...	...	...
		Meherpur ..	...	...	...	...	1·86	...	...	...	...	1·83	0·04	...	...	...	...	...	...	...	...	...
		Kushtia .	...	...	...	...	1·30	0·07	...	...	...	0·95	0·45	...	...	...	...	...	...	...	...	...
	Khulna .	Satkhira ..	...	0·45	...	...	2·00	...	...	...	...	...	0·30	...	...	...	...	...	...	...	...	...
		Bagerhat .	...	...	...	...	0·25	...	...	...	...	...	0·12	...	...	...	...	...	...	...	...	...
		Khulna .	...	...	...	...	1·01	...	0·25	...	...	...	0·0[illegible]	...	...	...	...	...	...	...	...	...
		Nakipur ...	...	0·2[illegible]	1·00	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Rampal ..	...	...	...	...	...	...	...	...	...	...	0·40	...	...	...	...	...	...	...	...	...
	Jessore ..	Narail ...	...	...	...	...	0·20	0·05	...	...	...	0·[illegible]3	0·94	...	...	...	...	...	...	...	...	...
		Jessore ...	...	...	...	...	0·24	...	...	...	...	0·07	...	0·27	...	...	...	...	...	...	...	...
		Jhenidah ...	...	...	...	...	1·07	0·14	...	...	...	0·21	2·95	...	...	...	...	...	...	...	...	...
		Magura ...	...	...	...	...	[illegible]·21	0·03	...	...	...	0·11	1·85	...	...	...	...	...	...	...	...	...
		Bangaon ..	...	...	...	...	1·22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Burdwan ..	Kalna ..	...	...	...	...	...	...	...	...	...	0·03	...	...	...	...	...	...	...	...	...	...
		Burdwan ..	...	...	...	...	0·09	...	...	...	...	0·17	...	...	...	...	...	...	...	...	...	...
		Katwa ..	...	...	...	0·51	...	...	...	...	0·01	0·05	...	...	...	...	...	...	...	...	...	...
		Raniganj ..	...	...	...	...	...	...	...	...	...	0·36	...	...	...	...	...	...	...	...	...	...
		Mankur ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bankura ..	Bankura .	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Vishnupur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Simlapal .	...	...	...	...	0·17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Khatra ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Indas ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kotalpur ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Anua	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gangajalghati	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Raipur ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sonamukhi ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Birbhum ...	Suri ..	...	...	...	...	...	...	...	...	...	0·38	...	...	...	...	...	...	...	...	...	...
		[illegible]tampur .	...	...	...	...	...	...	...	...	0·02	0·02	...	...	...	...	...	...	...	...	...	...
		Rampur Hat	...	...	...	...	...	...	...	...	...	...	0·09	...	...	...	...	...	...	...	...	...
		Bolpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Murarai ...	...	...	...	...	...	...	...	...	...	...	0·3[illegible]	...	...	...	...	...	...	...	...	...
	Murshidabad	Kandi ...	...	...	...	...	...	...	...	...	...	0·34	0·03	...	...	...	...	...	...	...	...	...
		Berhampore...	...	...	...	...	...	...	...	...	...	0·13	0·10	...	...	...	...	...	...	...	...	...
		Lalbagh ...	...	...	...	...	...	0·23	...	...	...	...	0·52	...	...	...	...	...	...	...	...	...
		Azimganj ...	...	...	...	...	...	0·23	...	...	...	...	0·35	...	...	...	...	...	...	...	...	...
		Jangipur ...	...	...	...	...	...	...	...	...	...	0·72	...	...	...	...	...	...	...	...	...	...
		Lalgola	...	...	...	...	...	...	...	...	1·00	...	...	...	...	...	...	...	...	...	...	...
		Akriganj ...	...	...	...	0·04	0·90	...	...	...	...	0·61	0·11	...	...	...	...	...	...	...	...	...
		Gatkabari ...	...	...	...	...	0·80	...	...	...	...	1·80	...	...	...	...	...	...	...	...	...	...
NORTH BENGAL.	Pabna ...	Pabna ...	...	...	...	...	1·35	0·31	...	...	...	0·11	...	...	...	...	...	...	...	...	...	...
		Sirajganj ..	...	...	...	...	...	0·02	...	...	...	0·37	...	...	...	...	...	...	...	...	...	...
	Bogra ...	Sherpur ...	...	...	...	...	0·75	...	...	...	...	1·33	...	...	...	...	...	...	...	...	...	...
		Nowkhilla ..	...	...	...	...	...	...	...	...	...	0·97	...	...	...	...	...	...	...	...	...	...
		Bogra ...	...	0·20	...	...	...	...	...	...	...	1·15	...	...	...	...	...	...	...	...	...	...
		Panchbibi ...	...	...	...	...	...	...	...	...	...	0·40	...	...	...	...	...	...	...	...	...	...
	Rajshahi ...	Boalia ...	...	...	...	...	0·28	...	...	...	...	0·12	0·02	...	...	...	...	...	...	...	...	...
		Nator ...	...	...	...	...	0·13	...	...	...	...	0·20	0·02	...	...	...	...	...	...	...	...	...
		Naogaon ...	...	...	...	...	0·40	...	...	...	...	0·50	...	...	...	...	...	...	...	...	...	...
		Lalpur ...	...	...	...	0·30	...	...	...	...	0·22	...	...	...	...	...	...	...	...	...	...	...
		Manda ...	...	...	...	0·90	...	...	...	...	0·50	...	...	...	...	...	...	...	...	...	...	...

in Bengal in April 1893.

21	22	23	24	25	26	27	28	29	30	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 1st April 1893 to 30th April 1893.	Average rainfall from 1st April to date.	Station.	District.	Meteorological division.
...	...	0·04	...	...	...	...	0·03	...	...	Nil	0·90	0·07	0·53	0·04	0·07	0·53	Puri ...	Puri ...	ORISSA.
...	...	0·05	0·05	...	...	...	...	...	...	Nil	1·00	0·10	0·65	0·05	0·10	0·65	Khurda.		
...	0·06	0·07	...	...	...	...	...	...	...	Nil	1·36	0·13	0·58	0·07	0·13	0·58	Banpur.		
...	...	0·13	0·98	0·07	...	...	...	...	...	2	1·85	1·18	2·14	0·98	1·18	2·14	False Point.		
...	...	...	0·25	...	...	0·05	...	...	...	1	?	0·25	?	0·25	0·25	?	*Gop.*		
...	...	0·10	...	0·15	...	...	...	...	...	2	?	0·25	?	0·15	0·25	?	*Satpara.*		
...	...	...	0·13	0·19	...	...	...	...	...	2	?	0·32	?	0·19	0·32	?	*Pipli.*		
...	...	...	0·08	...	...	0·05	...	...	...	Nil	1·16	0·13	0·68	0·08	0·13	0·68	Jagatsingpur.	Cuttack.	
...	0·02	...	...	...	...	...	...	...	...	Nil	1·00	0·02	0·31	0·02	0·02	0·31	Banki.		
...	0·24	...	0·12	...	...	...	...	...	...	2	1·95	0·36	1·38	0·24	0·36	1·38	Cuttack.		
...	...	0·02	0·41	0·27	...	...	0·10	...	...	3	1·63	0·82	1·06	0·41	0·82	1·06	Kendrapara.		
...	...	...	1·79	0·05	0·09	...	0·34	...	...	2	2·68	2·29	1·81	1·79	2·29	1·81	Jajpur.		
...	...	2·26	0·32	...	...	1·36	...	...	...	3	?	3·94	?	2·26	3·94	?	*Dharmsala.*		
...	0·50	...	0·48						...		?		?			?	*Salipur*		
...	...										?		?			?	Pal Lahara.		
...	...	...	0·31	...	...	...	0·49	...	...		?		?			?	Akhyapada ..	Balasore.	
...	...	...	1·15	...	...	...	...	...	...	1	1·88	1·15	1·02	1·15	1·15	1·02	Chandbali		
...	...	...	0·21	...	0·70	...	0·20	...	...	3	3·21	1·11	1·93	0·70	1·11	1·93	Bhadrak.		
0·30	...	0·80	...	...	...	...	...	...	...	2	3·12	1·10	1·83	0·80	1·10	1·83	Soro		
...	...	...	1·26	0·11	...	...	...	...	0·10	4	3·85	1·74	2·32	1·26	1·74	2·52	Balasore.		
...	...	0·55	...	...	...	1·70	...	...	...	3	2·41	2·75	1·41	1·70	2·75	1·41	Jellasore.		
...	3·15	...	...	...	...	...	...	...	...	1	3·00	3·15	1·39	3·15	3·15	1·39	Bartonia		
...	...	...	0·73	...	...	...	0·99	...	...	2	2·41	1·72	1·49	0·99	1·72	1·49	Contai	Midnapore ...	SOUTH-WEST BENGAL.
...	...	...	0·21	...	0·90	...	0·13	...	...	3	2·37	1·26	1·66	0·90	1·26	1·66	Tamluk.		
...	...	...	0·28	...	...	...	1·29	...	...	4	2·85	1·84	1·50	1·29	1·84	1·50	Midnapore.		
...	...	...	0·06	...	...	...	0·29	0·51	...	3	2·77	2·18	1·80	1·30	2·18	1·80	Ghatal.		
...	...	...	0·21	...	0·11	...	0·55	...	...	4	?	1·04	?	0·55	1·04	?	*Kukrahaty.*		
...	...	...	0·88	...	...	0·07	0·72	0·43	...	3	?	2·10	?	0·88	2·10	?	*Garhbeta.*		
...	...	...	0·24	...	...	...	0·08	...	...	1	?	0·38	?	0·24	0·38	?	Panskura.		
	...	...	1·48	...	...	...	0·58	...	...	2	?	2·04?	?	1·45	2·04		Dantoon.		
		...	0·84	...	...	...	0·28	...	...	2	2·40	1·16	1·39	0·84	1·16	1·39	Saugor Island	24-Parganas.	
...	...	...	...	...	...	...	0·42	...	...	1	2·53	0·42	2·57	0·42	0·42	2·57	Diamond Harbour.		
...	...	...	...	...	0·40	...	...	...	...	1	?	0·40	?	0·40	0·40	?	*Canning Town.*		
0·01	...	...	0·04	...	...	...	0·10	...	...	1	3·05	0·17	1·81	0·10	0·17	1·81	Alipore (Observatory).		
...	...	...	...	...	...	...	...	1·35	...	2	3·21	1·93	1·81	1·35	1·93	1·81	Barrackpore		
...	...	...	...	...	...	...	0·23	0·13	...	3	3·05	0·54	2·03	0·22	0·54	2·03	Dum-Dum.		
...	...	...	...	...	...	...	...	0·81	...	3	3·11	2·27	2·04	0·81	2·27	2·04	Barasat.		
...	...	...	...	...	...	...	...	...	...	1	3·21	0·97	2·10	0·97	0·97	2·10	Basirhat.		
...	...	...	...	...	...	...	...	0·03	...	Nil	3·10	0·08	2·12	0·05	0·08	2·12	Howrah	Howrah.	
...	...	0·03	0·19	...	...	...	0·24	...	...	2	2·71	0·46	1·47	0·24	0·46	1·47	Moheshrekha		
...	...	...	0·27	...	...	...	0·15	...	...	2	?	0·42	?	0·27	0·42	?	*Ulubaria*		
...	...	0·01	...	...	...	...	0·01	1·23	...	2	3·00	1·94	2·00	1·23	1·94	2·00	Serampore ..	Hooghly	
...	...	...	...	...	...	...	...	0·81	...	2	2·85	1·74	2·00	0·93	1·74	2·00	Hooghly.		
...	...	...	...	...	...	...	0·65	...	...	1	2·95	0·67	1·98	0·65	0·67	1·98	Jahanabad.		
...	...	...	...	...	0·07	...	...	0·52	0·07	3	3·60	1·23	2·99	0·52	1·23	2·99	Rangahat ..	Nadia.	
...	...	...	...	...	0·08	0·05	0·15	1·44	...	3	3·35	2·89	2·41	1·44	2·89	2·41	Krishnagar.		
...	...	0·44	1·06	...	...	...	...	2·82	...	7	4·30	5·61	2·83	2·82	5·61	2·83	Chuadanga.		
...	0·26	0·85	...	...	0·22	...	...	1·64	0·74	7	3·70	7·43	2·93	1·86	7·43	2·93	Meherpur.		
...	0·10	0·85	...	...	...	...	...	3·10	0·45	7	4·80	7·27	3·01	3·10	7·27	3·01	Kushtia.		
...	...	0·01	...	...	0·14	...	...	0·20	...	5	4·19	3·10	2·93	2·00	3·10	2·93	Satkhira	Khulna.	
...	...	0·28	0·24		...	...	...	...	0·07	4	4·05	0·96	3·31	0·28	0·96	3·31	Bagerhat.		
...	...	0·04	0·04	...	...	...	...	[illegible]	0·05	3	4·74	2·47	3·21	1·01	2·47	3·21	Khulna.		
...	...	...	...	...	0·77	...	...	...	...	3	?	2·03	?	1·00	2·03	?	*Nakipur.*		
...	...	...	0·50	0·80	...	...	...	...	0·21	4	?	1·01	?	0·80	1·01	?	*Rampal.*		
...	...	...	...	...	0·31	...	...	0·53	1·45	5	5·47	3·51	3·22	1·45	3·51	3·22	Narail	Jessore	
...	...	...	...	...	0·07	...	...	0·62	0·20	5	4·85	2·37	3·96	0·97	2·37	3·96	Jessore.		
...	0·02	0·33	...	...	...	...	...	2·65	0·24	7	4·58	7·61	3·38	2·95	7·61	3·38	Jhenidah		
...	...	1·00	...	...	...	...	...	2·30	0·05	5	5·16	5·34	3·87	2·30	5·34	3·87	Magura		
...	...	...	...	...	...	...	...	0·56	...	2	4·05	1·78	2·74	1·22	1·78	2·74	Bangaon		
...	...	...	...	...	...	...	...	0·45	...	1	2·63	0·48	2·39	0·45	0·48	2·39	Kalna ..	Burdwan	
...	0·01	...	0·10	...	...	0·22	0·08	0·69	...	4	3·65	1·33	2·29	0·69	1·36	2·29	Burdwan.		
...	0·04	...	...	...	...	0·35	...	0·53	...	3	2·89	1·49	1·80	0·53	1·49	1·80	Katwa.		
...	...	...	...	...	...	0·22	...	0·78	...	3	2·15	1·36	1·26	0·78	1·36	1·26	Raniganj		
...	...	...	...	...	...	1·12	...	0·58	...	2	?	1·79	?	1·12	1·70	?	*Mankur.*		
...	...	...	0·15	...	...	0·71	0·13	0·60	...	4	2·90	1·59	1·46	0·71	1·59	1·43	Bankura	Bankura	
...	...	0·08	0·24	...	...	0·68	1·04	0·43	...	4	2·18	2·47	1·60	1·04	2·47	1·60	Vishnupur.		
...	...	0·47	0·09	...	...	...	...	0·52	...	3	1·91	1·25	0·87	0·52	1·25	0·87	Malhara.		
...	...	...	0·85	...	...	1·00	1·15	0·17	...	4	1·60	3·17	0·83	1·15	3·17	0·83	Kotra		
...	...	...	0·22	...	0·85	0·59	0·05	0·36	...	4	?	2·07	?	0·85	2·07	?	*Indus.*		
...	...	...	...	...	...	0·50	...	1·00	...	2	?	1·50	?	1·00	1·50	?	*Kotalpur.*		
...	...	0·15	...	...	1·15	0·81	0·61	...	...	4	?	2·72	?	1·15	2·72	?	*Arda.*		
...	...	...	0·32	...	...	0·54	...	0·69	...	3	?	1·55	?	0·69	1·55	?	*Gangajalghati.*		
...	...	...	1·47	...	...	0·65	0·20	...	...	3	?	2·32	?	1·47	2·32	?	*Raipur.*		
...	...	...	...	...	...	2·23	0·05	0·47	...	2	?	2·75	?	2·23	2·75	?	*Sonamukhi.*		
...	...	0·03	...	...	...	0·30	...	0·19	...	3	2·00	0·90	1·03	0·38	0·90	1·03	Suri	Birbhum.	
...	...	0·01	...	...	...	0·05	...	0·75	...	1	1·80	0·85	1·06	0·75	0·85	1·06	Hetampur.		
...	...	0·78	...	...	...	0·12	...	0·33	0·08	3	2·25	1·40	1·47	0·78	1·40	1·47	Rampur Hât.		
...	...	...	0·51	...	...	0·20	...	0·73	...	3	?	1·44	?	0·73	1·44	?	*Bolpore.*		
...	...	...	0·24	...	...	1·00	...	0·46	...	4	?	2·00	?	1·00	2·00	?	*Morarai*		
...	0·14	0·92	...	...	...	0·55	...	0·92	...	5	2·60	2·40	1·67	0·92	2·90	1·67	Kandi ..	Murshidabad.	
...	0·11	0·56	0·20	...	0·01	2·15	...	0·61	0·05	7	2·59	3·92	1·61	2·15	3·92	1·61	Berhampore.		
...	...	0·42	1·02	...	...	0·07	...	1·72	...	5	2·18	3·98	1·16	1·72	3·98	1·16	Lalbagh		
...	...	0·15	3·05	...	...	...	...	1·80	0·24	6	2·38	5·82	1·38	3·05	5·82	1·38	Azimganj.		
...	...	...	2·38	...	...	...	...	0·85	...	3	2·50	3·95	1·15	2·38	3·95	1·15	Jangipur.		
...	...	0·10	...	...	...	...	...	...	...	2	2·44	1·10	1·35	1·00	1·10	1·35	Lalgola.		
...	...	0·13	2·62	...	...	0·14	...	0·55	...	7	?	5·10	?	2·62	5·10	?	*Akhriganj.*		
...	0·30	1·05	...	...	...	...	...	2·40	0·10	6	?	6·45	?	2·40	6·45	?	*Patkabari.*		
...	...	0·53	...	...	...	...	...	2·78	0·65	6	5·20	5·75	3·12	2·78	5·75	3·12	Pabna	Pabna ...	NORTH BENGAL.
...	0·01	0·08	...	...	...	...	...	0·13	1·88	3	4·21	2·40	2·78	1·88	2·40	2·78	Sirajganj.		
...	...	0·15	...	...	...	...	...	1·60	1·04	5	2·57	4·87	1·47	1·60	4·87	1·47	Sherpur	Bogra.	
...	...	...	...	...	...	...	...	0·54	1·27	3	3·62	2·77	1·99	1·27	2·77	1·99	Nowkhilla.		
...	...	0·48	0·10	...	...	0·20	...	0·20	1·56	7	3·50	3·89	2·21	1·56	3·80	2·21	Bogra.		
...	...	0·20	0·70	...	0·80	...	...	1·32	1·20	6	2·14	4·62	1·60	1·32	4·62	1·60	Panchbibi.		
...	...	0·07	3·79	...	...	0·07	...	0·53	0·02	4	2·56	4·90	1·42	3·79	4·90	1·42	Boalia	Rajshahi.	
...	0·26	0·77	0·92	...	...	0·02	...	0·10	0·20	7	2·79	2·62	2·17	0·92	2·62	2·17	Nator		
0·40	...	...	0·38	...	...	0·04	...	2·59	...	4	1·57	3·82	0·63	2·50	3·82	0·63	*Nargaon.*		
...	...	...	...	...	...	...	...	0·73	0·12	5	?	2·37	?	0·90	2·37	?	*Lalpur.*		
...	...	0·63	...	...	...	...	...	...	...	3	?	2·03	?	0·90	2·03	?	*Manda.*		

Table of Rainfall recorded at Stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
NORTH BENGAL—concld.	Malda ...	Malda ...	...	...	...	...	0·20	...	...	...	...	0·23	...	...	...	...	...	...	...	...	...	...
		Chanchal ...	...	...	...	...	0·15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gajol ...	...	...	...	...	0·70	...	...	...	...	0·29	...	...	...	...	...	...	...	...	...	...
		Sibganj ...	...	...	...	...	0·60	...	...	...	...	0·30	...	...	...	...	...	...	...	...	...	...
	Dinajpur ...	Mohadebpur	...	...	...	...	0·30	...	...	...	...	0·30	...	...	...	...	...	...	...	...	...	...
		Churamon ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Raiganj ...	...	...	...	...	0·16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dinajpur ...	...	...	...	...	0·48	...	...	...	0·39	0·16	...	...	...	...	...	...	...	...	...	...
		Baloorghat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Thakurgaon ..	...	...	...	...	0·34	0·42	...	...	0·10	...	...	...	...	...	...	...	...	...	...	...
	Rangpur ...	Bhawaniganj (*Gyabanda*).	...	...	...	...	0·21	...	...	...	...	0·40	...	...	...	...	...	...	...	...	...	...
		Rangpur ...	...	...	...	...	1·75	...	...	...	0·46	0·19	...	...	...	...	...	...	...	...	...	...
		Kurigaon	...	...	...	...	3·35	0·03	1·37	...	1·22	0·11	...	...	...	...	...	...	...	...	...	...
		Bagdogra (*Nilphamari*)	...	...	...	...	1·27	0·10	0·03	...	0·12	...	...	...	...	...	...	...	...	...	...	...
		Ulipur	...	...	...	...	2·65	...	...	...	1·30	0·45	...	...	...	...	...	...	...	...	...	...
		Sundergunge											Not received.				0·35		0·15			
	Jalpaiguri ...	Jalpaiguri	...	...	...	...	0·28	0·10	...	...	...	0·01	...	...	...	...	0·33	...	...	0·22	...	...
		Alipore Duar	...	...	...	3·54	0·23	...	...	0·31	...	...	...	...	...	0·91	...	0·25	0·25	0·25	...	...
		Falacotta ...	...	...	...	1·95	0·19	...	0·18	0·12	0·37	...	...	...	...	1·90	...	...	...	...	...	...
		Debiganj ...	...	...	...	...	0·58	0·19	...	...	0·11	...	...	...	...	...	...	...	...	...	...	...
		Bhagatpur (Nagrakatta).	...	...	...	0·28	0·80	2·60	...	0·44	0·21	0·11	...	...	...	0·20	0·77	0·31	0·05	...	...	...
	Kuch Bihar	Dinhatta ..	...	...	...	0·81	1·17	0·03	0·14	...	0·64	...	...	...	...	...	...	0·13	0·73	0·24	...	...
		Kuch Bihar ..	...	...	...	2·62	1·31	0·25	0·40	...	0·72	...	...	...	...	...	...	...	0·25	0·59	...	...
		Mekliganj	...	...	...	0·15	0·75	0·03	...	...	0·17	...	...	...	...	...	0·02	...	0·05	0·22	...	...
		Mathabhanga	...	...	...	1·40	1·56	0·10	0·13	...	0·41	...	...	...	...	...	...	...	...	...	...	...
	Sikkim	Gnatong ...	...	...	...	0·17	1·67	0·03	1·15	1·26	0·61	0·65	0·08	...	...	0·14	0·27	0·28	0·26	0·16	...	...
	Darjeeling .	Buxa ...	...	...	...	1·81	1·12	...	1·03	1·30	1·85	0·11	...	...	...	...	1·25	1·34	0·70	0·26	...	...
		Siliguri ...	...	...	...	0·08	0·68	0·06	1·05	0·02	0·40	...	...	...	...	1·22	0·46	0·05	0·05	...	...	...
		Darjeeling ...	...	...	...	...	0·30	0·03	0·22	2·05	0·38	0·04	...	...	...	...	...	0·06	0·01	...	...	...
		Kalimpong .	...	...	...	...	0·31	...	0·77	0·30	0·50	0·46	...	...	...	...	...	0·05	...	...	...	...
		Kurseong ...	...	...	...	0·15	0·07	...	0·55	0·53	1·20	0·05	0·45	...	...	...	0·33	0·18	...	...	...	...
	British Bhutan	Pedong ...	...	...	...	0·36	0·16	...	0·76	0·49	0·44	0·05	...	...	...	...	0·13	0·04	...	...	...	...
		Mongpoo ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
EAST BENGAL	Chittagong ...	Cox's Bazar ...	...	...	...	...	...	...	...	...	...	...	0·07	...	...	...	...	...	...	...	...	...
		Chittagong ...	...	...	...	...	...	...	...	...	...	...	0·15	...	...	...	...	...	...	...	...	...
		Kutubdia ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Satkanya ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kodala ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Fenoa ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mirsarai ..	...	...	...	...	...	0·61	...	...	0·03	...	0·11	...	...	...	...	...	...	...	...	...
		Chandpore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chittagong Hill Tracts.	Rangamati	...	...	...	...	2·90	...	...	...	...	...	0·05	...	...	...	...	...	...	...	...	...
		Bandarban	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Demagiri ..	...	...	...	...	0·05	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Backergunge...	Patuakhali ...	...	...	...	0·48	0·08	...	...	...	...	...	1·10	...	...	...	...	...	...	...	...	...
		Firozpur ...	...	...	...	...	0·69	...	...	...	...	...	0·15	...	...	...	...	...	...	...	...	...
		Barisal ...	...	...	0·85	...	0·35	...	...	...	...	...	0·25	...	...	...	...	...	...	...	...	...
		Gournaddi ..	...	...	0·52	...	0·68	...	...	...	...	...	0·69	...	...	...	...	...	...	...	...	...
		Bhola ...	...	...	...	...	0·66	...	...	...	...	...	0·09	...	...	...	...	...	...	...	...	...
		Doulatkhan ..	...	...	...	...	...	...	...	...	...	...	0·16	...	...	...	...	...	...	...	...	...
		Bauphal ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Noakhali ..	Noakhali ...	...	...	...	...	...	...	...	...	...	...	0·09	...	...	...	...	...	...	...	...	...
		Fenny ...	...	...	...	...	...	...	...	...	...	...	0·26	...	...	...	...	...	...	...	...	...
		Harishpur ..	...	...	...	...	...	0·27	...	...	...	...	0·16	...	...	...	...	...	...	...	...	...
		Ramganj ...	...	...	...	...	0·13	...	...	...	...	...	0·55	...	...	...	...	...	...	...	...	...
	Faridpur ..	Madaripur ...	...	...	...	...	0·83	0·13	...	...	...	0·11	...	...	...	...	...	...	...	...	...	...
		Faridpur ..	...	...	...	...	·37	0·20	0·05	...	...	0·21	0·55	...	...	...	...	...	...	...	...	...
		Goalundo .	...	...	...	...	0·60	...	...	...	...	0·25	0·36	...	...	...	...	...	...	...	...	...
	Dacca .	Munshiganj	...	...	...	...	...	...	...	...	...	0·6	0·28	...	...	...	...	...	...	...	...	...
		Dacca ..	...	...	...	...	...	0·88	...	...	...	0·20	0·06	...	...	...	...	...	...	...	...	...
		Narainganj	...	...	...	...	...	0·11	...	...	...	0·21	0·17	...	...	...	...	...	...	...	...	...
		Manikganj	0·32	...	...	...	0·01	0·03	0·05	...	...	0·19	0·25	...	...	...	...	...	...	...	...	...
		Joydebpur ...	0·42	...	0·05	...	...	1·17	0·09	...	...	0·69	0·33	...	...	...	...	...	...	...	...	...
	Hill Tippera	Agartola ...	...	...	...	...	...	...	0·10	...	0·05	...	...	...	...	...	...	...	...	...	...	...
	Tippera	Comilla ..	...	...	...	...	...	...	0·16	...	...	...	0·43	...	...	...	...	...	...	...	...	...
		Chandpur ..	...	...	...	...	0·90	...	...	...	...	0·12	1·40	...	...	...	...	...	...	...	...	...
		Brahmanbaria	...	...	...	...	...	0·15	...	0·65	0·05	0·65	...	...	...	...	...	...	...	...	...	...
		Ramchandrapur.	...	...	...	...	0·60	...	...	...	...	0·20	...	...	...	...	...	...	...	...	...	...
		Nasirnagar .	...	...	...	...	...	...	...	1·83	0·20	0·54	0·07	...	...	...	...	...	...	...	...	...
		Daudkandi ...	...	...	0·10	...	...	...	...	...	...	0·39	0·28	...	...	...	...	...	...	...	...	...
		Kasba ..	...	...	...	...	...	...	...	...	1·39	...	...	...	...	...	...	...	...	...	...	...
		Luksham ..	...	...	...	...	...	...	...	...	...	...	0·55	...	...	...	...	...	...	...	...	...
	Mymensingh	Kishoreganj	...	...	...	...	...	0·21	...	0·34	0·75	0·78	...	...	...	...	...	...	...	...	...	...
		Atia (*Tangail*)	...	...	...	...	...	0·21	...	...	...	0·11	0·18	...	...	...	...	...	0·13	...	...	...
		Mymensingh	0·33	...	...	...	0·81	0·04	...	...	1·55	0·57	...	...	...	...	...	...	...	...	...	...
		Jamalpur ..	...	...	...	...	0·41	...	...	...	0·90	0·60	...	...	...	...	...	...	0·27	...	...	...
		Netrokona ..	...	...	...	0·21	...	...	1·93	...	0·83	0·71	...	...	...	...	...	...	...	...	...	...
		Subarnakhali	...	...	...	...	...	...	0·10	...	...	0·40	...	...	...	...	...	...	0·20	0·20	...	...
		Durgapur .	...	...	...	...	1·70	...	0·70	...	0·40	1·10	...	...	...	...	...	...	...	...	...	...
		Sherpur Town	...	...	...	...	0·55	...	...	...	1·80	0·77	...	...	...	...	...	...	...	...	...	...
		Dewanganj ..	...	...	...	...	0·64	...	...	...	...	0·29	...	...	...	...	...	...	...	...	...	...
NORTH BIHAR	Purnea ..	Kishanganj ...	...	...	...	...	0·49	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Araria ...	...	...	...	...	0·68	...	...	...	...	0·06	...	...	...	...	...	...	...	...	...	...
		Purnea ...	...	...	...	...	0·61	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gondwara (Korah).	...	...	...	...	0·25	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Barsoe ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Forbesgunj ...	...	...	...	...	0·51	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kaliaganj ..	...	...	...	...	0·08	0·27	...	...	0·16	...	...	...	...	...	...	...	...	...	...	...
	Bhagalpur ..	Madhipura ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bongaon (Syfabad).	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Supaul ...	...	...	...	...	...	...	...	...	...	0·18	...	...	...	...	...	...	...	...	...	...
		Protabganj ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bhagalpur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Banka ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kolgong ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

in Bengal in April 1893—*continued.*

21	22	23	24	25	26	27	28	29	30	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 1st April to 30th April 1893.	Average rainfall from 1st April to 30th April 1893.	Station.	District.	Meteorological division.
...	...	...	2·15	...	...	0·16	...	0·78	0·02	5	1·65	3·54	0·94	2·15	3·54	0·94	Malda	Malda ..	NORTH BENGAL *concld.*
...	...	...	0·13	...	...	0·28	..	0·56	0·54	5	1·62	1·66	1·01	0·56	1·66	1·01	Chanchal.		
...	...	...	0·19	...	...	0·56	0·05	2·06	0·12	6	?	3·91	?	2·00	3·91	?	*Gajol.*		
...	...	...	...	...	...	0·15	0·18	0·08	...	4	?	1·31	?	0·60	1·31	?	*Sibganj.*		
...	...	..	...	...	...	0·50	...	1·50		4	1·55	2·60	0·99	1·50	2·60	0·99	Mohadebpur	Dinajpur.	
...	...	..	...	...	...	0·28	...	1·07	0·38	3	1·55	1·73	0·63	1·07	1·73	0·63	Churamon.		
...	...	..	0·25	...	...	0·67	0·43	1·31	0·64	6	2·08	3·46	1·12	1·31	3·46	1·12	Raiganj.		
...	0·02	0·33	...	0·72	...	0·61	..	1·20	1·31	8	2·60	5·22	1·87	1·31	5·22	1·87	Dinajpur.		
...	...	..	0·42	...	...		..	1·43	0·72	3	2·00	2·56	0·95	1·42	2·56	0·95	Baloorghat		
...	...	1·28	...	..	0·76	1·89	...	0·40	3·80	8	?	8·99	?	3·80	8·99	?	*Thakurgaon*		
...	0·95	...	0·26	...	...	1·17	...	0·80	1·00	7	4·60	4·79	2·73	1·17	4·79	2·73	Bhawaniganj (*Gyabandha*).	Rangpur.	
...	0·35	1·04	0·08	0·44	...	1·35		0·75	0·74	9	4·40	7·15	3·14	1·75	7·15	3·14	Rangpur.		
...	0·95	1·60	0·53	0·20	...	2·10	0·52	0·47	0·29	12	5·29	12·74	4·79	3·?5	12·74	4·79	Kurigram.		
...	...	2·72	0·18	...	...	1·21	...	0·33	0·71	8	3·93	6·67	3·13	2·72	6·67	3·13	Bagdogra. (*Nilphamari.*)		
...	0·10	0·17	0·12	...	...	1·75	..	0·71	...	8	?	7·25	?	2·65	7·25	?	*Ulipur*		
			0·20	...	..	0·35	0·59										Sundergunge.		
...	...	0·05	..	...	2·17	0·39	...	1·10	1·27	8	5·79	5·87	4·08	2·17	5·87	4·08	Jalpaiguri .	Jalpaiguri.	
...	0·15	1·34	...	...	0·93	0·39	...	...	0·68	11	?	8·94	?	3·54	8·94	?	*Alipore Duar.*		
...	...	0·23	0·10	...	1·65	0·33	...	1·31	1·48	15	?	10·56	?	1·95	10·56	?	*Falacotta.*		
...	...	0·90		...		0·76	.	0·20	0·07	6	?	2·81	?	0·90	2·81	?	*Debiganj.*		
...	...	1·16	0·02	..	1·70	0·06	...	1·68	1·72	13	?	12·20	?	2·60	12·20	?	*Bhagatpur (Nagrakatta).*		
...	0·42	0·74	1·84	0·20	0·12	1·80	0·51	0·81	0·27	16	5·82	10·60	4·16	1·84	10·60	4·16	Dinhatta ..	Kuch Bihar.	
...	...	1·32	1·16	0·14	1·27	1·53	0·17	0·65	0·04	14	7·06	12·42	5·46	2·62	12·42	5·46	Kuch Bihar		
...	...	0·68	0·35	0·25	0·24	0·65	0·30	0·83	...	11	4·91	5·00	3·84	0·83	5·00	3·84	Mckliganj.		
...	...	0·55	...	...	0·81	1·78	0·03	0·40	...	10	6·09	7·46	4·18	1·78	7·46	4·18	Matabhanga.		
0·13	0·90	0·97	0·61	0·18	0·33	0·56	0·38	0·73	0·56	21	?	12·08	?	1·67	12·08	?	Gnatong ...	Sikkim.	
...	0·53	0·48	0·47	...	0·54	.	0·49	0·81	0·68	17	10·15	14·75	8·73	1·85	14·75	8·73	Buxa	Darjeeling.	
...	...	2·54	0·02	...	1·81	0·05	0·05	0·89	0·27	9	5·57	9·64	3·18	2·57	9·64	3·18	Siliguri.		
...	1·60	0·16	2·23	0·16	0·05	0·19	0·15	0·46	0·28	12	8·05	8·37	4·40	2·23	8·37	4·40	Darjeeling.		
...	0·39	.	0·24	0·03	0·09	...	.	0·24	0·?5	9	7·00	3·63	3·13	0·77	3·63	3·13	Kalimpong.		
...	0·52	0·38	0·14	...	1·52	.	0·04	1·08	1·65	13	?	8·82	?	1·52	8·82	?	Kurseong.		
																	Pedong ...	British Bhutan	
0·39	0·11	0·59	0·15	...	0·33	0·15	0·11	0·40	0·35	15		5·01		0·76	5·01		Mongpoo.		
...	0·02	0·28	0·02	0·36	...	...	...			2	3·21	0·68	2·53	0·36	0·68	2·53	Cox's Bazar	Chittagong	EAST BENGAL.
...	0·54	1·00	...	0·60	...	...	...	0·05	1·96	4	4·15	4·22	3·32	1·96	4·22	3·32	Chittagong.		
...	...	1·30	0·05	0·43	..	...	...	...	4·42	4	?	6·35	?	4·42	6·35	?	*Kutubdia.*		
...	...	0·49	...	0·41	...	...	.	...	0·59	3	?	1·49	?	0·59	1·49	?	*Satkanya.*		
											?		?			?	Kodala.		
		1·66	0·06	...	0·13						?		?			?	Fenoa.		
...	0·12	1·99	0·07	...	...	..	...	0·61	10·63	6	?	14·20	?	10·63	14·20	?	Mirsarai.		
											?		?			?	Chandpore.		
...	...	1·66	..	..	0·16	...	...	...	2·78	3	5·35	7·50	3·56	2·90	7·50	3·56	Rangamati ...	Chittagong Hill Tracts.	
...	...	0·78	0·05	0·35	...	...	..	...	1·85	3	?	3·08	?	1·85	3·08	?	*Bandarban* ...		
0·75	...	1·95	0·05	...	...	...	...	0·20	0·08	3	?	3·08	?	1·95	3·08	?	Demagiri.		
...	...	0·50	0·21	0·03	.	...	...	...		4	4·06	2·40	3·04	1·10	2·40	3·04	Patuakhali ...	Backergunge.	
...	...	0·35	0·15	...	..	...	...	...	0·89	5	3·79	2·23	2·62	0·89	2·23	2·62	Pirojpur.		
...	...	0·79	0·05	...	...	...	...	0·59	2·24	6	4·65	5·12	3·24	2·24	5·12	3·24	Barisal.		
...	...	0·78	0·04	...	0·50	..	...	0·52	6·20	7	?	9·93	?	6·20	9·93	?	*Gournaddi.*		
...	...	0·50	0·15	0·08	..	0·60	...	0·65	7·22	5	4·38	9·35	3·59	7·22	9·35	3·59	Bhola		
...	...	0·51	...	0·36	...	...	...	0·57	11·95	4	?	13·39	?	11·95	13·39	?	*Doulatkhan.*		
...	...	0·77	0·55	.	...	...	...	...	0·60	4	?	2·08	?	0·77	2·08	?	*Bauphal.*		
...	0·45	0·19	0·04	...	...	..	...	0·95	20·67?	4	4·35	22·30?	4·23	20·67?	20·67?	4·23	Noakhali ..	Noakhali.	
...	...	3·10	0·05	...	...	..	...	0·12	3·64	4	5·23	7·17	4·87	3·64	7·17	4·87	Fenny.		
...	0·01	0·50	0·21	...	...	...	...	0·38	6·60	6	?	8·13	?	6·60	8·13	?	*Harishpur.*		
...	0·77	0·15	...	0·09	...	...	...	2·18	3·36	6	?	7·23	?	3·36	7·23	?	*Ramganj.*		
...	0·25	0·82	0·32	...	0·62	...	...	1·19	1·92	9	5·37	6·19	3·62	1·92	6·19	3·62	Madaripur .	Faridpur	
...	3·47	1·04	0·03	...	0·04	...	...	1·98	1·24	8	5·70	9·18	3·74	3·47	9·18	3·74	Faridpur.		
...	1·65	1·16	0·05	...	...	..	...	1·91	0·90	7	5·84	6·88	3·93	1·91	6·88	3·93	Goalundo		
...	0·08	0·20	...	...	...	..	...	2·93	0·83	5	6·65	4·93	4·82	2·93	4·93	4·82	Munshiganj ..	Dacca.	
...	0·32	0·05	...	...	...	...	...	3·18	1·12	5	6·75	5·81	4·61	3·18	5·81	4·61	Dacca.		
...	0·08	0·11	...	0·09	..	...	...	3·87	1·06	6	6·43	5·70	4·90	3·87	5·70	4·90	Naraingnaj.		
...	0·48	0·25	...	..	...	..	...	0·65	1·22	7	5·82	3·36	3·98	1·22	3·36	3·98	Manikganj		
...	0·15	0·07	...	0·05	...	...	...	1·05	1·10	7	?	5·10	?	1·17	5·10	?	*Joydebpur.*		
...	...	...	...	...	...	...	...	1·10	...	2	6·00	1·25	5·28	1·10	1·25	5·28	Agartala	Hill Tippera.	
...	0·30	0·11	...	0·10	...	...	...	1·?8	0·73	7	6·47	3·51	5·20	1·65	3·51	5·20	Comilla	Tippera.	
...	1·10	0·73	...	...	...	...	...	2·38	2·00	7	5·33	8·63	4·30	2·38	8·63	4·30	Chandpur.		
...	0·20	...	...	...	...	...	...	1·12	2·53	6	6·56	5·35	5·16	2·53	5·35	5·16	Brahmanbaria.		
...	...	...	...	...	...	...	...	1·50	..	3	?	2·30	?	1·50	2·30	?	*Ramchandrapur.*		
...	0·74	...	...	1·55	...	...	...	1·55	1·50	7	?	8·00	?	1·85	8·00	?	*Nasirnagar*		
...	...	0·20	...	...	...	...	...	3·40	0·32	6	?	4·60	?	3·40	4·60	?	*Daudkandi.*		
...	...	...	...	...	...	...	...	0·50	1·54	3	?	3·34	?	1·54	3·34	?	*Kasba.*		
...	...	...	...	...	...	...	...	0·50	3·10	3	?	4·15	?	3·10	4·15	?	*Laksham.*		
0·03	...	...	...	...	...	...	...	0·86	2·05	6	6·63	5·02	4·99	2·05	5·02	4·99	Kishoreganj	Mymensingh.	
...	0·24	0·26	...	...	...	...	...	1·28	0·98	7	5·00	3·26	3·51	1·28	3·26	3·51	Atia (*Tangail*).		
...	0·50	...	0·02	...	0·03	...	..	1·45	1·50	8	5·90	6·33	3·80	1·55	6·33	3·80	Mymensingh.		
...	0·24	...	...	..	...	...	...	0·61	1·68	6	4·74	4·44	3·26	1·68	4·44	3·26	Jamalpur.		
...	1·75	...	...	...	...	...	...	1·62	0·85	8	7·00	8·17	4·24	1·93	8·17	4·24	Netrokona.		
...	...	...	...	...	...	...	...	0·07		2	?	0·57	?	0·40	0·57	?	*Subornakhali.*		
...	0·20	...	...	...	.	...	0·30	...	1·35	9	?	6·75	?	1·?0	6·75	?	*Durgapur*		
...	0·83	..	0·13	...	0·19	...	0·45	1·24	0·83	9	?	6·79	?	1·80	6·79	?	*Sherepur Town*		
...	0·55	...	0·04	...	...	...	0·54	0·66	1·80	7	?	5·12	?	1·80	5·12	?	*Dewanganj.*		
...	0·03	1·12	...	...	...	0·38	0·27	0·23	.	5	2·44	2·52	1·87	1·12	2·52	1·87	Kishanganj .	Purnea .	NORTH BIHAR.
...	...	...	...	...	...	2·13		0·60	0·31	4	2·00	3·74	1·50	2·13	3·72	1·50	Araria.		
...	...	...	...	...	...	2·00	1·82	0·02	0·54	4	2·00	5·05	1·50	2·00	5·05	1·50	Purnea.		
...	...	...	...	...	...	...	1·08	0·15			?		?			?	*Gondwara (Korah).*		
...	...	...	0·83	...	...	0·71	...	0·97	...	3	?	2·51	?	0·97	2·51	?	*Barsoe.*		
...	...	...	0·91	...	...	1·34	...	1·13	...	4	?	3·?1	?	1·34	3·91	?	*Forbesganj.*		
...	...	0·56	...	0·28	1·20	0·27	0·27	0·73	0·05	8	?	3·87	?	1·20	3·87	?	*Kaliaganj.*		
...	...	...	...	...	...	0·05	...	...	0·20	1	1·53	0·25	1·03	0·20	0·25	1·03	Madhipura	Bhagalpur.	
...	...	...	...	...	...	..	...	...	...	Nil	?	Nil	?	Nil	Nil	?	Bongaon. (Sylabad).		
...	...	...	...	...	...	...	...	0·90	0·29	2	1·39	1·19	0·89	0·90	1·19	0·89	Supaul.		
...	...	...	...	...	...	0·85	...	1·36	0·14	4	?	2·52	?	1·35	2·52	?	*Protabganj*		
...	...	...	1·53	...	...	0·29	...	1·96	...	3	1·35	3·78	0·77	1·96	3·78	0·77	Bhagalpur.		
...	...	...	1·52	...	...	0·33	...	0·42	...	3	1·25	2·27	0·54	1·52	3·27	0·54	Banka.		
...	0·01	...	1·05	..	...	0·33	...	0·96	...	3	?	2·35	?	1·05	2·35	?	*Kolgong.*		

Table of Rainfall recorded at Stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
North Bihar—concld.	Darbhanga	Tajpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Darbhanga	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Madhubani	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bahera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Roshera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Muzaffarpur	Sitamarhi	...	...	...	...	...	...	...	...	...	0·12	...	...	...	...	...	...	...	...	...	...
		Muzaffarpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Hajipur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Paru	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mahua (Chitwara).	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sirhar	...	...	...	...	...	...	...	...	...	0·15	...	...	...	...	...	...	...	...	...	...
		Pupri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Champaran	Motihari	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bettiah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bagaha	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Burhurwa	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Saran	Gopalganj	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Siwan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chapra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
South Bihar	Shahabad	Buxar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dehri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bhabhua	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sasaram	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Arrah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mohaniah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Khiri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Agiaon	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ramnagar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Koath	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sikroul	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bassawan	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Manoharpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Gaya	Aurungabad	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gaya	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Nawada	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jahanabad	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Arwal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Daudnagar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sherghati	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Rajauli	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Pakri Barawan.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Patna	Patna	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dinapore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bihar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Barh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bickram	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Hilsa	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Monghyr	Begusarai	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Monghyr	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jamui	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gogri	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sheikpura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chakai Bamda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Sonthal Parganas.	Rajmahal	...	...	...	...	...	...	...	...	...	0·23	...	...	...	...	...	...	...	...	...	...
		Godda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Pakour	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Naya Dumka	...	...	...	0·03	...	...	...	...	...	1·02	...	...	...	...	...	...	...	...	...	...
		Deoghur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jamtara	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Belbadda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Nanihat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chota Nagpur.	Hazaribagh	Pachamba (*Giridi*).	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Hazaribagh	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Semtagurah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mahudi Hills	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jhoomrah Hills	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Barhi	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chatra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Karagdeha	...	...	...	...	...	...	...	...	0·02	...	...	...	...	...	...	...	...	...	...	...
		Ramghar	...	...	...	...	...	...	...	...	0·15	...	...	...	...	...	...	...	...	...	...	...
	Lohardaga	Lohardaga	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ranchi	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Silli	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sirguja	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jashpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gangpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Palamau	Palamau (*Daltonganj*).	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Balumat	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Hoseinabad	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Garwah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Singhbhum	Chaibassa	...	...	...	...	0·35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chakradharpur.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ghatsila	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Baharagora	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Manbhum	Gajikura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kankapur	...	...	...	...	...	...	...	Not	received.		...	...	...	...	...	...	...	...	...	...
		Purulia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Gobindpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Raghunathpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Barrabhum	...	...	...	...	...	...	...	...	...	0·25	...	...	...	...	...	...	...	...	...	...
		Jhalda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chas	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Pandra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Orissa Tributary Mahals.	Keonjher	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Anundpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Talcher	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Narsingpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	...	...
		Angul	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Dhenkanal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bispara	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Kunjabongar	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Baramba	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

in Bengal in April 1893—*concluded.*

21	22	23	24	25	26	27	28	29	30	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 1st April 1893 to 30th April 1893.	Average rainfall from 1st April to 30th April.	Station.	District.	Meteorological Division.
...	...	...	0·12	...	...	0·09	...	0·13	...	2	0·89	0·64	0·36	0·42	0·64	0·36	Tajpur ...	Darbhanga.	NORTH BIHAR —*concluded.*
...	0·01	...	0·21	...	...	0·31	...	0·66	...	3	1·37	1·19	0·60	0·66	0·19	0·60	Darbhanga.		
...	...	...	...	...	...	...	...	0·62	0·39	2	1·63	1·01	1·01	0·62	1·01	1·01	Madhubani.		
...	...	0·19	...	...	...	...	...	...	...	1	?	0·19	?	0·19	0·19	?	*Bahera.*		
...	...	...	...	...	...	...	...	0·20	...	1	?	0·20	?	0·20	0·20	?	*Roshera.*		
...	...	...	...	...	0·29	...	0·11	...	0·65	4	1·53	1·17	1·18	0·65	1·17	1·18	Sitamarhi	Muzaffarpur.	
...	...	0·02	0·02	...	...	0·54	...	0·59	...	2	1·05	1·08	0·58	0·54	1·08	0·58	Muzaffarpur		
...	...	0·02	...	...	...	1·85	...	0·01	...	1	0·61	1·88	0·19	1·85	1·88	0·19	Hajipur.		
...	...	...	...	...	1·35	...	1·31	...	...	2	?	2·66	?	1·35	2·66	?	*Paru.*		
...	...	...	...	...	0·45	...	1·60	...	...	2	?	2·05	?	1·60	2·05	?	*Mahua* (Chitwarra.)		
...	...	...	...	...	...	0·45	...	0·20	...	3	?	0·80	?	0·45	0·80	?	*Sinhar.*		
...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Pupri.*		
...	...	0·04	...	...	...	1·83	...	0·54	...	2	1·3	2·41	0·78	1·83	2·41	0·78	Motihari ...	Champaran.	
0·10	...	...	...	...	...	...	0·30	0·33	...	3	0·89	0·73	0·75	0·33	0·73	0·75	Bettia		
...	...	...	...	...	...	1·00	...	1·31	...	2	?	2·31	?	1·31	2·31	?	*Bagaha.*		
...	...	...	...	...	...	...	...	0·56	...	1	?	0·56	?	0·56	0·56	?	*Burhurwa.*		
...	...	0·12	...	...	...	...	...	...	...	1	0·60	0·12	0·20	0·12	0·12	0·20	Gopalganj ...	Saran.	
...	0·03	...	...	...	0·38	...	...	...	...	1	0·74	0·41	0·27	0·38	0·41	0·27	Siwan.		
...	0·03	...	...	...	...	...	...	0·06	...	Nil	0·65	0·09	0·23	0·06	0·09	0·23	Chapra.		
...	...	...	...	...	...	...	0·04	0·02	...	Nil	0·40	0·06	0·17	0·04	0·06	0·17	Buxar ...	Shahabad ..	SOUTH BIHAR.
...	...	...	...	...	...	...	...	...	...	Nil	0·20	Nil	0·11	Nil	Nil	0·11	Dehri.		
...	0·02	...	...	...	...	...	...	...	...	Nil	0·45	0·02	0·13	0·02	0·02	0·13	Bhabhua.		
...	...	...	...	...	...	...	...	...	...	Nil	0·61	Nil	0·17	Nil	Nil	0·17	Sasaram.		
...	...	...	...	...	...	...	0·05	...	...	Nil	0·50	0·05	0·22	0·05	0·05	0·22	Arrah.		
...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Mohaniah.*		
...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Khiri.*		
...	...	...	...	...	...	0·10	...	...	...	1	?	0·10	?	0·10	0·10	?	*Ageaon.*		
...	...	...	...	...	...	0·17	...	...	...	1	?	0·17	?	0·17	0·17	?	*Ramnagar.*		
...	...	...	...	...	...	...	0·03	...	...	Nil	?	0·03	?	0·03	0·03	?	*Koath.*		
...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Sikroul.*		
...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Bassiwan.*		
...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Manaharpur.*		
...	0·07	...	...	...	...	...	...	...	...	Nil	0·53	0·07	0·23	0·07	0·07	0·23	Aurungabad ...	Gaya.	
...	0·08	...	...	...	...	...	...	0·60	...	1	0·60	0·68	0·31	0·60	0·68	0·31	Gaya.		
...	...	...	...	...	...	...	...	...	...	Nil	0·58	Nil	0·30	Nil	Nil	0·30	Nawada.		
...	0·30	...	...	...	...	0·12	...	0·28	...	3	0·35	0·70	0·15	0·30	0·70	0·15	Jahánabad.		
...	...	...	...	...	...	...	...	0·08	...	Nil	?	0·08	?	0·08	0·08	?	*Arwal.*		
...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Daudnagar.*		
...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Sherghati.*		
...	...	...	...	...	...	...	...	0·97	...	1	?	0·97	?	0·97	0·97	?	*Rajauli.*		
...	...	...	...	...	...	0·24	...	...	...	1	?	0·24	?	0·24	0·24	?	*Pakri Barawan.*		
...	...	0·03	...	...	...	1·84	...	0·03	...	1	0·65	1·90	0·23	1·84	1·90	0·23	Patna ..	Patna.	
0·03	...	0·05	...	...	...	0·46	...	0·03	...	1	0·55	0·55	0·23	0·46	0·55	0·23	Dinapore.		
...	0·07	...	...	...	...	0·90	...	0·04	...	1	0·75	1·01	0·22	0·90	1·01	0·22	Bihar.		
...	0·04	...	...	...	...	0·33	...	0·31	...	2	0·53	0·65	0·12	0·33	0·65	0·12	Barh.		
...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Bickram.*		
...	...	...	...	...	1·18	...	0·20	...	...	2	?	1·38	?	1·18	1·38	?	*Hilsa.*		
...	...	...	...	...	...	0·39	...	0·41	...	2	0·95	0·80	0·36	0·41	0·80	0·36	Begusarai ..	Monghyr.	
...	...	...	...	...	...	1·20	...	0·11	0·20	2	0·85	1·31	0·42	1·20	1·31	0·42	Monghyr.		
...	...	...	...	...	...	0·12	...	...	...	1	0·70	0·12	0·47	0·12	0·12	0·47	Jamui.		
...	...	...	...	...	...	...	...	2·45	...	1	?	2·45	?	2·45	2·45	?	*Gogri.*		
...	...	...	...	...	...	0·32	...	...	...	1	?	0·32	?	0·32	0·32	?	*Sheikpura.*		
...	...	...	...	...	...	0·30	...	...	...	1	?	0·30	?	0·30	0·30	?	*Chahai Bamda.*		
...	...	...	1·65	0·25	...	0·64	...	1·03	...	5	1·16	3·80	1·05	1·65	3·80	1·05	Rajmahal ...	Sonthal Parganas.	
...	...	...	0·51	...	...	0·42	...	0·12	0·20	4	1·35	1·65	0·49	0·91	1·65	0·49	Godda.		
...	0·11	...	1·39	...	...	0·54	...	0·08	...	4	1·00	3·24	0·43	1·39	3·24	0·43	Pakour.		
...	0·03	0·34	...	...	...	0·74	...	0·02	...	2	2·41	1·16	0·99	0·74	1·16	0·99	Naya Dumka.		
...	...	...	1·50	...	...	1·07	...	...	...	2	1·61	2·57	0·83	1·50	2·57	0·83	Deoghur.		
...	...	0·24	0·05	...	...	0·52	...	0·21	...	3	1·73	1·00	0·61	0·52	1·00	0·61	Jamtara		
...	...	...	1·37	...	...	0·97	...	...	...	2	?	2·34	?	1·37	2·34	?	*Belbadda.*		
...	...	...	...	1·00	0·50	0·36	...	...	...	3	?	1·86	?	1·00	1·86	?	Vanihat		
...	...	...	...	...	...	1·08	...	0·08	...	1	1·42	1·16	0·64	1·08	1·16	0·64	Pachamba ... (*Giridi*).	Hazaribagh ..	CHOTA NAGPUR.
...	0·05	0·11	0·16	...	...	...	0·10	...	...	3	1·00	0·42	0·37	0·16	0·42	0·37	Hazaribágh.		
...	...	...	...	...	...	0·14	0·08	...	...	1	0·73	0·22	0·30	0·14	0·22	0·30	Simtaguran.		
...	...	...	0·10	...	...	...	...	...	...	1	0·36	0·10	0·10	0·10	0·10	0·10	Mahudi Hills.		
...	...	...	...	...	...	...	0·40	...	...	1	Nil	0·40	Nil	0·40	0·40	Nil	Jnoomran Hills		
...	...	...	...	...	...	...	...	0·22	...	1	?	0·22	?	0·22	0·22	?	*Barhi.*		
...	0·02	...	...	...	...	...	0·03	...	...	Nil	?	0·05	?	0·03	0·05	?	*Chatra.*		
...	...	...	...	...	0·25	0·65	...	0·17	...	3	?	1·07	?	0·65	1·07	?	*Karagdeha.*		
...	...	...	...	...	...	...	0·23	...	...	2	?	0·38	?	0·23	0·34	?	*Kamjhar.*		
...	...	0·38	...	...	...	...	...	...	...	1	0·71	0·38	0·26	0·38	0·38	0·26	Lohardaga ...	Lohardaga.	
...	...	...	0·27	0·20	...	0·07	...	0·25	...	3	1·75	0·88	0·64	0·29	0·88	0·64	Ranchi.		
...	...	0·15	...	0·35	...	...	...	...	...	2	?	0·50	?	0·35	0·50	?	*Silli.*		
...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	Sirguja.		
...	...	0·02	0·22	...	...	...	...	...	...	1	?	0·24	?	0·22	0·24	?	Jasupur.		
...	...	0·40	...	0·25	...	...	...	...	...	2	?	0·65	?	0·40	0·65	?	Gangpur.		
...	...	...	...	...	...	...	...	...	...	Nil	0·68	Nil	0·29	Nil	Nil	0·29	Palamau. (*Daltongunj*).	Palamau.	
...	...	...	...	0·45	...	...	...	...	...	1	?	0·45	?	0·45	0·45	?	*Balumat.*		
...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Hoseinabad.*		
...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	*Garwah.*		
...	...	0·15	0·16	0·10	...	...	0·04	...	...	4	1·55	0·80	0·67	0·35	0·80	0·67	Chaibassa ..	Singhbhum.	
...	...	0·08	0·03	0·10	0·30	...	...	...	...	4	?	0·57	?	0·30	0·57	?	*Chakradharpur.*		
...	...	...	1·40	...	...	...	...	...	...	1	?	1·40	?	1·40	1·40	?	*Ghatsila.*		
...	...	...	0·75	1·21	...	...	0·30	...	...	3	?	2·26	?	1·21	2·26	?	*Banaragura.*		
...	0·02	0·15	...	...	...	...	...	...	...	1	?	0·17	?	0·15	0·17	?	Gaitkura.		
...	...	0·21	...	...	...	...	0·25	...	...	2	?	0·46	0·85	0·25	0·46	0·85	Kalikapur.		
...	...	0·28	0·08	...	...	...	1·52	0·77	...	3	2·30	2·45	0·63	1·32	2·45	0·63	Purulia ...	Manbhum.	
...	...	...	...	...	...	...	...	0·50	...	1	1·22	0·50	?	0·50	0·50	?	Gobindpur.		
...	...	...	...	...	...	...	...	0·90	...	1	?	0·90	?	0·90	0·90	?	*Raghunathpur.*		
...	...	0·15	0·75	...	...	0·30	0·80	...	...	5	?	2·25	?	0·80	2·25	?	*Barrabhum.*		
...	...	0·12	...	...	...	0·73	0·44	...	...	3	?	1·29	?	0·73	1·29	?	*Jhalda.*		
...	...	0·30	...	...	...	1·39	0·23	0·33	...	4	?	2·16	?	1·39	2·16	?	*Chas.*		
...	...	0·29	0·50	...	...	0·20	...	0·90	...	4	?	1·89	?	0·90	1·89	?	*Pandra.*		
...	0·10	0·70	...	0·03	...	...	...	...	...	2	?	[illegible]	?	0·70	0·83	?	Keonjhar ...	Orissa Tributary Mahals.	
...	...	...	2·24	...	1·64	0·31	0·47	...	...	4	?	[illegible]	?	2·24	4·66	?	Anandapur.		
...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	Talcher.		
...	...	...	...	...	...	...	...	...	...	1	?	0·10	?	0·10	0·10	?	Narsingpur.		
...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	Angul.		
...	...	0·10	...	...	...	...	...	...	...	1	?	0·10	?	0·10	0·10	?	Dhenkanal.		
...	...	...	...	0·53	...	...	...	...	...	1	?	0·53	?	0·53	0·53	?	Bispara.		
...	...	...	...	...	...	...	...	...	...	Nil	?	Nil	?	Nil	Nil	?	Kanjabongar.		
...	...	...	...	...	...	...	0·11	...	...	1	?	0·11	?	0·11	0·11	?	Baramba.		

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVATIONS TAKEN IN ASSAM, FOR THE MONTH OF APRIL 1893.

DURING the early part of April there was very little worthy of remark in the general weather conditions beyond the continued low temperatures, especially during the day, when compared with the averages for past years. Pressure distribution never differed very largely from the normal, and underwent the ordinary small oscillations usual in settled weather. On one or two occasions between the 1st and the 15th, weather became slightly disturbed owing to the passage of shallow depressions across the Province, but the rain, which fell at these times, was very local and chiefly confined to the northern districts. These periods of slight disturbance were from the 5th to the 7th, when rain fell in North Bengal and parts of South-West and East Bengal, and again on the 10th and 11th, when, as before, practically no rain fell in Orissa, Chota Nagpur and Bihar, but showers were well distributed in the other districts. During this early part of the month day readings of the thermometers were steadily below the normal by several degrees, while at night, though the air was cooler than usual, the difference was usually much smaller than by day.

After the 15th, until towards the end of the month, fine cloudless weather prevailed, but the pressure distribution underwent considerable modification, and there resulted an arrangement which in all probability intensified the disturbance which afterwards became general over the province and continued for some time. Temperature rose above the normal both by day and night, but the excess in minimum readings was considerably the greater, and the wind circulation underwent a change, which became an important feature of the weather condition for days afterwards. Owing to the low pressure in Central India, the area of lowest readings in Bengal was in the south-west corner, and the wind circulation due to this arrangement became easterly in all districts.

About the 23rd a depression formed in the north-west of India, and began moving in an easterly direction, while on the 25th a small cyclonic storm developed in the Andaman Sea, and moving over Burmah caused stormy weather in the east of the Bay and heavy rainfall in Burmah. The centre of the cyclonic disturbance passed over Rangoon on the 27th, and on that day the depression from the north-west was beginning to affect the weather in the extreme west of the Province. On the following day there was a rapid rise of pressure in the east of the Bay and a rapid fall in the western districts of Bengal, so that gradients from being very slight in the north of the Bay, became in a short time much steeper than is usual at the end of April. In consequence of these steeper gradients strong moisture-laden winds blew in all districts and general rain fell, except in Orissa and part of South-West Bengal, up till the end of the month.

Pressure.—Though the mean pressures for the month differ from the normal by a few thousandths of an inch only, large changes have occurred at times, and the distribution has been considerably above and below the normal. During the first half of the month readings were steadily in excess, the greatest difference occuring on the 10th and 11th, when it was more than ·2 inch in the north of the Province, and somewhat less eleswhere. After the 11th pressure steadily fell. By the 15th the distribution was practically normal, and by the 18th there was defect ranging from ·1 inch in Orissa to ·2 inch in Assam. These relatively low readings continued till the 23rd, when a rapid rise was general, and the distribution was again above the normal; but from the 25th large oscillations were caused by the two disturbances, one in the east of the Bay, and the other in the western districts of Bengal.

The changes on the 27th, when the storm was passing over Lower Burmah, varied from a rise of ·05 inch in the west of Bihar to a fall of ·176 inch at Rangoon; and on the 28th, when pressure was rising in Burmah, changes varied from a rise of ·157 inch at Rangoon to a fall of ·177 inch at Arrah. Defect then ranged from ·13 inch in the south of the Bay to ·25 inch at Dehri.

Temperature—Was generally below the normal during the early part of the month. The difference from the normal by day was greater than by night, and even when, towards the middle of the month, a general rise prevailed, the day readings continued relatively lower. During the last week unsettled conditions prevailed with numerous thunderstorms in all districts, and cool weather again became general. The means for the larger divisions are all below the normal. Defect is under 1° in Bihar only, and in the other divisions varies from 1·6° in Assam to 2·4° in Chota Nagpur.

Rainfall.—As stated above, scattered showers fell about the 5th, and again on the 10th and 11th, after which there was very little rain till the 22nd, when the unsettled weather, which prevailed during the last week, commenced. During the first week rainfall was practically normal, during the second and third it was much below the normal; but the heavy falls during the last week brought up the total fall for the month to above the normal in all districts except Orissa. The largest excess was 2·74 inches in North Bengal. In East Bengal excess was 1·99 inches, in North Bihar ·85 inch, South Bihar ·59 inch, South-west Bengal ·32 inch, and Chota Nagpur ·23 inch. The heaviest falls were at Gnatong, Sibsagar, Silchar, Faridpur, Dhubri, Rangpur, Mymensingh, Noakhali, and Dacca, all of which places received more than 5 inches.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the month of April 1893:—

Meteorological Divisions.	Temperature.						Rainfall.							
	Highest observed during month.	Lowest observed during month.	Averages for month.			Average mean of month above or below normal mean of month.	Of month.			Rainy days.			Since 1st April 1893.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in month.	Normal average number in month.	Variation.	Average.	Normal average.
Orissa	105·1	66·8	90·6	70·5	83 6	−1·7	1·08	1·29	−0 21	1·40	2·07	−0·67	1·08	1·29
South-West Bengal	108·1	66·7	95 5	75·1	85·3	−1·8	2·37	2·05	+0·32	3 39	3·11	+0·28	2·37	2·05
North Bengal	103·7	62·2	90·5	70·6	80·6	−1·7	5·17	2·43	+2·74	6·96	3·54	+3 42	5 17	2·43
East Bengal	97·5	63·1	88·2	71·9	80·1	−2·0	5·99	4·00	+1·99	5·64	5·41	+0·23	5 99	4 00
North Bihar	106·3	62·3	95·7	71·1	83 4	−0 3	1·64	0·79	+0·85	2 39	1·29	+1 10	1·64	0·79
South Bihar	107·4	64·9	99·3	73·0	86·2	−0·8	0·97	0·38	+0·59	2 86	0·84	+2·02	0·97	0·38
Chota Nagpur	106 6	61·2	96·9	71·2	84·0	−2·1	0·66	0·43	+0·23	1·72	1·06	+0·66	0 66	0·43
Assam	95·5	59 3	83·9	67·6	75·8	−1·6								

METEOROLOGICAL OFFICE, BENGAL;
The 16*th May* 1893.

C. LITTLE,
Offg. Meteorological Reporter to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS.											
			Air pressure.			Wind.		Temperature.						
			Mean barometric height 8 A. M. reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri	29·784	29·739	—	SW	337	89·7	13th May	73·6	9th May	88·1	77·7	83·9
		Gopalpore	29·777	29·738	+·028	SW	453	89·2	8th "	68·9	13th "	87·7	75·4	81·5
		False Point	29·800	29·763	+·039	Variable	315	88·5	8 & 12 "	69·6	12th "	86·5	75·6	81·1
	Cuttack	Cuttack	29·726	29·749	+·038	Calm	92	99·1	8th "	71·8	9 & 10 "	94·0	75·9	85·0
	Balasore	Balasore	29·764	29·767	+·052	SW	123	97·5	8th "	66·8	8th "	89·0	73·4	81·2
South-West Bengal.	Midnapore	Midnapore	29·679	29·775	+·034	S	204	98·3	12th "	68·2	13th "	91·6	72·2	81·9
	24-Parganas	Calcutta	29·812	29·778	+·056	Sly	62	91·6	13th "	66·2	7th "	88·1	71·6	79·9
		Saugor Island	29·803	29·772	+·043	Variable	309	89·7	13th "	70·5	8th "	87·8	75·4	81·6
	Howrah													
	Hooghly													
	Nadia	Krishnagar	29·778	29·774	+·058	Variable	97	91·8	13th "	61·7	8th "	88·0	71·7	79·9
	Khulna													
	Jessore	Jessore	29·801	29·781	+·043	NEly	83	91·5	13th "	67·0	8th "	86·8	72·3	79·6
	Burdwan	Burdwan	29·742	29·7[illegible]8	+·067	Variable	62	91·1	12 & 13 "	67·2	7th "	88·2	71·4	79·8
		Raniganj	29·453	29·771	+·052	Variable	71	93·2	13th "	64·0	7th "	87·9	69·5	78·7
	Bankura	Bankura	29·509	29·753	+·060	Calm	76	93·1	13th "	64·7	1[illegible]th "	88·5	68·9	78·7
	Birbhum													
	Murshidabad	Berhampore	29·757	29·773	+·046	Variable	54	89·6	12th "	66·7	8th "	85·8	72·[illegible]	79·0
North Bengal.	Pabna	Sirajganj	29·789	29·785	+·038	Calm	68	89·6	13th "	66·3	8th "	84·7	70·9	77·8
	Bogra	Bogra	29·755	29·769	+·033	E	51	90·2	13th "	65·2	8th "	85·5	70·2	77·9
	Rajshahi	Rampur Boalia.	29·752	29·772	+·044	Ely	82	88·6	13th "	63·7	8th "	84·7	70·3	77·5
	Malda	Malda	29·752	29·785	—	SE	57	92·6	13th "	65·5	8th "	86·3	71·3	78·8
	Dinajpur	Dinajpur	29·723	29·793	+·031	E & ENE	66	90·6	13th "	67·8	8th "	86·6	71·7	79·2
	Rangpur	Rangpur	29·722	29·800	+·032	ENE	52	90·8	13th "	66·7	8th "	86·1	70·3	78·2
	Jalpaiguri	Jalpaiguri	29·586	29·827	+·019	Ely	61	89·9	11th "	67·6	8 & 13 "	86·3	70·1	78·2
	Kuch Bihar													
	Darjeeling	Darjeeling	22·988	—	+·045	Nly	114†	63·6	11th "	45·7	7th "	59·4	48·1	53·8
	Sikkim	Gnatong	19·204	—	—	SE	68	45·4	12th "	23·1	7 & 10 "	43·4	25·4	34·4
East Bengal.	Chittagong	Chittagong	29·773	29·806	+·017	NE	85	87·2	13th "	68·1	7 & 8 "	84·2	71·5	77·9
	Chittagong Hill Tracts	Demagiri	Observations not received.											
	Backergunge	Barisal	29·825	29·763	+·030	Calm	89	90·3	7 & 13 May	68·9	8th "	87·5	72·8	80·2
	Noakhali	Noakhali	29·797	29·787	+·044	Ely	109	88·5	7th "	64·4	8th "	85·6	71·2	78·4
	Faridpur	Faridpur	29·809	29·803	+·042	Calm	57	87·5	13th "	65·9	8th "	85·7	71·7	78·7
	Dacca	Dacca	29·611	29·781	+·026	Calm	80	90·1	13th "	63·2	8th "	87·0	72·6	79·8
	Tippera	Comilla	29·815	29·798	+·036	Sly	86	89·4	13th "	60·8	8th "	86·9	71·5	79·2
	Mymensingh	Mymensingh	29·789	29·863	+·022	ENE	85	88·7	13th "	63·6	8th "	85·3	71·9	78·6
North Bihar.	Purnea	Purnea	29·709	29·789	+·054	Ely	49	91·2	11 & 12 "	68·2	8th "	88·1	71·5	79·8
	Bhagalpur	Bhagalpur	29·659	29·774	+·078	Calm	26	92·7	13th "	66·5	8th "	87·1	71·5	79·3
	Darbhanga	Darbhanga	29·635	29·767	+·059	ESE & ENE.	119	92·0	12th "	69·7	9th "	87·6	71·2	79·4
	Muzaffarpur	Muzaffarpur	29·656	29·789	—	Calm	57	92·7	12 & 13 "	69·2	10th "	87·6	70·6	79·1
	Champaran	Motihari	29·599	29·768	+·069	Variable	119	94·2	12 & 13 "	65·8	10th "	87·6	69·1	78·4
	Saran	Chapra	29·638	29·773	+·081	ESE	103†	98·3	13th "	69·6	10th "	90·3	72·7	81·5
South Bihar.	Shahabad	Dehri	29·437	29·744	+·060	Variable	138	99·4	13th "	62·0	8th "	91·9	71·9	81·9
		Buxar	29·572	29·767	+·077	E	246?	99·5	13th "	62·9	7th "	91·3	71·0	81·1
		Arrah	29·616	29·759	+·079	E	73	98·4	13th "	68·0	8th "	90·8	72·4	81·6
	Gaya	Gaya	29·416	29·747	+·056	E	175	99·5	13th "	62·7	8th "	91·8	72·6	82·2
	Patna	Bankipore	29·637	29·773	+·066	E	124	97·0	13th "	70·2	8th "	89·4	72·3	80·9
	Monghyr													
	Sonthal Parganas	Naya Dumka	29·317	29·768	+·065	ESE	56*	91·1	12th "	65·9	8th "	86·7	71·2	78·9
Chota Nagpur.	Hazaribagh	Hazaribagh	27·808	29·741	+·039	S	190	91·2	13th "	63·3	9th "	88·8	67·7	78·3
	Lohardaga	Ranchi	27·673	29·740	+·035	Sly	157	91·0	8th "	61·4	9th "	86·1	66·8	76·5
	Palamau	Daltonganj	29·053	—	—	SSly	105	101·3	13th "	73.0	9th "	97·4	75·6	86·6
	Singhbhum	Chaibassa	29·044	29·757	+·076	NEly	46†	99·8	8th "	67·3	9th "	93·0	72·0	82·6
	Manbhum													
Assam.	Sibsagar	Sibsagar	29·501	29·738	—·026	NE & Calm.		89·6	12 & 13 "	66·4	11th "	86·0	69·4	77·7
	[illegible]alpara	Dhubri	29·735	29·806	+·021	NE	118	89·7	13th "	63·8	8 & 9 "	83·5	70·3	76·9
	Cachar	Silchar	29·757	29·814	+·015	Calm		92·0	13th "	68·3	8th "	87·5	70·4	79·1

* Means of 5 days. | † Mean of 6 days.

Explanation.—*Summary.*—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01 rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station district, *i.e.*, from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one of

for the week ending Saturday, the 13th of May 1893.

					DISTRICT OBSERVATIONS.										
					Of week.				Rainfall.						
									Since 1st of month.			Since 1st April 1893.			
Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Mean for district.	Normal mean.	Variation.	Mean for district.	Normal mean.	Variation.	District.
—	81·2	84	4·9	2·17		0·80		1·10		1·04			2·04		Puri.
—1·9	81·1	83	1·4	3·01											
—3·5	82·3	81	7·7	1·56											
—4·4	81·9	75	4·6	3·39		1·01		1·39		1·28			2·33		Cuttack.
—2·9	81·1	86	2·4	2·26		1·29		1·82		2·05			3·64		Balasore.
—3·8	79·3	83	4·6	1·83	2·30	1·60	3·75	1·70	4·57	2·41	+2·16	6·32	4·40	+1·92	Midnapore.
—3·8	78·1	83	4·1	2·61	2·09	1·49	4·57	1·80	4·28	2·65	+1·63	5·35	4·61	+0·74	24-Parganas.
—3·0	81·2	84	7·0	2·75											
					2·34	1·87	3·00	1·88	4·82	3·16	+1·66	5·10	4·79	+0·31	Howrah.
					1·43	1·40	2·67	1·71	3·05	2·81	+0·24	4·77	4·60	+0·17	Hooghly.
—3·8	79·1	82	5·1	1·52	1·75	1·25	3·00	1·63	2·97	2·67	+0·30	7·85	5·39	+2·46	Nadia.
					1·63	1·78	2·67	1·98	4·01	3·41	+0·60	6·19	6·45	—0·26	Khulna.
—3·9	78·9	88	5·0	2·50	1·73	1·63	3·20	2·02	4·47	3·15	+1·32	8·59	6·50	+2·09	Jessore.
—5·6	77·0	80	5·1	3·39	3·08	1·24	3·25	1·40	6·07	2·37	+3·70	7·18	4·33	+2·85	Burdwan.
—7·4	76·1	81	3·0	4·63											
—12·5	76·8	82	4·6	5·69	2·87	1·02	3·50	1·35	4·57	1·69	+2·80	6·69	2·79	+3·00	Bankura.
					1·55	0·84	3·00	1·32	2·71	1·31	+1·40	3·79	2·46	+1·33	Birbhum.
—4·8	76·2	93	4·6	1·13	1·49	1·11	2·17	1·63	2·22	2·03	+0·19	6·40	3·32	+3·08	Murshidabad.
—3·0	77·6	85	4·7	0·68	0·80	1·55	1·50	2·08	4·07	3·00	+1·07	7·24	5·81	+1·43	Pabna.
—5·5	78·0	83	2·3	1·15	1·29	1·78	1·25	1·95	5·21	3·10	+2·11	9·24	4·80	+4·44	Bogra.
—5·2	77·6	86	4·3	1·22	1·19	1·35	1·00	1·58	3·81	2·36	+1·45	7·59	3·57	+4·02	Rajshahi.
—	78·3	84	3·7	1·20	1·05	0·97	1·50	1·24	2·01	1·55	+0·46	4·63	2·51	+2·12	Malda.
—2·3	76·9	82	3·6	0·81	1·94	0·99	1·40	1·45	3·80	1·88	+1·92	6·72	2·85	+3·87	Dinajpur.
—1·3	77·3	86	1·4	0·52	2·76	1·86	0·50	2·24	4·13	3·68	+0·45	11·91	6·98	+4·93	Rangpur.
—0·7	77·1	77	5·6	0·90	0·96	2·13	1·00	2·26	1·60	3·93	—2·33	7·47	7·85	—0·38	Jalpaiguri.
					0·45	2·06	1·00	2·61	2·44	4·09	—1·65	11·31	8·30	+3·01	Kuch Bihar.
—0·8	55·5	86	6·1	1·14	1·87	1·94	2·75	2·74	2·54	3·53	—0·99	11·64	8·33	+3·31	Darjeeling.
—	39·3	92	3·7	2·25											Sikkim.
—2·4	77·8	87	4·1	1·37	2·50	2·19	2·00	2·16	5·29	4·38	+0·91	7·74	7·10	+0·64	Chittagong.
					6·06	2·76	3·00	2·65	8·98	5·26	+3·72	16·48	8·61	+7·87	Chittagong Hill Tracts.
—1·2	80·1	84	8·0	2·34	1·86	1·88	2·75	2·24	5·98	3·40	+2·58	10·76	6·51	+4·25	Backergunge.
—1·8	79·4	82	2·4	0·89	1·45	2·95	2·00	2·25	4·89	5·34	—0·45	19·45	9·76	+9·69	Noakhali.
—2·3	78·0	87	4·3	0·73		2·37		2·63		4·04			7·69		Faridpur.
—2·1	78·6	83	5·0	1·04	0·95	2·35	2·00	2·94	5·64	4·44	+1·20	8·89	8·68	+0·21	Dacca.
—2·2	78·9	87	3·7	2·21	1·88	3·11	2·75	2·90	7·28	5·49	+1·79		10·27		Tippera.
—1·0	78·0	81	4·1	1·59	1·69	2·33	2·40	2·45	5·72	4·38	+1·34	10·49	8·13	+2·36	Mymensingh.
—2·1	76·9	85	1·0	0·29		1·14		1·48		1·97			3·51		Purnea.
—5·0	77·6	80	3·7	0·64	0·76	0·73	1·50	0·97		1·29			1·98		Bhagalpur.
—5·1	78·6	74	1·9	0·93	0·57	0·83	1·33	1·09	3·04	1·22	+1·82	3·85	1·80	+2·05	Darbhanga.
—	77·2	80	3·1	1·06	0·44	0·76	2·50	1·03	1·53	1·03	+0·50	2·91	1·64	+1·27	Muzaffarpur.
—4·9	77·0	72	3·4	0·36	0·47	0·70	1·50	1·16	1·34	1·24	+0·10	2·51	1·93	+0·58	Champaran.
—4·5	79·1	78	3·7	0·03	0·12	0·45	0·67	0·82	1·10	0·94	+0·16	1·30	1·10	+0·20	Saran.
—5·3	79·8	69	2·6	0·84											
—6·1	77·2	75	3·6	0·90	0·87	0·30	1·20	0·61	1·41	0·41	+1·00	1·43	0·57	+0·86	Shahabad.
—6·0	79·2	76	2·3	0·47											
—7·0	79·1	77	2·9	1·02	0·98	0·26	1·00	0·55	1·61	0·38	+1·23	1·97	0·63	+1·34	Gaya.
—5·0	79·7	76	4·0	0·07		0·42		0·65		0·64			0·84		Patna.
					0·67	0·44	1·33	0·82	2·26	0·77	+1·49	3·33	1·76	+1·57	Monghyr.
—6·7	77·2	81	4·3	2·35	2·23	0·85	3·00	1·24	4·15	1·33	+2·82	6·39	2·07	+4·32	Sonthal Parganas.
—6·1	76·9	68	1·7	1·60		0·62		0·98		0·92			1·14		Hazaribagh.
—7·0	75·[illegible]	70	3·0	0·37	0·54	0·53	1·00	1·14	2·58	0·68	+1·90		1·11		Lohardaga.
—	84·2	55	0	0·02		0·17		0·63		0·28			0·62		Palamau.
—5·6	77·0	76	2·7	1·50	1·50	0·98	3·00	1·53	2·46	1·46	+1·00	3·26	2·22	+1·04	Singhbhum.
					1·59	0·72	3·00	1·22	2·14	0·99	+1·15	3·62	1·08	+1·94	Manbhum.
+0·2	75·7	89	4·4	0·94											Assam.
—0·8	76·1	84	3·0	1·68											
+1·1	77·6	84	5·9	0·43											

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 13th of May 1893.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 7th.	Monday, 8th.	Tuesday, 9th.	Wednesday, 10th.	Thursday, 11th.	Friday, 12th.	Saturday, 13th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April to date.
ORISSA	Puri	Puri	...	...	2·11	0·06	...	...	...	1	2·17	0·63	2·76	0·84	2·83	1·45
		Khurda	...	0·18	2·53	0·03	...	0·63				0·76		1·06		1·72
		Banpur	...	...	1·25	1·50	...	0·70				0·83		1·07		1·59
		False Point	...	...	0·69	...	0·09	0·68	0·10	3	1·56	0·91	4·07	1·19	5·25	3·39
		Gop										?		?		?
		Satpara	...	...	1·75	0·13						?		?		?
		Pipli	0·08	...	1·33	0·02	...	0·72				?		?		?
	Cuttack	Jagatsingpore	...	1·85		0·88						1·25		1·44		2·13
		Banki	...	0·10	1·70	...	0·20					0·31		0·42		0·78
		Cuttack	...	...	0·67	0·51	0·15	1·21	1·45	5	3·99	0·85	5·55	1·20	5·91	2·56
		Kendrapara	...	...	0·94	0·16	...	0·83	0·29	4	2·22	1·41	4·50	1·59	5·32	2·68
		Jajpur	...	0·06	0·62	0·09	...	0·10	0·20	3	1·07	1·25	2·95	1·76	5·24	3·53
		Dharmsala	...	0·96		0·12	0·60	0·66				?		?		?
		Salipore	...	0·17								?		?		?
		Pal Lahara										?		?		?
	Balasore	*Akhyapada*	...	...	0·16	...	0·14	...	0·40	3	0·70	?	1·97	?		3·49
		Chandbali	...	...	0·25	...	0·10	1·15				1·97		2·54		3·78
		Bhadrak	...	...	0·10	...	0·15	...	0·59	3	0·84	1·39	2·59	1·95	3·70	3·67
		Soro	0·30	0·25	0·15	...	...	1·00	...	4	1·70	0·97		1·98		4·37
		Balasore	0·07	1·62	0·23	...	...	0·22	0·05	3	2·19	1·12	5·69	2·02	7·43	2·91
		Jellasore										1·06		1·58		3·56
	Midnapore	Baripodah	0·61	0·22	0·06	0·53	0·74	0·70	...	5	2·86	1·25	3·71	2·25	6·86	3·68
SOUTH-WEST BENGAL.		Contai	0·17	1·00	0·66	...	...	0·09	0·28	4	2·20	1·61	3·56	2·30	6·34	3·96
		Tamluk	...	1·68	0·54	0·15	0·17	...	0·16	5	2·70	1·47	5·08	2·25	5·44	4·37
		Midnapore	...	0·64	0·19	...	...	...	1·08	3	1·91	1·48	3·60	2·38	8·03	4·84
		Ghatal	0·09	0·85	0·11	...	...	...	1·15	3	2·20	1·83	5·85	3·20	7·07	?
		Kukrahaty	0·55	1·05	...	...	0·36	...	0·12	4	2·08	?	6·03	?	4·56	?
		Garhbeta	...	0·62	0·03	0·97	...	...	0·34	3	1·96	?	2·46	?	4·96	?
		Panskura	...	1·68	0·86	...	0·67	...	0·60	4	3·81	?	3·81	?	5·79	?
		Dautoon	0·16	1·50	0·25	...	...	...	...	3	1·91	?	3·75	?	6·10	3·30
	24-Parganas	Saugor Island	0·22	1·62	0·16	0·65	...	...	0·10	4	2·75	1·26	4·94	2·04		
		Diamond Harbour	...	2·10	...	...	0·30	...	0·04	2	2·44	1·42	7·18	2·42	7·60	4·68
		Canning Town	1·84	2·60	...	...	...	...	1·32	3	5·76	?	8·19	?	8·59	?
		Alipore (Observatory.)	1·83	0·51	...	...	0·25	...	0·02	3	2·61	1·53	5·15	2·65	5·32	4·34
		Barrackpore	1·11	0·42	...	...	...	...	...	2	1·53	1·36	1·78	2·64	3·71	4·35
		Dum-Dum	1·04	0·63	...	...	0·91	...	...	3	2·58	1·55	4·32	2·81	4·86	4·76
		Barasat	0·51	0·27	...	...	...	...	...	2	0·78	1·69	1·87	3·09	4·14	5·03
		Basirhat	...	0·99	...	0·93	...	...	...	2	1·92	1·60	4·70	2·84	5·67	4·78
	Howrah	Howrah	0·10	2·32	...	...	0·35	...	...	3	2·77	1·64	4·26	2·72	4·34	4·71
		Mohesreka	0·72	0·98	...	0·21	...	...	...	3	1·91	2·09	5·38	3·59	5·84	4·85
		Ulubaria	0·82	0·87	...	...	...	...	0·10	3	1·79	?	5·14	?	5·56	?
	Hooghly	Serampore	1·29	0·44	...	...	...	...	...	2	1·73	1·65	2·28	2·93	4·20	4·72
		Hooghly	0·33	0·32	...	0·08	...	...	...	2	0·73	1·43	1·69	3·14	3·43	4·84
		Jahanabad	0·58	0·48	0·04	...	0·53	...	0·21	4	1·84	1·13	5·22	2·38	5·89	4·21
	Nadia	Ranaghat	0·50	0·71	...	...	0·91	...	...	3	2·12	1·06	3·51	2·03	4·74	4·98
		Krishnagar	0·43	1·08	...	...	0·01	...	...	2	1·52	1·15	3·69	2·61	6·58	4·93
		Chuadanga	0·60	0·49	...	...	0·15	...	...	3	1·24	1·54	1·77	3·10	7·38	5·84
		Meherpore	0·69	0·40	...	...	0·34	...	1·56	4	2·99	0·92	3·26	2·63	10·69	5·23
		Kushtia	0·09	0·63	...	0·15	...	...	...	3	0·87	1·57	2·61	2·95	9·88	5·91
	Khulna	Satkhira	0·37	1·00	...	...	...	...	...	2	1·37	1·74	4·56	3·13	7·66	6·05
		Bagerhat	0·38	1·69	...	...	0·63	...	...	3	2·70	1·71	4·48	3·51	5·44	6·67
		Khulna	0·21	0·27	...	...	0·49	...	...	3	0·97	1·89	3·00	3·60	5·47	6·64
		Nakipur	0·75	1·12								?		?		?
		Rampal	0·30	1·50	...	...	0·40	...	...	3	2·20	?	3·54	?	5·45	?
	Jessore	Narail	0·20	0·25	...	...	...	...	...	2	1·15	1·79	4·66	3·48	8·17	6·53
		Jessore	0·51	1·18	...	0·29	0·17	...	0·35	5	2·50	1·69	7·02	3·58	9·39	7·32
		Jhenidah	1·05	0·49	...	...	0·45	...	...	3	1·99	1·27	4·31	2·69	11·92	6·12
		Magura	1·05	0·37	...	0·06	0·45	...	0·10	4	2·03	1·88	4·19	3·52	9·53	7·40
		Bangaon	0·55	0·45	...	...	...	...	...	2	1·00	1·53	2·19	2·50	3·97	5·17
	Burdwan	Kalna	0·85	1·19	...	...	0·07	...	0·20	3	2·31	1·38	3·55	2·71	4·03	4·82
		Burdwan	2·43	0·69	0·06	0·02	0·09	...	0·10	3	3·39	1·23	7·44	2·18	8·80	4·33
		Katwa	0·70	0·84	...	...	...	...	0·43	3	1·97	1·10	5·47	2·29	6·96	3·84
		Raniganj	0·94	0·86	0·70	2·09	...	...	0·04	4	4·63	0·57	6·55	1·03	7·91	2·28
		Mankur	0·83	0·63	0·27	0·69	0·11	...	...	5	2·53	?	4·68	?	6·38	?
	Bankura	Bankura	1·50	1·18	2·36	0·65	...	...	...	4	5·69	0·85	7·30	1·47	8·89	2·92
		Vishnupur	...	0·60	0·08	...	0·08	...	0·28	2	1·04	1·34	3·54	2·43	4·01	3·86
		Maliara	1·12	0·50	0·34	1·02	...	...	0·08	4	3·06	0·83	5·45	1·38	6·70	2·21
		Khatra	0·21	0·98	0·13	0·05	...	...	0·30	4	1·67	1·04	1·95	1·40	5·12	2·13
		Indas	0·93	1·08	0·09	...	0·37	...	0·14	4	2·61	?	5·48	?	7·55	?
		Kotalpur	...	1·12	...	0·42	...	...	0·15	3	1·69	?	2·44	?	3·94	?
		Onda	1·15	0·12	0·60	...	0·25	...	...	4	2·12	?	5·82	?	8·54	?
		Gangajalghati	0·93	0·38	0·78	0·74	...	...	0·35	5	3·18	?	5·71	?	7·26	?
		Raipur	0·19	0·95	...	...	...	...	1·55	3	2·69	?	4·32	?	6·64	?
		Sonamukhi	1·07	0·81	1·61	...	0·63	...	0·13	5	4·25	?	6·22	?	8·97	?
	Birbhum	Suri	0·17	0·57	...	...	...	...	0·25	3	0·99	0·81	2·08	1·16	2·98	2·20
		Hetampore	0·67	0·67	0·17	...	...	...	0·35	4	1·86	0·89	2·73	1·34	3·58	2·30
		Rampur Hat	0·53	...	...	...	...	...	1·25	2	1·78	1·09	2·55	1·61	3·95	3·00
		Bolpur	0·85	0·45	...	0·93	...	...	...	3	2·23	?	4·08	?	5·52	?
		Murari	...	1·70	0·92	...	...	...	...	2	2·62	?	4·47	?	6·47	?
	Murshidabad	Kandi	0·20	0·55	...	...	...	...	...	2	0·75	1·15	1·09	1·60	3·99	3·31
		Berhampore	0·41	0·61	...	...	...	...	0·11	3	1·13	1·31	1·41	2·30	5·33	3·86
		Lalbagh	...	1·27	0·36	...	...	0·20	...	3	1·83	1·06	2·45	2·22	6·43	3·25
		Azimganj	...	1·38	0·41	...	...	...	...	2	1·79	1·03	2·34	1·91	8·16	3·15
		Jangipur	...	1·77	0·05	...	...	...	...	1	1·82	1·06	3·59	1·84	7·54	2·93
		Lalgola	1·02	...	1·60	...	...	...	...	2	1·62	1·07	2·52	2·22	3·02	3·37
		Akhriganj	...	1·20	1·46	...	...	...	...	2	2·80	?	3·23	?	8·33	?
		Putkabari	...	1·40	...	...	...	...	...	1	1·40	?	2·30	?	8·75	?
NORTH BENGAL	Pabna	Pabna	0·06	0·64	...	0·12	0·09	...	...	2	0·91	1·73	3·83	3·10	9·58	6·18
		Sirajganj	0·05	0·63	...	...	...	...	...	1	0·68	1·36	4·29	2·88	4·90	5·41
	Bogra	Sherepore	...	0·50	...	...	...	...	...	1	0·50	1·82	4·12	3·20	8·90	4·54
		Nowkhila	...	1·09	...	...	...	...	...	1	1·09	1·72	6·08	3·08		5·03
		Bogra	...	1·15	...	...	...	...	...	1	1·15	1·63	3·81	3·32	7·70	5·38
		Panchbibi	...	2·25	0·15	...	...	...	...	2	2·40	1·95	6·79	2·78	11·41	4·27
	Rajshahi	Boalia	0·01	1·10	...	...	...	...	...	1	1·11	1·20	2·55	2·17	7·45	3·47
		Nator	0·03	1·15	...	0·09	...	...	...	1	1·27	1·02	4·77	3·26	7·39	5·09
		Naugaon	...	1·15	0·05	...	...	...	...	1	1·20	1·23	4·14	1·86	7·96	2·15
		Lalpore	...	1·30	1·10	...	...	...	0·57	3	2·97	?		?		?
		Manda	0·83	1·92	...	...	...	...	...	2	2·75	?		?		?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 13th of May 1893—contd.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 7th May.	Monday, 8th.	Tuesday, 9th.	Wednesday, 10th.	Thursday, 11th.	Friday, 12th.	Saturday, 13th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April.
NORTH BENGAL—concld.	Malda ...	Malda ...	0·72	0·48	...	...	...	...	...	2	1·20	0·84	2·86	1·40	6·40	2·38
		Chanchal ...	0·05	0·82	...	...	...	...	0·02	1	0·89	1·09	1 16	1·60	2·82	2·59
		Gajol ..	0·10	0·35	...	...	...	...	0·09	2	0·54	?	1·96	?	5·87	?
		Nibganj	0·78	3·55	0·10	...	...	...	...	3	4·43	?	7·10	?	8 41	?
	Dinajpur ...	Mohadebpore	...	2·20	4·30	...	...	...	...	2	6·50	1·28	8·75	2·19	11·35	3·13
		Churaman ...	...	0·02	...	0·06	0·55	...	0·03	1	0·66	0·88	0·88	1·57	2·61	2·04
		Raiganj ...	...	0·25	...	...	...	...	0·40	2	0·65	1·02	2·01	2·28	3·17	3 35
		Dinajpur ...	0·82	0·03	...	...	...	...	...	1	0·85	1·10	2·37	2·27	7 59	3·90
		Balurghat ...	...	1·05	...	...	...	...	...	1	1·05	0·67	4·98	0·99	7·34	1·82
		Thakurgaon ...	...	...	...	...	...	...	...	Nil	Nil	?	3·56	?	12·55	?
	Rangpur ...	Bhawanigunge (*Gyabanda*)	...	0·50	...	...	...	...	...	1	0·50	1·88	1·10	3·22	5·98	5·84
		Rangpur ...	...	0·06	...	...	...	...	0·46	1	0·52	1·44	1·10	3 15	8·51	6·08
		Kurigaon ...	...	0·01	...	...	...	...	...	Nil	0·01	2·52	1·72	4·89	14·43	9·39
		Gobindgunge	...	1·71	0·05	0·03	...	...	...	1	1·79	?	5·57	?	?	?
		Bagdogra (*Nilphamari*)	...	...	...	...	...	...	...	Nil	Nil	1·59	0·18	3·44	6·85	6·48
		Ulipore ...	...	...	...	...	...	...	...	Nil	Nil	?	1·21	?	8·46	?
		Sundergunge ..	...	1·71	0·05							?		?		?
	Jalpaiguri ...	Jalpaiguri ...	0·92	...	0·02	0·01	0·01	...	...	1	0·96	2·13	1·60	3·93	7·47	7·83
		Alipore Dooar	0·18	...	...	...	...	...	...	1	0·18	?	1·56	?	9·50	?
		Fallacotta ...	0·85	...	...	...	...	...	0·17	2	1·02	?	1·77	?	12·33	?
		Debiganj ...	...	...	...	...	...	...	...	Nil	Nil	?	1·34	?	4·14	?
		Bhagatpore (Nagrakatta)	1·75	...	...	...	1·80	...	0·40	3	3·95	?	4·45	?	16·63	?
	Kuch Bihar .	Dinhatta ...	...	...	...	...	...	...	...	Nil	Nil	1·85	2 48	4·21	13·08	7·80
		Kuch Bihar ...	0·47	...	...	...	...	...	...	1	0·47	2·73	2·39	5·23	14 81	10·47
		Mickliganj ...	...	...	...	...	...	...	0·56	1	0·56	1·75	2·34	3·34	7·34	7·32
		Mathabhanga	0·66	...	...	...	...	...	0·11	2	0·77	1·91	2·54	3 57	10·00	7·53
	Darjeeling ...	Buxa ...	1·59	0·11	...	...	0·69	...	0·33	4	2·72	3 11	4·23	5·99	18·98	14·51
		Siliguri ...	0·41	...	...	...	1·88	0·07	0·47	3	2·83	1·26	3·13	1·92	12·77	5·11
		Darjeeling ...	0·83	0·01	0·07	...	...	0·03	0·20	2	1·14	2 03	1·75	3·73	10·12	8·14
		Kalimpong ...	0·55	0·09	0·04	...	0·10	...	...	2	0·78	1·34	1·03	2·44	4·66	5·62
		Kurseong ...	1·08	0·04	...	...	...	0·13	0·34	3	1·59	?	3·42	?	12·24	?
		Pedong ...	0·50	0·03	0·10	...	0·24	...	0·08	3	0·95	?	1·58	?	?	?
EAST BENGAL	Chittagong ..	Cox's Bazar ...	2·13	1·32	0·04	...	...	...	...	2	3·49	2·44	5·32	4·32	6·00	6·72
		Chittagong ...	1·38	0·13	...	...	...	...	...	2	1·51	1·94	5·26	4·43	9·48	7·47
		Kutubdia ...	4·63	0·59								?		?		?
		Satkanya ...	2·25	0·80	...	...	...	0·38				?		?		?
		Kodala ...										?		?		?
		Fenoa ...	2·70	0·15								?		?		?
		Mirsarai ...	1 63	0·31	...	...	...	...	...	2	1·94	?		?		?
		Chandpur ...	0·90									?		?		?
	Chittagong Hill Tracts.	Rangamati ...	4·60	0·52	...	...	...	0·94	...	3	6·06	2 76	8·98	5 26	14·19	8 61
		Bundarban ...	2·50	0·22	...	...	0·40	...	...	3	3·12	?	6·82	?	10·90	?
	Backergunge	Patuakhali ...	0·68	0·62	...	0·17	0·34	...	...	4	1·80	1·53	3·58	3·15	6·28	6·06
		Pirojpur ...	0·42	0·95	...	0·39	0·20	...	...	4	1·96	1·97	4·73	3·50	6·96	6·19
		Barisal ...	0·45	0·82	...	...	1·45	...	...	3	2·72	2·17	8·23	3·41	13·35	3 77
		Gournaddi ...	0·35	1·86	...	...	0·26	...	...	3	2·47	?	7·34	?	16·10	?
		Bhola ...	0·42	0·38	...	0·05	0·12	...	...	3	0·97	1 83	7·09	3·52	16 44	7·03
		Daulatkhan ...	0·65	0·30	...	...	0·14	...	...	3	1·09	?	8·75	?	22·14	?
		Bauphal ...	0 76	0·58	...	...	0·89	0 12	...	4	2·35	?	5 32	?	7·40	?
	Noakhali ...	Noakhali ...	0·50	0·37	...	...	0·02	...	...	2	0·[illegible]	2·69	4·53	4·85	26·92	8·85
		Fenny ...	1·50	0·52	...	...	...	...	...	2	2·02	3·20	5·25	5·82	12·42	10·65
		Harishpore ...	0·40	0·66								?		?		?
		Ramganj ...	0·68	1·48	...	...	0·45	...	...	3	2·61	?	5·01	?	12·24	?
	Faridpur ...	Madaripur ...	0·41	1·32	...	...	0·55	...	...	3	2·28	2·68		4·73		8·25
		Faridpur ...	0·31	0·30	...	...	0·12	...	...	3	0·73	2·29	3·94	3·70	10·98	7 33
		Goalundo ...	0·40	...	...	...	...	...	...	1	0·40	2·15	4·47	3·72	11·35	7·50
	Dacca	Munshiganj ...	0·73	0·52	...	...	0·18	...	...	3	1·43	2·43	6·86	4·48	11·79	9·25
		Dacca ...	0·04	1·00	...	...	...	...	...	1	1·04	2·67	4 63	4 40	10·44	8 84
		Narayanganj...	0·48	0·32	...	...	0·04	...	...	2	0·84	2·08	5 19	4·32	10·89	8·28
		Manikganj ...	0·04	0·19	...	...	0·24	...	...	2	0·47	2 20	5·86	4·53	9·22	8·32
		Joydebpore ...	0·02	0 32	...	...	0·06	...	...	1	0·40	?	2·12	?	7·21	?
	Hill Tippera	Agartola ...	...	1·85	...	0·15	...	...	...	2	2·00	3·11		5·74		10·73
	Tippera ...	Comilla ...	0·23	1·39	...	0·15	0·18	...	...	4	1·95	3·03	11·33	5 45	14·84	10·45
		Chandpore ...	0·88	1·67	...	...	0·22	...	...	3	2·77	3 23	6·61	5·44	15·24	9 47
		Brahmanbaria	...	0·45	...	...	0·35	...	...	2	0·80	3·08	4·97	5 32	10·32	10 42
		Ramchandrapore ...	0·06	0 41	...	...	...	...	...	1	0·47	?	3·02	?	5·32	?
		Nasirnagar ...	...	0·45	...	...	...	...	...	1	0·45	?	8·55	?		?
		Daudkandi ...	0·30	0·65	...	...	0·10	...	...	3	1·05	?	3·25	?	7·85	?
		Kasba ...	0·30	0·80	...	...	...	...	...	2	1·10	?	8·18	?	11·52	?
		Laksham ...	1·50	1·85	...	...	...	...	...	2	3·35	?	7·28	?	11·43	?
	Mymensingh..	Kishorganj ...	...	1·38	...	1·06	1·39	...	...	3	3·83	2·63	7·01	4·71	12·03	9·60
		Atia (*Tangail*)	...	0·51	...	...	0·33	...	...	2	0·84	1 60	4·91	3·35	8·13	6·48
		Mymensingh ...	0·15	0·22	...	1·22	...	...	...	3	1·59	2·73	5·10	4·57	12 03	8·34
		Jamalpur ...	...	0·78	...	0·39	0·17	...	...	3	1·34	2·73	3·84	4·54	8·27	7·48
		Netrakona ...	...	0·85	...	...	...	...	...	1	0·85	1·98	3·73	4·77	11·90	8·72
		Subornakhally	0·30	0·50	...	...	...	...	...	2	0·80	?		?		?
		Durgapore ...	...	...	...	...	...	...	...	Nil	Nil	?	3·20	?	3·77	?
		Sherepore Town	...	1·17	...	...	0·44	...	...	2	1·61	?	2·80	?	5·55	?
		Dewanganj ...	...	2·80	...	...	...	...	...			?	6·71	?	13 50	?
NORTH BIHAR	Purnea ...	Kishanganj ...	...	...	...	...	...	...	...	Nil	Nil	1·13	1·35	2·08	3·57	3·94
		Araria ...	...	...	...	...	...	0·03	0·56	1	0·59	1·47	1·42	2·23	5·14	3·76
		Purnea ...	0·05	...	...	0·03	...	...	0·21	1	0·29	0·82	1·29	1·55	6·34	2·84
		Gondwara (Korah) ...	0·42	...	...	...	...	0·20	...	2	0·62	?		?		?
		Barsoe ...	...	...	...	...	...	...	...	Nil	Nil	?	2·60	?	5·11	?
		Forbesganj ...	...	...	0·63	...	...	...	0·20	2	0·83	?	1·63	?	5·54	?
		Kaliaganj ...	...	...	...	...	...	...	0·20	1	0·20	?	1·70	?	5·57	?
	Bhagalpur ..	Madhipura ...	0·25	...	...	...	...	...	0·06	1	0·31	1·00	0·78	1 71	1·03	2 67
		Bongaon (Sufabad). ...	...	...	...	...	...	0·11	...	1	0·11	?	0·33	?		?
		Supaul ...	0·25	...	...	...	...	0·04	0·10	2	0·39	0·78		1·54		2·35
		Protabganj ...	...	...	...	...	...	0·27	1·49	2	1·76	?	1·76	?	4·10	?
		Bhagalpur ...	0·42	0·22	...	...	...	...	...	2	0·64	0·55	0 64	0·89	2·98	1·61
		Banka ...	1·69	...	...	...	...	...	...	1	1·69	0 57	2·99	0·73	5·26	0·28
		Colgong ...	...	0·23	...	...	...	...	1·01	2	1·24	?	2·56	?	4·91	?
	Darbhanga ..	Tajpur ...	0·57	...	...	...	...	...	...	1	0·57	0·86	3·22	1·13	3 86	1·46
		Darbhanga ...	0·32	...	...	0·61	...	...	...	2	0·93	0·92	4·01	1·30	5·20	1·86
		Madhubani ...	0·20	...	...	...	...	...	...	1	0·20	0·71	1·88	1·22	2·50	2·11
		Bahera ...	...	...	...	...	...	...	...	Nil	Nil	?	2·58	?		?
		Roshera ...	0·45	...	...	...	...	...	0·12	2	0·57	?	1·50	?	1·70	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 13th of May 1893—concld.

Meteorological Division.	District.	Station.	Rainfall.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 1st April 1893.	Average rainfall from 1st April.
			Sunday, 7th April.	Monday, 8th.	Tuesday, 9th.	Wednesday, 10th.	Thursday, 11th.	Friday, 12th.	Saturday, 13th.							
North Bihar—concluded.	Muzaffarpur...	Sitamarhi ...	0·34	...	...	0·15	...	...	0·15	3	0·64	0·81	0·27	1·15	2·44	2·18
		Muzaffarpur	0·53	...	...	0·12	...	...	...	2	0·65	0·90	1·61	1·21	2·69	1·75
		Hajipur ...	...	0·02	...	...	...	...	...	Nil	0·02	0·59	1·70	0·75	3·58	0·94
		Paru ...	0·12	...	...	...	...	...	...	1	0·12	?	0·31	?	3·47	?
		Mahwa (Chitwarra.)										?		?		?
		Siuhar ...	...	...	...	...	...	...		Nil	Nil	?	0·54	?	1·34	?
		Pupri ...							...	Nil	Nil	?		?		?
	Champaran ..	Motihari ...	0·36	...	...	...	...	...	...	1	0·36	0·76	1·01	1·08	3·42	1·79
		Bettiah	0·27	...	0·30	...	...	...	...	2	0·57	0·63	0·98	1·38	1·76	2·05
		Bagaha ...	0·47	...	2·83	0·43	...	...	...	3	3·73	?	5·20	?	7·60	?
		Burhurwa .	0·22	...	0·15	...	...	...	...	2	0·37	?	1·56	?	2·12	?
	Saran ..	Gopalganj ..	...	...	0·21	...	...	...	...	1	0·21	0·46	1·02	1·56	1·14	1·54
		Siwan ...	...	0·11	...	...	...	...	...	1	0·11	0·43	1·17	0·67	1·55	0·91
		Chapra ...	...	0·03	...	...	...	...	...	Nil	0·03	0·46	1·11	0·61	1·17	0·85
South Bihar	Shahabad ...	Sreepore ...										?		?		?
		Buxar ...	0·82	0·08	...	...	...	...	...	1	0·90	0·28	1·33	0·33	1·39	0·52
		Dehri ...	0·10	0·74	...	...	...	...	...	2	0·84	0·19	1·37	0·19	0·37	0·30
		Bhabhua ...	0·87	...	...	...	...	...	...	1	0·87	0·38	0·97	0·52	0·97	0·65
		Sasaram ...	1·40	...	...	...	...	...	...	1	1·40	0·26	1·40	0·37	1·40	0·55
		Arrah ...	0·34	...	...	...	...	...	...	1	0·34	0·40	2·00	0·63	2·05	0·82
		Mohanea ...	0·06	...	...	...	...	...	...	Nil	0·06	?	0·19	?	0·19	?
		Khiri ...										?		?		?
		Ageaon ...										?		?	1·60	?
		Ramagar ...	...	0·50	...	...	...	...	...	1	0·50	?	1·50	?		?
		Koath ...	..	0·33	...	...	...	...	...	1	0·35	?	0·89	?	0·92	?
		Sikroul ...	1·04	...	...	...	...	...	...	1	1·04	?	1·37	?	1·37	?
		Bassowan ...	0·84	...	...	...	...	...	...	1	0·84	?	0·89	?		?
		Monaharpur	0·63	...	...	...	...	...	...	1	0·63	?	1·04	?	1·04	?
	Gaya ...	Aurangabad ..	0·06	0·67	0·05	...	...	...	...	1	0·78	0·19	0·96	0·28	1·03	0·51
		Gaya ...	...	1·02	...	...	...	...	...	1	1·02	0·15	1·78	0·24	2·48	0·57
		Nawadah ...	...	0·69	...	0·02	...	...	...	1	0·71	0·31	1·50	0·52	1·50	0·84
		Jahanabad ...	...	1·32	0·07	...	...	...	...	1	1·39	0·37	2·18	0·45	2·88	0·61
		Arwal	...	0·76	...	...	...	...	...	1	0·76	?	1·61	?	1·69	?
		Daudnagar ...	...	0·68	...	...	...	...	...	1	0·68	?	1·10	?	1·10	?
		Sherghati .										?		?		?
		Rajauli ..	...	0·41	...	0·32	...	...	...	2	0·73	?	1·13		2·10	?
		Pakri Barawan	...	0·70	...	1·25	...	...	...	2	1·95	?	3·61	?	4·05	?
	Patna ...	Patna .	...	0·07	...	...	...	...	...	Nil	0·07	0·43	1·20	0·57	3·10	0·79
		Dinapore ...	...	0·04	...	...	...	...	...	Nil	0·04	0·39	1·09	0·43	1·64	0·68
		Bihar ...	...	1·14	...	1·40	...	...	...	2	2·54	0·52	3·69	0·75	4·70	0·97
		Barh ..										0·44		0·79		0·91
		Bickram .	...	1·00	...	...	...	...	...	1	1·00	?	2·62	?		?
		Hilsa	...	1·42	...	...	...	...	...	1	1·42	?	2·77	?	4·15	?
	Monghyr ...	Begusarai ...	0·14	...	...	...	...	...	...	1	0·14	0·46	2·31	0·79	3·11	1·13
		Monghyr ...	0·34	...	...	...	...	...	...	1	0·34	0·41	2·04	0·79	3·35	1·18
		Jamui ..	...	0·61	...	0·91	...	...	...	2	1·52	0·46	2·41	0·75	3·52	1·20
		Gogri ...	0·95									?		?		?
		Shaikpura ...	...	0·45	...	2·22	...	...	...	2	2·67	?	4·93	?	5·25	?
		Chahai Bamda	...	0·41	...	0·55	...	...	...	2	0·96	?	2·54	?	2·84	?
												?		?		?
	Sonthal Parganas.	Chupreon ...	0·57	0·15	...	...	...	...	3·59	3	4·31	1·19	5·98	2·01	9·78	2·98
		Rajmahal ...	1·01	1·32	0·02	...	...	...	0·56	3	2·91	0·78	4·21	1·10	5·80	1·60
		Godda .	..	1·40	0·23	0·04	...	...	...	2	1·67	0·78	5·15	1·23	8·39	1·67
		Pakour ...	0·05	0·57	0·02	0·03	...	0·66	1·02	3	2·35	0·64	4·10	1·29	5·26	2·23
		Naya Dumka	...	0·30	...	0·10	...	...	0·50	3	0·90	0·76	1·85	1·10	4·82	1·98
		Deoghur	0·22	0·33	0·15	0·53	...	...	...	4	1·23	0·93	3·20	1·32	4·20	1·88
		Jamtara ...	0·18	0·94	...	...	...	...	1·29	3	2·41	?	5·50	?	7·84	?
		Belbodda ...	0·3	0·7								?		?		?
		Nanihat ...														
Chota Nagpur.	Hazaribagh ...	Pachamba ...	0·75	0·30	...	2·00	...	0·12	0·25	5	3·42	0·40	3·58	0·82	4·74	1·12
		(Giridih).	1·12	...	0·02	0·46	...	...	...	2	1·60	0·47	2·37	0·68	2·79	1·04
		Hazaribagh .	...	...	...	...	...	0·09	...	Nil	0·09	0·78	1·32	1·12	1·54	1·34
		Semtaguran	...	...	...	1·16	...	...	...	1	1·16	0·52	1·98	0·71	2·08	0·78
		Mahudi Hills										0·92		1·24		1·24
		Jhumra Hill	...	...	...	0·06	...	...	...	Nil	0·03	?	2·12	?	2·34	?
		Barhi ...	...	...	...	...	0·05	...	1·00	1	1·05	?	1·23	?	1·28	?
		Chatra ...	0·37	0·18	...	0·20	...	...	0·30	4	1·05	?	1·89	?	2·96	?
		Karagdeha ..	...	...	...	...	...	...	...	Nil	Nil	?	1·29	?	1·67	?
		Ramgar ...						...	...	1	0·64	0·35	1·31	0·38	1·69	0·62
	Lohardaga ...	Lohardaga ...	...	...	0·64	...	...									
		Ranchi ...	0·32	...	0·07	...	...	0·05	...	1	0·44	0·70	3·84	0·98	3·84	1·56
		Silli ...	...	0·80				0·70				?		?		?
	Palamau ...	Palamau (Daltanganj).	...	...	...	...						0·17		0·28		0·62
		Balumath ...										?		?		?
		Husainabad	...	...	...	...	...	...	...	Nil	Nil	?		?		?
		Garhwa .	...	...	...	...	...	...	...	Nil	Nil	?	0·05	?		?
	Singhbhum ...	Chaibassa ...	0·24	0·07	0·84	0·03	...	0·32	...	3	1·50	0·98	2·46	1·46	3·26	2·22
		Chakardharpur.	0·16	0·24	0·3	...	...	0·59	...			?		?		?
		Ghatsila ...	...	...	...	...	...	0·56	0·40	2	0·96	?	2·66	?	4·06	?
		Baharagura	...	0·20	...	...	...	...	0·35	2	0·55	?	2·67	?		?
	Manbhum ...	Gailkeira ...	0·25	0·52	0·21	...	0·48	...	...	4	1·46	?	2·87	?	3·04	?
		Kalikapur ...	...	...	0·34	...	...	...	0·49	2	0·83	?	1·69	?	2·15	?
		Purulia ...	...	0·12	0·75	...	...	...	0·08	2	0·95	0·96	1·73	1·31	4·18	2·15
		Gobindpur ...	0·54	0·21	0·23	1·25	...	...	...	4	2·23	0·48	2·55	0·67	3·05	1·31
		Raghunathpore.	0·32	0·23	0·45	2·05	...	...	...	4	3·05	?	3·50	?	4·40	?
		Barahabhum	0·20	...	0·60	...	...	...	...	2	0·80	?	1·10	?	3·35	?
		Jhalda ...	...	0·33	...	...	0·19	0·27	...	3	0·79	?	2·26	?	3·05	?
		Chas ...	0·53	0·20	...	0·36	...	...	0·10	4	1·19	?	1·86	?	4·02	?
		Pandra ...	0·90	0·50	0·20	0·35	...	...	...	4	1·95	?	3·17	?	5·06	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the* 16*th May* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 13TH MAY 1893.

AFTER a very short period of more settled weather at the end of the previous week, the approach of a depression from the west had begun to cause easterly winds in all districts and numerous thunder showers in the western half of the province.

This unsettled weather was most pronounced on the first day of the week under review, that is, on Sunday the 7th, when following a very rapid fall of pressure in the western districts, thunderstorms became more than usually numerous and severe. The severity of these storms, apart from the strength of the wind, of which there is no record for the short interval the storm lasts, was shown partly by the heavy rain, but more by the occurrence of hail. The fall of hail during a thunderstorm is a not unusual feature in the cooler month of March, but it is very unusual in May when, owing to the high temperature of the air, the hail is melted probably long before reaching the ground. The rapid fall of pressure on the 7th was followed by an even more rapid rise on the 8th. The low pressure area over Bengal completely disappeared, but as the rise commenced in the north and spread southwards, the area of lowest pressure retreated southwards. In consequence of this southward displacement of the area of lowest pressure, the easterly circulation of winds continued, and though pressure in Bengal was soon very much above the normal, thunderstorms with rain continued to occur not unfrequently over almost the whole of Bengal. A further consequence of the rapid rise of pressure was the great uniformity in the distribution not only over Bengal, but also in the Bay. Winds became very light, the skies were clearer and temperature began to rise steadily. The large defect in temperature which followed the heavy rainfall in the western districts underwent very little change till the middle of the week. During the last three days it diminished considerably, and by the end of the week was under 2° at nearly all stations except in Chota Nagpur and Orissa, while in the eastern districts and Assam there was excess of about 2.°

Pressure—Fell rapidly on the 7th, rose rapidly on the 8th, and more slowly on the 9th, when there was excess varying from ·05 inch in the east of the province to nearly ·2 inch in the west of Bihar. A fall then set in and continued till the 12th. The distribution resulting from these changes was practically normal. At the end of the week it was again rising. Mean pressure for the week is consequently considerably above the normal.

Temperature—Was unusually low at the beginning of the week, especially in the western districts. On the 8th defect was over 10° in South Bihar and part of South-West Bengal, and was between 5° and 10° in almost all the other districts. These low temperatures continued for some days, but during the latter half of the week the difference from the normal was steadily diminishing in the west of the province, while in East Bengal, North Bengal and Assam, readings had become one or two degrees in excess. The means for the large divisions are all much below the normal except for Assam. Defect varies from 2°·6 in East Bengal to 6° in Chota Nagpur and South Bihar.

Rainfall.—In the early part of the week rainfall was general and heavy in the western districts, and scattered showers fell in all districts practically throughout the week. The average falls in Orissa, South-West Bengal, Chota Nagpur, and South Bihar are all much above the normal, while in North Bihar, North Bengal and East Bengal, there is a considerable defect. Weather in these last three districts was not so disturbed, while the depression existed over the west of the province on the first day of the week, and owing to the rapid rise of pressure in the north, the eastward motion of the low pressure area was checked, and the rainfall became more scattered.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 13th of May 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week. Of highest of each day.	Averages for week. Of lowest of each day.	Averages for week. Of mean for each day.	Average mean of week above or below normal mean of week.	Of week. Average.	Of week. Normal average.	Of week. Variation.	Rainy days. Average number in week.	Rainy days. Normal average number in week.	Rainy days. Variation.	Since 1st of month. Average.	Since 1st of month. Normal average.	Since 1st April 1893. Average.	Since 1st April 1893. Normal average.
Orissa	99·1	66·8	89·1	75·6	82·3	−3·2	2·15	1·07	+1·08	3·00	1·48	+1·52	3·63	1·53	4·65	2·76
South-West Bengal ...	98·3?	61·7	88·1	71·7	79·9	−5·4	2·01	1·35	+0·66	2·93	1·68	+1·25	3·94	2·50	6·22	4·43
North Bengal	92·6	63·7	85·7	70·7	78·2	−3·0	1·03	1·56	−0·53	1·12	1·92	−0·80	3·15	2·92	8·12	5·20
East Bengal	90·3	64·4	86·0	72·0	79·0	−2·6	1·73	2·45	−0·67	2·54	2·57	−0·03	5·66	4·48	11·67	8·32
North Bihar	98·3	69·6	88·1	71·1	79·6	−4·3	0·46	0·77	−0·31	1·33	1·08	+0·25	1·72	1·27	3·29	2·00
South Bihar	99·5	62·0	90·3	71·9	81·1	−6·0	1·25	0·48	+0·77	1·14	0·89	+0·25	2·45	0·73	3·47	1·07
Chota Nagpur	99·8	61·4	89·3	68·8	79·1	−6·2	1·33	0·61	+0·72	2·11	1·07	+1·04	2·03	0·83	2·09	1·30
Assam	92·0	66·4	85·8	70·0	77·9	+0·2										

METEOROLOGICAL OFFICE, BENGAL,
The 16th May 1893.

C. LITTLE,
Offg. Meteorological Reporter to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 7th to 13th May 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Temperature. Maximum.	Temperature. Range.	Temperature. Minimum.	Hygrometry. Mean wet bulb.	Hygrometry. Vapour tension.	Hygrometry. Dew point.	Hygrometry. Humidity.	Wind. Prevailing direction.	Wind. Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
May	7th	138·7	4·0	29·693	76·5	85·6	19·2	66·4	72·9	0·766	71·2	84	Variable ...	130	2·12	Chiefly cloudy, o, g, p, t, <, K, ▲.
,,	8th	142·7	6·1	·806	77·4	84·6	16·8	67·8	72·9	·751	70·8	81	SSW and variable	92	0·22	Chiefly cloudy, o, p.
,,	9th	150·7	10·9	·834	81·7	89·4	16·2	73·2	76·1	·826	73·5	77	SSW and SW ...	39	Nil	Partially cloudy.
,,	10th	141·5	7·3	·799	79·9	86·5	15·3	71·2	75·0	·808	72·8	79	ESE and calm ...	36	0·25	Partially cloudy, o, g, t, p.
,,	11th	147·0	8·5	·720	81·4	89·0	16·6	72·4	76·7	·860	74·7	81	Calm and variable	68	Nil	Partially cloudy, ⌓.
,,	12th	150·5	11·5	·704	83·4	91·6	15·1	76·5	77·7	·876	75·2	78	Calm and variable	44	Nil	Chiefly cloudy, o g, lr.
,,	13th	145·5	11·9	·754	82·6	90·6	16·9	73·7	75·5	·789	72·1	71	SSW and variable	55	0·02	Chiefly clear, d.

	Inches.
The mean pressure of the seven days	29·759
The average pressure of the corresponding period for 24 years, Surveyor-General's Office	29·676
	Hours.
The total number of hours of bright sunshine	60·2
The maximum possible number of hours of sunshine	91·6
	°
The mean temperature of the seven days	80·4
The average temperature of the corresponding period for 24 years, Surveyor-General's Office	85·6
The extreme variation of temperature	25·2
The maximum temperature	91·6
	Miles.
The highest velocity of the wind in one hour	15
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	79
The average relative humidity of the corresponding period for 24 years, Surveyor-General's Office	73
	Inches.
The total fall of rain from 7th to 13th May 1893	2·61
The average fall of the corresponding period for 24 years, Surveyor-General's Office	1·11
The total fall from 1st January to 13th May 1893	12·17
The average fall of the corresponding period for 24 years, Surveyor-General's Office	6·56

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; p, passing temporary showers; t, thunder; l, lightning; K, thunderstorm; ▲, hail; lr, lightning reflection; ⌓, dew; d, drizzling rain.

J. H. Gilliland,
For Meteorological Reporter to the Govt. of India.

Meteorological Office, Govt. of India;
Calcutta, the 15th May 1893.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 7th to 13th May 1893.

Month.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature. Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Hygrometry. Vavour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	Rainfall, past 24 hours.
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
May ...	7th ...	29·709	76·1	87·0	21·9	65·1	80·9	73·8	·739	70·2	71	1·95
,, ...	8th ...	·877	78·0	88·0	20·1	67·9	81·6	74·5	·760	71·0	69	0·60
,, ...	9th ...	·894	82·4	92·0	19·2	72·8	86·8	77·5	·820	73·3	64	......
,, ...	10th ...	·878	79·7	88·5	17·7	70·8	73·6	71·6	·748	70·6	90	0·32
,, ...	11th ...	·795	81·2	90·0	17·7	72·3	85·6	79·5	·778	71·7	74	......
,, ...	12th ..	·772	85·1	93·5	16·9	76·6	88·1	78·0	·828	73·6	62	......
,, ...	13th ...	·830	82·8	92·0	18·4	73·6	87·1	79·5	·756	70·8	71	......

	Inches.
The mean 10 A.M. pressure of the seven days	29·822
	°
The mean temperature of the seven days	80·8
The extreme variation of temperature	28·4
The maximum temperature	93·5
	%
The mean 10 A.M. relative humidity of the seven days	72·0
	Inches.
The total fall of rain from 7th to 13th May 1893	2·87

The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 15th May 1893.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 13th May 1893, as compared with the corresponding week of the previous year.

Nature of Cargo.		Week ending Saturday, the 13th May 1893.			Week ending Saturday, the 14th May 1892.	
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs
Rice and paddy	214	43,925	628	171	60,895	927
Jute	10	3,925	33	3	1,400	23
Firewood	92	72,775	993	76	42,915	615
Other articles	595	1,58,300	2,162	719	1,46,450	2,021
Total ...	911	2,78,925	3,8 6	969	2,51,660	3,616

BENGAL CENTRAL RAILWAY.

Abstract of principal commodities carried over the Bengal Central Railway during the month of February 1893, as compared with the same month of the previous year.

Staples.	1893.		1892.		Total.		Increase.	Decrease.
	Up.	Down.	Up.	Down.	1893.	1892.		
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal	2,908	......	2,273	......	3,526*	2,460*	1,066	......
Cotton twist and yarn—								
1.—European								
2.—Indian								
Cotton piece-goods—								
1.—European—								
a.—In bales and bundles	341	1	339	......	342	339	3	......
b.—In boxes								
2.—Indian—								
a.—In bales and bundles								
b.—In boxes								
Grains—								
2.—Rice	10	537	11	1,268	547	1,279	. .	732
5.—Others	79	517	59	436	596	495	101	......
Hides and skins—								
1.—Hides of cattle—								
a.—Dressed								
b.—Undressed	......	28	......	24	28	24	4	......
2.—Sk..ns of sheep, &c.—								
a.—Dressed								
b.—Undressed								
Jute—								
1.—Raw—								
b.—Unscrewed	......	170	3	29	170	32	138	... ..
2.—Gunny bags and cloth	37	7	15	2	44	17	27	......
Metals—								
1.—Copper, unwrought								
2.—Bras-, unwrought								
3.—Brass and copper, wrought	102	20	83	6	122	89	33	......
4.—Iron								
5.—Tin								
6.—Others								
Oils—								
2.—Kerosine	159	......	94	......	159	94	65	.....
3.—Others	132	......	92	... ..	132	92	40	.....
Oil-seeds—								
1.—Linseed								
2.—Rape and mustard								
3.—Til or gingelly								
4.—Niger	75	9	48	152	84	200	......	116
5.—Castor								
6.—Poppy								
7.—Others								
Provisions—								
2.—Betel-nuts	......	1,590	......	1,581	1,590	1,581	9	......
3.—Others	242	141	164	159	383	323	60	......
Railway plant and rolling-stock	......	......	......	......	143†	125†	18	......
Salt	194	......	196	......	194	196	......	2
Sugar—								
1.—Drained	67	1,445	39	1,313	1,512	1,352	160	......
2.—Undrained								
Tobacco	46	14	13	27	60	40	20	......
All other articles of merchandise—								
1.—Unmanufactured	465	272	433	418	737	881	......	144
2.—Manufactured								
Total ...	4,857	4,751	3,862	5,445	10,369	9,619	1,744	994

* Includes 618 tons and 187 tons of coal during 1893 and 1892, respectively, carried for Revenue, for which no "Up" and "Down" register maintained.

† Railway plant and rolling-stock 143 tons and 125 tons for the years 1893 and 1892, respectively, for which no "Up" and "Down" register maintained.

Comparative Statement of principal commodities carried on the Bengal Central Railway during the month of February 1893.

DECREASES.

	Tons.
Rice	732

Market not brisk enough to attract despatches by rail.

The increases and decreases in all other commodities are due to ordinary fluctuation of traffic and call for no special remarks.

JAMES SHAW,
for Examiner of Accounts.

CALCUTTA, *the 11th May* 1893.

EASTERN BENGAL STATE RAILWAY.

Abstract of principal commodities carried over the Eastern Bengal State Railway during the month of February 1893, *as compared with the same month of the previous year.*

STAPLES.	1893. Up.	1893. Down.	1892. Up.	1892. Down.	Total. 1893.	Total. 1892.	Increase.	Decrease.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Coal	4,634	27,989	8,017	18,084	37,453*	27,280*	10,173	......
Cotton, raw	8	430	127	429	438	556	......	118
Cotton twist and yarn—								
1.—European								
2.—Indian								
Cotton piece-goods—								
1.—European—								
a.—In bales and bundles	2,957	108	3,077	175	3,065	3,252	......	187
b.—In boxes								
2.—Indian—								
a.—In bales and bundles								
b.—In boxes								
Grains—								
2.—Rice	3,268	2,698	8,092	1,653	5,966	9,745	......	3,779
5.—Others	2,010	7,913	2,334	3,509	9,923	5,843	4,080	......
Hides and skins—								
1.—Hides of cattle—								
a.—Dressed								
b.—Undressed								
2.—Skins of sheep, &c.—	4	526	4	512	530	516	14	......
a.—Dressed								
b.—Undressed								
Jute—								
1.—Raw—								
a.—Screwed	......	4,431	......	1,828	4,431	1,828	2,603	......
b.—Unscrewed	48	5,636	1	2,611	5,684	2,612	3,072	......
2.—Gunny bags and cloth	328	878	237	1,403	1,206	1,640	......	434
Metals—								
1.—Copper, unwrought								
2.—Brass, unwrought								
3.—Brass and copper, wrought	1,708	312	2,552	205	2,020	2,757	......	767
4.—Iron								
5.—Tin								
6.—Others								
Oils—								
2.—Kerosine	9,099	16	727	23	9,115	750	8,365	......
3.—Others	265	50	220	36	315	265	50	......
Oil-seeds—								
1.—Linseed								
2.—Rape and mustard								
3.—Til or gingelly								
4.—Niger	130	1,385	87	3,721	1,515	3,808	......	2,293
5.—Castor								
6.—Poppy								
7.—Others								
Provisions—								
2.—Betel-nuts	140	1,580	119	1,553	1,720	1,672	48	......
3.—Others	672	412	677	412	1,084†	1,089†	......	5
Railway plant and rolling-stock	......	......	......	......	7,914	8,957	......	1,043
Salt	2,796	25	2,740	15	2,821	2,755	66	......
Sugar—								
1.—Drained	983	1,374	1,169	1,727	2,357	2,896	......	539
2.—Undrained								
Tea—								
1.—Foreign	1,071	134	......	144	1,205	144	1,061	......
2.—Indian								
Wood—								
1.—Timber	347	169	167	135	516	302	214	......
2.—Firewood	1,065	......	1,052	......	1,065	1,052	13	......
Tobacco	60	980	47	790	1,040	837	203	......
All other articles of merchandise—								
1.—Unmanufactured	4,676	2,071	4,080	2,299	6,747	6,379	368	......
2.—Manufactured								
Hay, straw, and wooloo (C. & S.-E. Sections)...	1,866	......	885	......	1,866	885	981	......
Total ...	38,135	59,116	36,450	41,264	109,996	87,850	31,311	9,165

* Includes 4,831 tons and 1,179 tons of coal during 1893 and 1892, respectively, carried for Revenue, for which no "Up" and "Down" register maintained.

† Railway plant and rolling-stock, 7,914 tons and 8,957 tons for the years 1893 and 1892, respectively, for which no "Up" and "Down" register maintained.

Comparative Statement of principal commodities carried on the Eastern Bengal State Railway during the month of February 1893.

INCREASES.

	Tons.
Coal	10,173
For railway and Flotilla consumption and for brick burning. Part of the increase is due to Brace Bridge Hall consignments.	
Jute, screwed	2,603
Saidpur, Rangpur, Lalmanir Hát, Postgolah, Mymensingh, and Sirajganj show increases under this head. There was comparatively little jute available in 1892.	
Jute, unscrewed	3,072
The increase was principally in despatches from Domar, Arariya, Goalundo, and Rangpur. The crop of 1892 was larger than that of 1891.	
Kerosine oil	8,365
Due to prohibition of carriage by boats within certain limits of the port of Calcutta.	
Hay, straw and wooloo	981
The increase was in bookings from Bansra, Canning, Diamond Harbour, and other stations on the Southern Section.	
Tea	1,061
Increased production.	

DECREASES.

	Tons.
Rice	3,779
The chief decrease was in despatches from Sara, Goalundo, and Nowabganj. The abnormal demand which existed in 1892 accounts for this fluctuation.	
Oil-seeds	2,293
Goalundo shows a very large decrease under this head. The falling off is said to be due to short crop. It is also partly due to the competition of the river steamers.	

CALCUTTA, *the* 12*th May* 1893.

JAMES SHAW,
for Examiner of Accounts.

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 6th May 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	284,922	2,84,954 10 0	35,53,451 30	8,49,354 10 0	20,205 2 0	11,54,604 6 0	74,362¾	137,262	211,624¾
Or per mile of railway	......	176 15 0	......	527 6 2	12 9 7	716 14 9	......	......	......
For previous 17 weeks of half-year	5,031,125	55,85,150 12 0	5,13,93,241 10	1,15,96,527 4 0	3,17,715 13 0	1,74,99,393 13 0	1,329,749¾	1,943,998¼	3,273,748
Total for 18 weeks ...	5,316,047	58,70,105 6 0	5,49,46,693 0	1,24,45,881 14 0	3,38,010 15 0	1,86,53,998 3 0	1,404,112¼	2,081,260¼	3,485,372¼
Comparison.									
Total for corresponding week of previous year	321,400	3,01,945 8 11	33,68,161 10	9,58,976 10 4	21,261 12 4	12,82,183 15 7	72,907	157,916	230,823
Per mile of railway corresponding week of previous year ...	......	187 7 9	......	595 7 3	13 3 3	796 2 3	......	......	......
Total for corresponding 18 weeks of previous year	5,371,044	58,53,274 10 8	5,33,23,054 30	1,28,38,424 13 1	3,47,908 4 7	1,90,39,607 12 4	1,426,524	2,080,443	3,506,967

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 6th May 1893 on 22¼ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	21,920	5,784 6 0	10,227 10	462 13 0	19 0 0	6,266 3 0	868	100	968
Or per mile of railway	......	259 15 6	......	20 12 10	0 13 8	281 10 0	......	......	......
For previous 17 weeks of half-year	*395,512	*1,03,720 7 0	†2,11,486 30	†7,002 11 0	‡204 0 0	1,10,927 2 0	15,338	1,762	17,100
Total for 18 weeks ...	417,432	1,09,504 13 0	2,21,714 0	7,465 8 0	223 0 0	1,17,193 5 0	16,206	1,862	18,068
Comparison.									
Total for corresponding week of previous year ...	21,520½	5,555 15 1	9,389 30	401 7 0	22 2 3	5,979 8 4	877	91	968
Per mile of railway corresponding week of previous year	......	249 11 4	......	18 0 8	0 15 11	268 11 11	......	......	......
Total for corresponding 18 weeks of previous year ...	425,929	1,10,511 10 4	3,86,349 10	11,818 4 9	228 4 9	1,22,588 3 10	16,291	2,020	18,311

* Added number of passengers 1,259 and Rs. 312 }
† Do. Mds. 15 and „ 11 } on account of difference between the approximate and audited figures for the week ended 1st April 1893.
‡ Do. „ 16 }

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 6th May 1893, on 161⅚ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	17,089	14,037 12 0	73,954 30	10,282 3 0	51 0 0	24,370 15 0	6,381	2,831	9,212
Or per mile of railway	......	86 15 7	......	63 11 3	0 5 1	150 15 11	......	......	......
For previous 17 weeks of half-year	*320,653	*2,38,773 2 0	†10,98,292 20	†1,50,409 11 0	‡799 0 0	3,89,981 13 0	93,285½	57,298	150,583½
Total for 18 weeks ...	337,742	2,52,810 14 0	11,72,247 10	1,60,691 14 0	850 0 0	4,14,352 12 0	99,666½	60,129	159,795½
Comparison.									
Total for corresponding week of previous year	17,260	13,853 12 4	32,811 20	6,988 12 0	96 9 9	20,939 2 1	6,710	1,854	8,564
Per mile of railway corresponding week of previous year	...	85 13 4	......	37 11 7	0 9 7	124 2 6	......	......	......
Total for corresponding 18 weeks of previous year	307,0[illegible]	2,41,1[illegible] 10 4	7,84,434 30	1,48,940 7 0	1,360 13 0	3,94,789 15 1	114,204	40,656	154,860

* Added number of passengers 1,081 and Rs. 4,498 }
† Do. Mds. 984 and „ 2,657 } on account of difference between the approximate and audited figures for the week ended 1st April 1893.
‡ Deduct „ 12 }

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for the week ended 6th May 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	225,305	a 92,720 0 0	7,14,369 0	95,170 0 0	12,110 0 0	2,00,000 0 0	27,746	29,189	56,935
Or per mile of railway	290	119 0 0	919 0	122 0 0	†1 0 0	242 0 0	......	......	...
For previous 17 weeks of half-year*	3,063,258	14,83,006 0 0	1,24,74,811 0	16,17,857 0 0	2,68,627 0 0	33,69,490 0 0	484,135	484,242	968,377
Total for 18 weeks ...	3,288,563	15,75,726 0 0	1,31,89,180 0	17,13,027 0 0	2,80,737 0 0	35,69,490 0 0	511,881	513,431	1,025,312
Comparison.									
Total for corresponding week of previous year	198,690	81,624 0 0	5,66,319 0	75,883 0 0	12,931 0 0	1,70,438 0 0	26,911	28,746	55,657
Per mile of railway corresponding period of previous year ...	256	105 0 0	729 0	98 0 0	†1 0 0	204 0 0	......	......	......
Total to corresponding date of previous year	3,066,827	15,05,043 0 0	1,09,70,672 0	14,48,071 0 0	2,66,842 0 0	32,19,956 0 0	496,797	530,694	1,027,491

* Audited up to week ending 11th March 1893.
† Excluding steamer earnings.
a Increase due to Full Dole Jatra which fell in week ending 13th May 1892.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 6th May 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	36,868	10,950 0 0	66,125 0	4,260 0 0	60 0 0	15,270 0 0	3,548	2,142	5,690
Or per mile of railway	295	88 0 0	529 0	34 0 0	......	122 0 0	...	.....	.....
For previous 16 weeks of half-year*	526,108	1,88,536 0 0	11,88,599 0	73,061 0 0	2,397 0 0	2,63,994 0 0	63,252	33,292	96,544
Total for 17 weeks ...	562,976	1,99,486 0 0	12,54,724 0	77,321 0 0	2,457 0 0	2,79,264 0 0	66,800	35,434	102,234
Comparison.									
Total for corresponding week of previous year	38,893	10,761 0 0	64,872 0	4,070 0 0	200 0 0	15,031 0 0	3,548	2,124	5,672
Per mile of railway corresponding week of previous year ...	311	86 0 0	519 0	33 0 0	1 0 0	120 0 0		...	...
Total to corresponding date of previous year	546,743	1,92,955 0 0	11,22,036 0	68,634 0 0	1,880 0 0	2,63,469 0 0	66,714	37,017	103,731

* Audited up to week ending 11th March 1893.

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 6th May 1893, on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	18,114	5,090 0 0	12,570 0	1,350 0 0	80 0 0	6,520 0 0	2,487	737	3,224
Or per mile of railway	211	59 0 0	146 0	16 0 0	1 0 0	76 0 0	.....	...	.....
For previous 17 weeks of half-year*	314,167	97,888 0 0	2,63,853 0	25,984 0 0	2,826 0 0	1,26,698 0 0	42,294	12,761	55,055
Total for 18 weeks ...	332,281	1,02,978 0 0	2,76,383 0	27,334 0 0	2,006 0 0	1,33,218 0 0	44,781	13,498	58,279
Comparison.									
Total for corresponding week of previous year	16,113	5,145 0 0	19,099 0	930 0 0	180 0 0	6,255 0 0	2,487	737	3,224
Per mile of railway corresponding week of previous year ...	187	60 0 0	222 0	11 0 0	2 0 0	73 0 0	......	.....	...
Total to corresponding date of previous year	309,218	1,00,428 0 0	3,12,091 0	19,146 0 0	3,032 0 0	1,22,006 0 0	45,630	13,262	58,892

* Audited up to week ending 11th March 1893.

BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

Approximate return of traffic for the week ending 6th May 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	102,600	41,160	5,64,520	84,290	12,840	1,38,290	13,637	22,270	35,907
Or per mile of railway	135·71	54·44	746·72	111·50	16·98	182·92	.....	...	......
For previous 17 weeks of half-year*	1,687,291	7,15,968	80,17,384	11,64,663	2,04,966	20,85,597	238,868	329,128	567,996
Total for 18 weeks ...	1,789,891	7,57,128	85,81,904	12,48,953	2,17,806	22,23,887	252,505	351,398	603,903
COMPARISON.									
Total for corresponding period of previous year on 755 miles open	104,814	43,697	6,01,922	90,297	13,515	1,47,509	12,191	28,528	40,719
Per mile of corresponding week of previous year	138·83	57·88	797·25	119·60	17·90	195·38	......	.....	.....
Total to corresponding date of previous year	1,732,105	7,66,024	69,48,496	10,49,915	2,15,585	20,31,524	220,261	366,733	586,994

* Includes audited gures up to 18th March 1893.

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CONTENTS.

RESOLUTION ON THE ADMINISTRATION REPORT OF THE JAIL DEPARTMENT FOR THE YEAR 1892.

RESOLUTION.

JAILS.

Calcutta, the 20th May 1893.

READ—

The Report on the Administration of the Jail Department for the year 1892.

Read also—

The Reports for the years 1890 and 1891, and the orders of Government recorded thereon.

DR. LETHBRIDGE held the office of Inspector-General of Jails until the 28th March, the date of his appointment as Superintendent of Thuggee and Dacoity Operations. He was then relieved by Surgeon-Major D. W. D. Comins, who was in charge of the department during the remainder of the year.

Judicial statistics.

2. The number of Central, District, Intermediate and Subsidiary Jails remained unchanged during the year. The following table shows the number of prisoners of all classes confined in the jails and subsidiary jails of the province in the last ten years.

	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
Number of prisoners of all classes in jails and subsidiary jails on the last day of previous year	15,593	14,718	15,354	15,076	14,629	13,210	13,985	15,048	15,211	16,609*
Total number admitted during the year	74,643	80,852	80,853	77,966	75,664	81,136	84,639	80,959	87,925	95,523
Total ...	90,238	95,570	96,207	93,042	90,293	94,346	98,624	96,007	103,136	112,132
Total discharged ...	75,520	80,216	81,131	78,413	77,083	80,361	83,576	80,800	86,546	94,339
Balance at the end of the year	14,718	15,354	15,076	14,629	13,210	13,985	15,048	15,207	16,590	17,793
Daily average of all classes ...	15,026	15,101	15,177	14,806	12,250	13,731	15,026	14,777	15,916	17,180

* The 19 prisoners (15 male convicts and 3 male and 1 female under-trial) who remained at the Deoghur Magistrate's hajat on the 31st December 1891, before it was converted into a subsidiary jail, were not accounted for in the statistics for 1891.

From these figures it appears that the number of admissions during the year, as well as the number of prisoners remaining in custody at its close, was larger than in any other of the past ten years. The daily average population has risen from 15,916 in 1891 to 17,180 in 1892, and this is almost entirely due to the increase in the number of male convicts admitted. On the other hand there was a satisfactory decrease in the daily average of under-trial prisoners present in jails, the number having fallen from 1,339 in 1891 to 1,240 in 1892.

Of the 46 Central, District and Intermediate Jails, and their affiliated Subsidiary Jails (or Lock-ups), 30 show an increase in the total number of direct admissions. This is attributed to the scarcity that prevailed in these districts, and to the rise in the price of grain, which led to the commission of a large number of thefts. It is noticed that the districts which show the greatest increase or decrease of crime are as a general rule those which were most or least affected by these causes. The Lieutenant-Governor has no doubt that this is the true explanation of the increase of crime during the year. There was a general rise in food-prices, and the province narrowly escaped a severe scarcity.

Releases.

3. The following table compares the releases under the various heads with the figures for the six previous years:—

	1886.	1887.	1888.	1889.	1890.	1891.	1892.
Released on expiry of sentence	27,125	21,328	26,452	28,754	28,464	28,873	32,543
,, on appeal	1,845	1,903	1,980	1,942	2,038	2,120	2,156
,, under remission rules	1,673	1,017	1,352	1,575	1,622	1,661	1,598
,, on medical grounds	26	28	33	37	39	105	110
,, on other grounds	27	6,184	88	2	9	8	6

Although there was a slight increase in the number of releases on appeal, His Honour notices with satisfaction that the percentage of such releases to total imprisonments has fallen from 6·19 in 1890 and 6·08 in 1891 to 5·59 in 1892, thus justifying the discretion of the Magistrates whose sentences were appealed against. The number of prisoners released on medical grounds has increased from 105 in 1891 to 140 in 1892. Of these, 26 were released under rule 488A of the Jail Code, which authorises the release of prisoners who are likely to die if detained in jail, but have a probability of recovery if released; while 112 were released under rules 487 and 488 which apply to prisoners who are almost certain to die, and who are released, not in the hope that they will recover, but that they may have the comfort of dying at home.

Classification of convicts.

4. Out of the 38,538 convicts admitted direct into jail during the year, 22,901 or 59·43 per cent. were Hindus, 13,762 or 35·71 per cent. were Muhammadans, and 685 or 1·78 per cent. were Christians. The number of juveniles under 16 years of age admitted to jail was 453 or 1·17 per cent. of the total admissions, as compared with 371 or 1·06 per cent. of the total admissions in 1891. The Reformatory Schools at Alipore and Hazaribagh continue to do excellent work. A propoal to amalgamate the two schools and to locate them at Hazaribagh was under consideration during the year, but was finally abandoned, the Lieutenant-Governor deciding that it would be inadvisable to make any change in the existing arrangements.

The proportion of cultivators to other classes of prisoners admitted into jail fell from 63·44 per cent. in 1891 to 61·94 per cent. in 1892. The number of female convicts admitted direct was 1,484, as compared with 1,431 in 1890 and 1,265 in 1891.

Re-convictions.

5. The number of re-convicted prisoners admitted into jail during the year was 3,888 or 10·08 per cent. of total admissions against 3,226 or 9·26 per cent. in 1891. Of this number 2,840 had one previous conviction, 658 had two previous convictions, and 390 had more than two. The Inspector-General attributes the increase to greater accuracy in recording re-convictions. Further progress was made during the year in improving and extending the anthroprometrical system for the identification of habitual offenders. The system promises to be of the greatest value in the future, but so far it has not been found possible to put it to any practical test, and no re-conviction was proved by its help during the year.

Sentences of convicts.

6. Of the 16,648 convicts confined in jail on the 31st December 1892, 8,226 or 49·41 per cent. had sentences not exceeding one year, as compared with 7,993 or 51·80 per cent. on the last day of 1891. The number of prisoners admitted in 1892 with sentences exceeding one year was 4,327 against 3,963 in 1891. The number of sentences of simple imprisonment rose from 2,472 or 7·10 per cent. of the total number of admissions in 1891 to 2,769 or 7·18 per cent. in 1892. Sentences of judicial whipping increased from 1,539 in 1891 to 2,029 in 1892, while the number of boys whipped rose from 458 to 565. The number of punishments of rigorous imprisonment with solitary confinement imposed during the year was 149, against 30 in 1890 and 56 in 1891. Sir Charles Elliott is glad to see that greater use is being made of this form of punishment, which is useful as a deterrent, and is particularly appropriate for certain classes of offences.

Under-trial prisoners.

7. The number of under-trial prisoners admitted during the year was 33,325 as compared with 30,304 in 1891, and the number remaining in jail at the close of the year was 1,071 compared with 1,089 on the last day of 1891. Of the total number thus admitted, including those remaining on the first day of the year, 17,688 or 51·1 per cent. were finally convicted, as against 15,036 or 49·6 per cent. in 1891. It is satisfactory to notice that, in spite of the large increase in the total number of prisoners admitted into the jails of the province in 1892, the number of under-trial prisoners at the close of the year is less than it has been for the three preceding years. The number of escapes among under-trial prisoners has fallen from 33 in 1891 to 8, and of these 3 remained uncaptured at the end of the year.

Detention of under-trial prisoners.

8. There has been a satisfactory improvement in the detention of under-trial prisoners during the year. In Sessions cases the average period for detention for the whole province was 39·70 days, as compared with 49·93 in 1891 and 45·88 in 1890. In Monghyr, Hazaribagh, Khulna and Faridpur the average detention exceeded two months, while in Birbhum and Noakhali it was below 20 days. In trials before Magistrates, the average period of detention for the whole province was 10·77 days as against 13·38 in 1890 and 11·96 in 1891. These figures afford valuable testimony to the improvement, on which the Lieutenant-Governor has so continually insisted, in trying judicial cases with greater promptitude, and His Honour is

glad to believe that the delays in procedure which constitute so serious a blot on the administration of justice have materially diminished in almost all districts. The longest average detention during the past year occurred in Jessore, 17·13 days; Purnea, 15·96 days; Rangpur, 15·31 days; Noakhali, 14·80 days; and Darbhanga, 14·69 days. The Lieutenant-Governor notices that Khulna has again the best record in the province, and that the average period of detention, which in 1891 was only 2·57 days, has reached the remarkably low figure of 0·93 days.

Civil prisoners.

9. There were 71 civil prisoners in confinement on the last day of 1891, and the total number of admissions during the year fell from 1,089 to 873. Of these, 867 were released and 6 were transferred, leaving 71 in jail at the end of the year, the same number as that with which it began.

State prisoners.

10. Four Lushai State prisoners were received into the Alipore Central Jail in May 1892. In July one of these, a man named Nikoalo, murdered one of his companions in the jail. He was committed to the Sessions for trial, but as he was found to be insane, he was remanded to the jail, where he is still under observation. The two remaining Lushais were retransferred to Silchar in August by order of the Government. Two other Lushai Chiefs were confined in the Hazaribagh Jail during the year. One was in jail throughout the year, and the other was received in August 1892. The health of these prisoners is good, and they appear to be comfortable and well looked after.

Jail buildings.

11. Excluding a sum of Rs. 9,960 expended on the Press buildings in the Presidency Jail, and Rs. 4,560 on the Reformatory School at Alipore, the total expenditure on jail works during the year was Rs. 1,56,543 as against Rs. 2,03,705 in 1891. Among the principal works carried out were the construction of a new jail at Palamau at a cost of Rs 12,274, and of four new subsidiary jails at Alipore (Jalpaiguri) Rs. 14,666, Thakurgaon Rs. 14,772, Fenny and Munshiganj, and the re roofing of the workshed of the Buxar Central Jail.

The advisability of the more extensive employment of convict labour on public works was referred to in his report last year by the Inspector-General, who was then in consultation with the Chief Engineer on the subject. It was expected that the number of prisoners thus employed would show a considerable increase during the year; but the expectation has hardly been realised, and the actual increase was only from 974 in 1891 to 997 in 1892.

Guards.

12. In consequence of the raising of the status of the Tippera Intermediate Jail to that of a District Jail, the total strengh of the warder guard has been increased from 1,607 men of all grades in 1891 to 1,620 in 1892. The practice of utilizing the Jail establishment of warders for the purpose of furnishing escorts to prisoners required by Magistrates to be produced before the Courts has been discontinued during the year, and orders have been issued directing that such escorts should in future be supplied by the Police. The Inspector-General mentions the great difficulty frequently experienced by Central Jails in meeting the demands for warders for District and Intermediate Jails, and he fears that, in consequence, the warders sent out from Central Jails were not always sufficiently trained in their jail duties or in drill. It is satisfactory to know that the warders have as a body worked well and cheerfully throughout the year, and this in spite of the high price of food, which pressed somewhat heavily on their means of subsistence, and of the greater responsibility and extra work thrown on them owing to the increase in the jail population and to the number of cases of sickness among the jail staff. Dr. Comins speaks highly of the smartness and efficiency with which many of the warder guards whom he inspected performed their physical exercises and drill movements. At his recent inspection of the Chittagong Jail, the Lieutenant-Governor tested the shooting of the warders at the rifle range, and the results showed that they had had little or no practice in this particular form of drill. His Honour would be glad to see a regular course of practice in firing prescribed, and he considers that in this as well as in ordinary drill the warders should combine with the regular police.

13. There were 34 escapes of convicts as compared with 13 in 1890 and 21 in 1891. Of this number, 2 were from Central Jails, 14 from District Jails, 7 from Intermediate Jails and 11 from Subsidiary Jails. Twenty were recaptured during the year, besides two who had escaped in previous years. On this subject Dr. Comins writes as follows:—

Escapes.

"The causes of the increased number of escapes are to be found in—

(a) The increased population.
(b) The lessened proportion of guards to prisoners.
(c) The increased work devolving on individual warders from more prisoners, as well as increased sickness in this unhealthy year among the warders, and the number from time to time unfit for duty.
(d) The necessity for using less secure enclosures and wards, which with a smaller jail population had been abandoned.
(e) The retention, owing to the fulness of Central Jails, of long-term prisoners for a longer period than usual in District and Subsidiary Jails, where the chances of escape are greater."

These reasons have doubtless much weight, but the increase in the number of escapes is greatly to be regretted, and every endeavour must be made to put a stop to them in future

Only one escape occurred from among the numerous gangs employed by the Public Departments, District Boards, or Municipalities, and that was due to the grossest carelessness on the part of the paid warder in charge of the gang. This is a creditable record considering the risks which unavoidably attend the extra-mural employment of convict prisoners.

14. The total number of offences committed by prisoners during the past year was 34,750 against 26,459 in 1891. The ratio of punishments to the daily average jail population increased from 183·1 in 1891 to 219·4 in 1892. The increase in the number of punishments is to be deplored, but Sir Charles Elliott sees no reason to suppose that any undue severity was shown, and the punishments themselves appear to have been moderate and judicious. As compared with 1891, there was a reduction in the number of cases of punishment by solitary confinement, but the percentage of whipping to the daily average number of male prisoners remained practically unchanged. The following table gives the statistics of punishments during the past seven years.

Prison discipline.

	By criminal courts.	By Jail Officers.					Total punishments.	Ratio per cent. of total punishments to daily average number of prisoners.	Ratio per cent. of corporal punishment to total number of all other punishments inflicted on male prisoners.
		Solitary confinement.	Reduced diet.*	Solitary confinement with reduced diet.	Corporal punishment.	All other punishments.			
	1	2	3	4	5	6	7	8	9
1886	44	2,504	1,015	499	396	36,046	40,504	299·93	1·01
1887	44	1,599	569	251	266	33,095	35,824	328·41	0·76
1888	29	1,295	525	352	245	26,608	29,054	234·71	0·86
1889	40	1,276	563	318	272	22,641	25,110	184·75	1·12
1890	28	1,270	430	134	259	23,576	25,697	191·10	1·04
1891	37	1,276	738	168	291	23,346	26,456	183·10	1·13
1892	44	1,037	972	217	335	32,133	34,738	219·39	0·97

* Including convicts put on penal diet.

"All other punishments" are analysed as follows and are compared with those for 1891:—

	1891.	1892.
Handcuffs	7,629	10,873
Fetters	8,840	11,321
Loss of marks	4,087	4,561
Gunny clothing	1,308	1,833
Penal or hard labour	686	1,161
Loss of early morning meal	345	979
Work in cells	10	9
Reduction and degradation of prison officers	515	652
Shaving the heads, and cutting the hair of female convicts ...	127	67
All other miscellaneous punishments	336	677
Total ...	23,883	32,133

Convict officers and mark remissions.

15. The number of prisoners employed as convict officers during the year was 2,198, of whom 409 were in the highest grade of convict warder. The ratio per cent. of the average number in jail was for male convict officers 5·58 against 5·80 in 1891, and for females 1·56 against 0·37. The Inspector-General reports that, as a general rule, these convict officers have done their work well, and by being employed at night in patrolling duties have afforded some relief to the staff of paid warders whose work has, for reasons already explained, been increased during the year. The number of convict officers punished was 1,783 against 1,580 in 1891. Of the 1,608 prisoners released during the year who were on the mark system, only ten failed to get remission under it.

Expenditure.

16. The following table shows the gross expenditure for jails and subsidiary jails in 1892 and for the nine years preceding:—

	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
General supervision...	45,966	47,018	48,207	49,236	49,198	50,251	49,344	49,890	48,820	51,583
Dieting prisoners ...	3,16,640	3,57,513	3,65,386	3,34,697	2,44,730	2,95,680	3,89,300	3,54,257	3,63,690	4,42,385
Establishment (excluding the police)	4,54,276	4,36,153	4,42,863	4,67,459	4,60,884	4,55,888	4,51,419	4,40,777	4,47,212	4,50,223
Hospital charges ...	40,947	39,227	49,383	42,899	36,008	46,936	56,825	47,766	49,155	47,787
Clothing	50,422	58,614	69,744	60,051	44,272	58,364	70,098	54,257	55,836	73,784
Miscellaneous contingencies	95,020	90,361	1,03,216	1,02,139	96,855	1,28,592	1,47,911	1,47,721	1,66,790	1,87,779
Petty construction and repairs ...	19,484	21,715	27,777	28,833	27,824	25,842	22,053	29,093	31,606	26,586
Police	3,701	...	...	..	...	..	...	...	...	...
Stationery	1,481	889	2,302	1,805	1,403	1,228	1,321	1,446	1,215	1,369
Medical stores ...	4,749	5,000	7,545	6,252	6,859	5,380	2,848	2,620	1,245	1,030
Total ...	10,32,695	10,56,490	11,16,423	10,93,361	9,68,033	10,68,161	11,91,149	11,27,827	11,65,560	12,82,526
Daily average population of all classes	15,026	15,101	15,176	14,806	12,250	13,731	15,025	14,777	15,915	17,178
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Average expenditure per prisoner ...	68 11 7	69 15 4	73 9 0	73 13 6	79 0 4	77 12 8	79 4 5	76 6 3	73 3 9	74 10 6
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.		Rs.	Rs.
Public Works Department ...	5,07,718	1,09,739	60,657	92,804	1,88,353	2,40,244	2,37,214	1,56,810	2,03,705	1,56,543

The increase under the heads Diet, Clothing, and Contingencies is due to the increase in the jail population from an average of 15,915 in 1891 to 17,178 in 1892. The average cost per prisoner under all heads of expenditure, excluding Public Works, was Rs. 74-10-6, showing an increase of Rs. 1-6-9 over that of last year, but the average is still below that for the four previous years.

Average rates.

17. The average prices paid for the chief articles of diet during the year 1892, as compared with those of previous years, are given below:—

	1887.	1888.	1889.	1890.	1891.	1892.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Rice	1 12 8	1 14 10	2 7 6	2 2 7	2 1 9	2 9 1
Wheat (flour) ...	3 5 4	3 0 9	3 7 0	2 15 4	3 1 7	3 10 7
Maize	1 7 0	1 10 2	2 1 2	1 12 9	2 0 0	1 13 5
Dal	2 0 8	2 3 2	2 11 0	2 8 4	2 7 8	2 11 9
Meat	6 3 0	6 2 9	6 3 6	6 2 2	6 6 7	6 3 10
Fish	6 14 8	6 9 0	6 7 3	6 11 10	6 4 8	6 7 5
Salt	3 4 8	3 15 0	4 0 1	3 15 2	3 12 6	3 11 0

There was a great rise in the price of all food-grains during the year, with the exception of maize, and the average price of rice rose from Rs. 2-1-9 in 1891 to Rs. 2-9-1 in 1892. In this connection Dr. Comins writes:—

"Had it not been for the timely storage of grain at the cheap season of the year, the cost under head "Diet" would have been very much heavier. There is ample evidence, however, that this has not been taken advantage of to the fullest extent, and there is yet much left to be done before the saving under this head will have reached its utmost limit. The arrangements for these large transactions have been left too much in the hands of jailors, who are timid and fear the responsibility of large bargains, and it is hard to break them of the time-honoured custom of buying in small quantities from the local bunnia at retail prices, and they have many duties which prevent them travelling far afield and of keeping themselves informed of the exact time when, and place where, the best bargain can be made. Much better results have been obtained where the Superintendent has personally enquired into or completed arrangements, or has effectively controlled and encouraged the efforts

of his jailor. Sufficient efforts to ensure a full supply of grain at the cheap season have not been made in all cases, and the cheapest season has been allowed to pass before the bulk of grain has been secured. In other cases, rice has been bought where it would obviously have been cheaper to have bought paddy, the husking and preparing of which would have also afforded good labour to the prisoners. The arrangement which promises to give the best results is that followed by the big grain merchants, who make advances to the zamindars or local cultivators before the grain is harvested, and thus have the first and best of the market."

As a successful example of the economy that can be effected by good management, the Inspector-General instances the case of the Dinajpur Jail, where Dr. R. M. Blaker and Jailor Gopal Chandra Chandra purchased 3,000 maunds of paddy in the Bogra district at a cost, including carriage, considerably less than that paid by the Bogra Jail, and when prices rose were able to dispose of the surplus stock at a profit. In this part of his report Dr. Comins has shown great attention to the question of expenditure on diet, and the means by which it can be kept down. Sir Charles Elliott fully endorses his remarks, which, if they are carefully studied by Jail Superintendents, cannot fail to be productive of useful results in the future.

18. The following table gives the average expenditure per prisoner on diet in each jail compared with that of the previous year :—

JAILS.	1891.	1892.	JAILS.	1891.	1892.
	Rs. A. P.	Rs. A. P.		Rs. A. P.	Rs. A. P.
Presidency—*European*	79 4 6	76 0 4	Faridpur	20 15 2	23 9 7
Darjeeling	36 2 4	40 0 0	Palamau	22 11 1	23 9 3
Purnea	16 8 0	34 7 2	Rangpur	20 10 6	23 3 3
Midnapore	28 1 1	30 9 2	Puri	16 7 6	23 2 8
Presidency—*Native*	23 14 9	30 0 8	Bogra	19 8 4	22 14 9
Alipore	26 3 2	27 15 6	Pabna	24 6 3	21 10 1
Chittagong	23 12 10	27 15 2	Khulna	20 6 5	21 8 11
Bhagulpur	24 11 0	27 14 2	Singhbhum	22 4 6	21 7 11
Dacca	22 6 0	28 10 0	Nadia	20 15 8	21 6 3
Jalpaiguri	21 5 6	26 6 0	Dinajpur	19 0 2	21 4 11
Saran	18 0 9	26 1 3	Backergunge	21 6 10	21 2 10
Rajshahi	23 12 5	25 13 11	Birbhum	19 3 10	21 0 0
Hooghly	19 12 2	25 11 3	Buxar	20 14 6	20 11 4
Mymensingh	23 12 6	25 8 3	Bankura	13 2 9	20 8 1
Cuttack	20 2 3	25 6 6	Noakhali	22 2 10	20 5 8
Muzaffarpur	21 15 8	25 4 8	Gaya	12 8 8	20 0 6
Naya Dumka	29 14 0	25 0 1	Balasore	19 13 2	20 0 3
Murshidabad	24 14 6	24 11 8	Malda	15 2 9	19 9 10
Tippera	21 4 10	24 8 4	Lohardaga	18 6 2	18 13 7
Jessore	21 0 8	24 8 0	Manbhum	19 5 3	18 6 8
Monghyr	16 15 10	24 7 7	Patna	19 15 4	18 5 9
Hazaribagh	18 2 11	24 2 3			
Shahabad	22 8 11	24 2 1	Average ...	22 12 10	25 10 6
Darbhanga	21 13 10	23 15 2			
Burdwan	21 15 11	23 12 8	For 1890 ...	23 15 5	...
Champaran	23 12 0	24 10 1			

The great increase in the cost of diet in the Purnea Jail is accounted for partly by the special and extra food given to the prisoners under medical advice, and partly by the high price of rice prevailing in the neighbourhood. Since Dr. Kelly took over the management, great economy has been effected in the cost of diet in the Naya Dumka Jail, which last year, leaving out Darjeeling, was the most expensive jail in the province. In the present year Patna heads the list of cheaply managed jails (as far as the cost of diet is concerned), and this result is in no small measure due to the efforts of the Jailor, Babu Lal Behari Singh, who was noticed in last year's report as the jailor at Gaya, which was the most cheaply managed jail in the province in 1891. Dr. Comins also mentions, as worthy of special commendation, Babu Becharam Gupta, the Assistant Jailor of Manbhum, and Munshi Dallaruddin Ahmed and Babu Ganesh Chunder Singh, Assistant Jailors of Pabna.

Supply of vegetables.

19. The supply of vegetables and condiments grown in the jail gardens was found to be insufficient for the wants of the prisoners, and in 23 jails condiments to the value of Rs. 3,099 had to be purchased, while in 8 jails vegetables were bought to the value of Rs. 973. This was in a great measure due to the unexpected increase in the jail population, but the Inspector-General also attributes it partly to the want of energetic management of the jail gardens. The number of lime-trees grown in jail gardens was 15,525, or nearly one tree for every prisoner confined in the jails of the province.

The total value of articles supplied to prisoners, for which no credit is taken in the account, was Rs. 91,441 against Rs. 72,831 in 1891 and Rs. 53,747 in 1890. The increase is said to be chiefly due to the further development of the jail

dairies, the value of the produce of which is estimated at Rs. 26,312 in 1892 against Rs. 13,784 in 1891. The value of grain grown in jail lands fell from Rs. 7,124 in 1891 to Rs. 5,786 in 1892, the decrease being due to the scanty rainfall of the preceding year.

Establishment.

20. The cost of establishment was Rs. 3,88,293 as against Rs. 3,84,825 in 1891, being an increase of Rs. 3,468. Hospital charges fell from Rs. 48,751 in 1891 to Rs. 47,368 in 1892, the decrease being attributed to the supply of milk (both cheaper and purer than that bought in the bazar) to the sick prisoners from the jail dairies. Clothing charges rose from Rs. 55,444 1891 to Rs. 73,427 in 1892, and this is accounted for by the increase in the jail population during the year. The expenditure on contingencies was Rs. 1,69,793 against Rs. 1,47,722 in 1891.

Average rate of controllable expenditure.

21. The total average cost per prisoner on account of diet, hospital charges, and clothing amounted to Rs. 33-1 against Rs. 29-11-9 in 1891 and Rs. 31-3-5 in 1890. The jails of Manbhum and Malda show the best results. As in former years, Buxar was the cheapest Central Jail in the province.

Employment of prisoners and manufactures.

22. The daily average number of prisoners sentenced to labour was 15,613 against 14,231 in 1891 and 13,241 in 1890. The daily average number of sick increased from 607 in 1891 to 683, while the number of convalescent and infirm fell from 1,285 to 1,243. The number employed on unremunerative labour increased from 729 in 1891 to 985 in 1892. The net cash earnings show a satisfactory increase, the figures being Rs. 3,23,211 for 1892 against Rs. 1,50,842 in 1890, and Rs. 3,14,021 in 1891. The increase in 1891 was mainly due to the working up of the large stock of castor seed at Rajshahi at the end of 1890, and to the realization of heavy outstandings from the Railway Department during the year, and the improvement thus effected was maintained during the year under review. On the subject of the beneficial effects of labour on health the Inspector-General has some interesting remarks to offer. Weak and sickly prisoners who have hitherto been supposed incapable of any kind of labour have been more extensively employed on gardening and other light kinds of work. In his Resolution on the Report on the Administration of the Jails of Bengal for 1891, the Lieutenant-Governor remarked on the health-giving effects of moderate labour in the case of weakly prisoners, and he now notices with satisfaction that the question has received greater attention on the part of Superintendents during the past year, and that the experiments made have resulted in a general improvement in the health of the prisoners so employed and in diminishing the numbers in the special and convalescent gangs.

23. The average earnings per prisoner sentenced to labour in Central Jails as compared with the figures for 1891 is shown below:—

	1891.	1892.
	Rs.	Rs.
Presidency	91·0	115·1
Buxar	36·0	33·2
Alipore	50·5	29·9
Bhagalpur	14·2	23·3
Midnapore	23·9	22·9
Dacca	9·4	8·9
Rajshahi	8·0	Loss.

In the Presidency Jail the profits from jail manufactures rose from Rs. 1,14,602 in 1891 to Rs. 1,50,011 in 1892. Towards this amount the printing industry contributed Rs. 1,47,345, and the work of this department is favourably noticed by the Inspector-General in his report.

In the Alipore Jail profits on manufactures fell from Rs. 91,386 in 1891 to Rs. 55,580; this is accounted for by the abnormally high price of jute during the year. The packing of quinine in 5-grain packets for sale at post-offices was introduced into this jail in the middle of December, and by the end of the month the outturn had risen to 10,000 daily. In the Bhagalpur Jail the profits show a satisfactory increase from Rs. 17,088 in 1891 to Rs. 30,794 in 1892, and the quality of the outturn of articles manufactured is reported to have much

improved. In the Buxar Central Jail there was a slight falling off in the profits on manufacturing operations, while in the Dacca Jail they remained practically unchanged. The Rajshahi Jail compares unfavourably with the other Central Jails of the Province, and the year's operations resulted in a loss of Rs. 3,562-12 principally on the castor-oil manufacture. This is partly accounted for by the deterioration in the value of dead-stock and of other articles improperly shown under that head, amounting to Rs. 4,959-11, which had to be written off. The Inspector-General remarks that the jail is badly situated for the working of an industry of this kind, in which outside competition is so keen, especially as with jail labour the full percentage of oil is not extracted. The profits of minor jails show an increase from Rs. 61,174 in 1891 to Rs. 68,263 in 1892. Darjeeling again heads the list with a profit of Rs. 8,880, or an average of Rs. 10·21 per prisoner sentenced to labour.

Subsidiary Jails.

24. During the year nine out of the 86 subsidiary jails were visited by the Superintendents less than 70 times, the minimum number required.

The number of convicts admitted into the Subsidiary Jails during the year was 17,385 as compared with 15,415 in 1891, the increase being accounted for by the large number of petty thefts following on the general scarcity and the high price of grain. The average detention of convicts was 7·26 days against 7·42 in 1891. In the Alipore (Jalpaiguri), Angul, and Khond Mahal Subsidiary Jails the average detention was over 15 days, in the first case because the prisoners were detained to assist in the construction of the new jail buildings, and in the other cases owing to the difficulties connected with the journey to Cuttack. The Lieutenant-Governor is of opinion that in these places the rules as to detention should be relaxed, as the prisoners might be usefully employed in the Subsidiary Jails in building, cultivation, jungle clearing or any other kind of work. The average detention of under-trial prisoners in Subsidiary Jails for 1892 was 11·30 against 13·55 in 1891. The decrease is all the more satisfactory, as the average number of prisoners admitted into jails was larger than in the preceding year. The total cost of the Subsidiary Jails during the year, excluding Public Works, was Rs. 1,08,994 as compared with Rs. 1,08,963 in 1891. The credits from jail manufactures amounted to Rs. 24,129 against Rs. 20,815.

Water-supply.

25. During the year all the different waters, ordinarily in use in jails, have been analysed by the Chemical Examiner to Government with a view to determining the best source for selection. The principle that all water should be raised by pumps and should be conveyed by means of pipes to the settling tank, boiler and filter, and thence to the different enclosures, has been sanctioned for general application in all Jals and will be gradually introduced as funds are available. In jails where buckets are used instead of pumps, the difficulty hitherto experienced in preventing the pollution of the water before use has been in some measure obviated by altering the shape of the bucket, and by the construction of a funnel-shaped opening in the well. Mr. Larymore's improved boiler for drinking-water has been supplied to several jails during the year, and the scheme for supplying the Arrah jail with water from the Sone Canals has approached completion. All these are very important reforms, and His Honour would be glad to see every jail supplied with such appliances, that water need never be contaminated in handling or carrying. It is of the utmost importance that all water should be really boiled and not merely heated before being used for cooking or drinking.

Accommodation in jails.

26. From statement XV appended to the Report, it appears that the maximum population on any one day considerably exceeded the capacity in many jails. Owing to the large increase in the daily average number of male convicts, and the narrow margin of accommodation allowed, this is often unavoidable. As all the Central Jails were quite full during the year, considerable difficulty was frequently experienced in providing accommodation for prisoners in the sleeping wards. Among the jails in which overcrowding occurred, the Inspector-General especially notices those at Buxar, Dacca, Mymensingh, and Jessore, in which the daily average of male convicts, after deducting the number of sick prisoners in hospital, exceeded by over 50 the capacity of the jails. In such cases the prisoners were allowed to sleep in worksheds specially prepared for them,

or in under-trial wards, or in the case of old and weakly prisoners, in the hospitals, whenever the accommodation permitted. In view of the increasing jail population, the necessity for additional accommodation is very great. A sum of one lakh of rupees has been placed at the disposal of the Inspector-General for original works during the present year, and this will be utilized in increasing the accommodation for prisoners in the jails at Bhagalpur, Barisal, Jessore, Malda and Comilla. In accordance with the recent orders of the Lieutenant-Governor, the surplus population of the jails will, as far as possible, be accommodated in the Central Jails in additional wards to be constructed for this purpose.

Mortality among prisoners.

27. The following table shows the sickness and mortality for 1892, and compares the year's figures with those of the last 30 years.

Years.	Daily average number of prisoners.	Daily average sick.	Ratio per mille of daily sick.	Number of deaths.			Death-rates per mille of average strength.			Remarks.
				From cholera.	From all other causes.	Total number of deaths.	From cholera.	From all other causes.	From all causes.	
1863	16,453	817	51·4	338	1,223	1,561	20·5	74·3	94·8	All classes of prisoners.
1864	16,729	814	48·6	231	804	1,035	13·8	48·0	61·8	
1865	17,439	766	43·3	162	790	952	9·2	45·3	54·5	
1866	20,683	746	54·5	684	1,569	2,223	33·0	74·0	107·0	
1867	18,738	668	35 6	162	916	1,078	9·0	49·0	58·0	
1868	18,051	646	35·7	122	802	924	7·0	44·0	51·0	Convicted and under-trial only.
1869	18,476	676	36 5	176	771	947	9·0	42·0	51·0	
1870	18,546	623	33·5	171	659	830	9·0	36·0	45·0	
1871 .. .	17,500	636	36·3	38	661	699	2·0	38·0	40·0	
1872 ...	19,105	673	35 2	117	885	1,002	6·0	46·0	52·0	
1873	20,142	689	34·2	128	832	960	6 0	41·0	47·0	
1874	21,509	782	36·2	145	1,027	1,172	7·0	47·0	54·0	
1875	21,257	835	39·2	96	949	1,045	4·0	45·0	49 0	
1876	21,672	849	39·1	267	975	1,242	12·3	45·0	57·3	
1877 ...	18,709	730	39 0	151	763	914	8·0	40·8	48·8	
1878	18,611	803	43·1	215	1,072	1,287	11·5	57·6	69·1	
1879	18,483	947	51 2	341	1,111	1,752	18·4	76·4	94·8	
1880	17,802	941	52·8	31	1,100	1,131	1·7	61·8	63·5	
1881	16,520	873	52 8	85	1,014	1,099	5·1	61·4	66·5	
1882	15,902	849	53·3	151	933	1,084	9·5	58·6	68·1	
1883	14,776	729	49·3	61	701	762	4·1	47·4	51·5	
1884	14,868	724	48·6	62	678	740	4·1	45·6	49·7	
1885	14,926	773	51 7	157	730	887	10·5	48·9	59·4	
1886	14,579	648	44·4	40	503	543	2·7	34·5	37 2	
1887 . .	12,047	539	44·7	20	379	399	1·7	31·4	33·1	
1888	13,634	631	46·2	132	482	614	9·7	35·3	45·0	
1889	14,971	695	46·4	132	555	687	8·8	37·0	45·8	
1890	14,706	580	39·4	33	443	476	2·2	30·1	32·3	
1891	15,849	610	38·5	52	439	491	3·2	27·7	30 9	
1892	17,122	687	40·1	68	684	752	3 9	40·8	43·9	
Average ...	17,329	733	42·3	152	824	976	8·8	47·5	56·3	

The daily average number of sick prisoners rose from 610 in 1891 to 687, and this is atributed to the increase in the population of the jails and the general unhealthiness of the year. The jails which have returned the highest ratio of daily average sick were Jessore 87·9, Dinajpur 86·2, Singhbhum 85·9, Naya Dumka 85·0, Malda 71·8, and Champaran 67·2. The number of admissions into hospital from dysentery and diarrhœa exceeds by nearly 1,000 the number for 1891, and this the Inspector-General attributes to the fact that a large number of the prisoners who were received into the jail had for months been subsisting on unnutritious and indigestible food. There were 115 cases of cholera with 60 deaths against 81 cases and 48 deaths in the previous year. The number of cases of cerebro-spinal fever fell from 23 to 9, and the deaths from 18 to 6. There were 45 cases of small-pox and 14 deaths compared with seven cases and one death in 1891. Of the 45 cases no less than 41 occurred in the Dacca Jail, and of these 13 proved fatal. All the prisoners in the jail, numbering 3,465, were vaccinated, and in 1,416 cases the first operation proved successful; the rest were revaccinated, 1,303 with successful results. Fourteen prisoners who were attacked with small-pox in the jail were also vaccinated a month after their recovery with the extraordinary result that in six cases the operation was completely successful. Dr. Cobb's account of the results of his experience (paragraph 102 of the Report) is altogether very remarkable, and deserves the careful perusal of the Medical Faculty. The facts will be further considered in the Vaccination Report.

Jails in which the death-rate was highest.

28. The total number of deaths among convicts in jails and subsidiary jails, including the 112 moribund prisoners who were released under rules 487 and 488 of the Jail Code, was 683 or 43·1 per mille against 454 or 31·4 per mille in 1891. The average death-rate for the last 30 years was 56·3 per mille. Excluding the released moribund prisoners, and 3 cases of death by accident, the number of prisoners who died in other than subsidiary jails during the year was 551, and of these only 166 were received into jail in good health, while 178 were found to be in bad health, and 207 in indifferent health at the time of admission. The following jails show a death-rate higher than 70 per cent. during the past year:—

Jails.	Death-rates from all causes per mille.		Death-rates exclusive of cholera per mille.	
	1891.	1892.	1891.	1892.
Naya Dumka	...	221·1	...	121·6
Dinajpur	88·3	156·8	88·3	156·8
Singhbhum	32·4	135·9	32·4	83·6
Jalpaiguri	42·8	126·1	42·8	126·1
Birbhum	...	112·5	...	112·5
Bogra	34·4	109·0	34·4	109·3
Rangpur	94·3	109·3	69·7	109·0
Malda	...	94·3	...	94·3
Saran	62·2	84·0	43·9	36·9
Jessore	45·9	80·2	45·9	80·2
Noakhali	...	75·1	...	62·6

Note.—Including moribund prisoners released during the year 1892.

Of the 15 intermediate jails, 7 are included in the above list and only 4 are district jails. The mortality in the small jail at Naya Dumka is extraordinary, and the case has been specially reported on. There were 20 deaths among the convicts received into the jail, and of this number 9 were due to cholera. There were also six deaths, of which one was from cholera, among the under-trial prisoners. Nearly all these deaths occurred between the months of June and October when cholera and bowel diseases were prevalent throughout the district, and scarcity and want pressed heavily on the surrounding population. It is satisfactory to know that no deaths have occurred in this jail since November last. The Dinajpur Jail is situated in an unhealthy district, and out of the 16 prisoners who died during the year, 7 were admitted in bad health, 7 in indifferent health, and only 2 in good health. The Superintendent is now able to report a considerable improvement in the health of this jail. At Singhbhum, out of 13 convicts who died, 6 were received in bad or indifferent health. Cholera and bowel-complaints were prevalent all over the district during the middle months of the year, and 12 out of the 13 deaths occurred from these diseases. In Jalpaiguri the 7 convicts who died were all received in bad or indifferent health, and in Rangpur, out of the 20 who died in jail, only 5 were in good health when admitted. The mortality among the prisoners received into the Birbhum Jail from the district itself was only 25·9 per mille, and the high rate shown above is due to the transfer of sickly prisoners from the Rangpur Jail to Birbhum. Of the 9 convicts who died in the Bogra Jail during the year, 5 were received in bad or indifferent health. At his inspection of this jail Sir Charles Elliott noticed certain defects in the water-supply and in the position of the hospital quarters, and the attention of the Inspector-General was drawn to these defects, and measures have since been taken to remedy them. In Jessore only 4 out of the 18 convicts who died were received in good health, while of the 3 who died at Malda, 2 were in bad and 1 in indifferent health when admitted. The Committee appointed to enquire into the unhealthiness of the Jails at Purnea, Rangpur, and Dinapur submitted its report during the year. Of the several valuable recommendations made by the Committee some have already been carried out, and effect will gradually be given to the others as opportunities arise.

The Inspector-General attributes the high rate of mortality among prisoners, as compared with 1891, chiefly to the unhealthiness of the year and to the prevailing scarcity. This is to a great extent borne out by a comparison of the figures for the past year, as shown in Statement XVIII appended to the report, with those of the previous year. The number of deaths

among convicts in 1892 exceeded the number for 1891 by 118. Among prisoners who had been less than six months in prison when they died, there was an increase of 104 deaths, while among those who had been in prison for terms varying from 6 to 12 months there was an increase of 16 deaths. The number of deaths among convicts who had undergone more than 12 months' imprisonment is practically the same for both years. Deaths among under-trial prisoners rose from 37 in 1891 to 69 in 1892. These figures show clearly that the increase in the number of deaths occurred among those who had recently come into the jail, and this bears out the theory that the high rate of mortality was mainly due to the unhealthiness of the season and to the prevalence of disease and want outside the jails, and not to diseases contracted within the walls. This is no doubt the true explanation of the high rate of mortality throughout the jails of the province. Nevertheless the record of the year is far from encouraging, and Sir Charles Elliott desires to impress once more upon all Superintendents of Jails the necessity of devoting special attention to this the most important of all the questions affecting jail administration. His Honour trusts that the close of the present year will show a large decrease in the prison death-rate throughout the jails of the province.

Inspections.

29. During the period that he was in charge of the department, Dr. Comins visited 28 jails, including all the Central Jails, and 9 Subsidiary Jails. Dr. Lethbridge inspected 8 jails previous to the 28th March, the date on which he made over charge to Dr. Comins. The number of inspections made by Judicial and Magisterial Officers increased from 2,145 in 1891 to 2,236 in 1892, but the number of visits paid by non-official visitors fell from 144 in 1890 and 137 in 1891 to 104 during the year under review. The Lieutenant-Governor himself inspected the jails at the head-quarters of all districts and sub-divisions which he visited and made special inspection notes in four cases.

Officers of the Department.

30. The Lieutenant-Governor is glad to notice the favourable mention made by the Inspector-General of several officers of his Department. Among those who receive special commendation are Dr. Bovill of Berhampore and Dr. Umesh Chandra Mukerji of Bankura. The thanks of the Lieutenant-Governor are due to Dr. Comins himself for his zealous administration of the department during the year. His report is thorough and painstaking, and shows that careful regard to details, which is the basis of all improvement in the health, the cost, and the labour outturn of prisoners, the three points which most require his continued and vigilant attention.

ORDER.—Ordered that a copy of this Resolution be forwarded to the Inspector-General of Jails for information and guidance.

Ordered also, that a copy of this Resolution, and a copy of the Report, be submitted to the Government of India, in the Home Department.

Ordered also, that a copy of this Resolution be published in the *Calcutta Gazette.*

By order of the Lieutenant-Governor of Bengal,

H. J. S. COTTON,

Chief Secretary to the Govt. of Bengal.

RE-ORGANISATION OF THE STAFF OF SUPERIOR POLICE OFFICERS IN BENGAL AND ASSAM.

POLICE.

RESOLUTION No. 97A—D.

Dated Darjeeling, the 20th May 1893.

READ again—

A letter from this Government, to the Government of India, No. 348, dated 25th January 1892, submitting proposals for the revision of the staff of superior police officers in Bengal and Assam.

Read—

A letter from the Government of India, in the Home Department, No. 180, dated 25th April 1893, forwarding a copy of a Despatch from the Government of India, to Her Majesty's Secretary of State, No. 23, dated 18th January 1893, and of a Despatch from the Secretary of State, No. 9, dated 23rd February 1893, according sanction, with minor modifications, to the scheme of re-organisation proposed by this Government.

THE main principles of the proposals made by this Government for the re-organisation of the staff of superior police officers, which have now been approved by the Government of India and Secretary of State, are (1) that there should be a District Superintendent of Police for every district in Bengal, the present practice, under which five districts are supervised by Assistant Superintendents, being abandoned; and (2) that Assistant Superintendents of Police should only be provided for the most important sub-divisional charges and as a reserve for leave vacancies. The effect of these proposals is that the number of District Superintendents will be increased from 50 to 55, the future distribution being as shown below:—

For charge of districts in Bengal	45
Commandant, Lushai Police	1
Personal Assistant to the Inspector-General of Police ...	1
Assistant Inspectors-General of Police for Railways ...	2
District Superintendents of Police for Assam	6
Total ...	55

The existing number of sanctioned Assistant Superintendents will be reduced from 36 to 29, and the number of probationary Assistant Superintendents from 15 to 8.

The distribution of Assistant Superintendents will be as follows:—

Employed in Assam	5
Lushai Hills and large subdivisions	8
Deputy Commissioner of Police, Calcutta	1
In charge of Special Branch	1
	15
Provision for furlough at 20 per cent. on 72 charges, including 2 Deputy Inspectors-General	14
Total ...	29

2. At the same time the appointments of District Superintendents and of Assistant Superintendents will be regraded thus:—

District Superintendents of Police.

Present scale.		Rs.		Rs.	Sanctioned scale.		Rs.		Rs.
7	at	1,000	=	7,000	5	at	1,000	=	5,000
7	”	800	=	5,600	6	”	900	=	5,400
13	”	700	=	9,100	7	”	800	=	5,600
11	”	600	=	6,600	12	”	700	=	8,400
12	”	500	=	6,000	12	”	600	=	7,200
					13	”	500	=	6,500
50				34,300	55				38,100

Increase = Rs. 3,800 per mensem.

Assistant Superintendents of Police.

Present scale.					Sanctioned scale.				
		Rs.		Rs.			Rs.		Rs.
16	at	400	=	6,400	14	at	400	=	5,600
15	„	300	=	4,500	15	„	300	=	4,500
5	„	250	=	1,250					
36				12,150	29				10,100

Decrease = Rs. 2,050 per mensem.

Probationers.

		Rs.		Rs.			Rs.		Rs.
15	at	250	=	3,750	8	at	250	=	2,000

Decrease = Rs. 1,750 per mensem.

The grades of District Superintendents are increased from five to six, and the grades of Assistant Superintendents are reduced from three or two.

These orders have been communicated to the Local Government with instructions to give effect to them gradually, so that the proposed regrading of District Superintendents may, as far as this can be arranged without serious inconvenience, be brought into force *pari passu* with the reduction in the strength of Assistant Superintendents and Probationers.

3. In consequence of the reduction which has already been effected in the number of Assistants and probationers, and of the recent retirement and deputation of officers whose places have not been filled up, the Lieutenant-Governor finds himself in a position to give immediate effect to the proposed revision of establishment, so far as numbers are concerned, and although it is not possible at present to fill up all the appointments according to the revised scale, a redistribution of grades in the direction sanctioned can at once be made. Excluding Messrs. Savi and Gayer, whose lien on their appointments will be suspended, there are at present 93 officers on the establishment against 92, which is the full number sanctioned by the Government of India and Secretary of State, and, under the authority now conveyed by the Government of India, the Lieutenant-Governor is pleased to direct that these officers shall at once be redistributed into grades as follows:

						Rs.
	8	District Superintendents, at Rs. 1,000 each	...	...	...	8,000
	2	Ditto, at „ 900 „	...	...	...	1,800
	7	Ditto, at „ 800 „	...	...	...	5,600
	12	Ditto, at „ 700 „	...	...	...	8,400
	12	Ditto, at „ 600 „	...	...	...	7,200
	14	Ditto, at „ 500 „	...	...	...	7,000
	55					38,000
	14	Assistant Superintendents at Rs. 400 each	...	...	...	5,600
	15	Ditto, at „ 300 „	...	...	...	4,500
	29					10,100
	9	Probationers at „ 250 „	...	...	...	2,250
Total	93	at a monthly cost of	...	...	...	50,350

4. This re-arrangement shows one probationary officer, and a monthly expenditure of Rs. 150 in excess of the sanctioned scale. The excess expenditure is, however, apparent only, as it includes the salary of an officer (Mr. Halliday) on deputation, which is debitable to another department, and not to the Police budget. The probationary officer in excess will be absorbed in the first vacancy that occurs. The re-distribution in the grades of District Superintendents on the exact lines of the sanctioned scale will be enforced as oppportunities occur, but it cannot be completely carried out until vacancies arise in the first grade of District Superintendents, and the number of officers in that grade is reduced to five. As such vacancies occur, there will be a re-adjustment in the lower grades until the sanctioned scale is reached.

5. Probationers who have passed their departmental examinations and have been confirmed in the department will be allowed to officiate as Assistant Superintendents, and draw the higher salary of the grade in which they may be acting.

6. The following statement shows the effect of the orders now passed. The names of the officers who receive promotion are printed in *italics*, and their promotion will be duly notified in the Gazette:—

District Superintendents of Police, 1st grade, on Rs. 1,000 (*eight*).

1. Colonel Herbert Maynard Ramsay.
2. William Dering Pratt.
3. John Masters.
4. William Henry Cornish.
5. James Patch.
6. Frederick Wilcox.
7. Arthur Hutton James.
8. George John Cawley.

District Superintendents of Police, 2nd grade, on Rs. 900 (*two*).

1. *Henry Neville Harris.*
2. *William John Kilby.*

District Superintendents of Police, 3rd grade, on Rs. 800 (*seven*).

1. William Benson Maxwell.
2. Alexander Vansittart Knyvett.
3. Bertram Rattray.
4. Thomas Gwyther Charles.
5. *Joseph Boileau Goad.*
6. *Charles Philip Crouch.*
7. *Edward Melian Showers.*

District Superintendents of Police, 4th grade, on Rs. 700 (*twelve*).

Henry Dawson (on deputation, seconded.)
1. George Robert King Meares.
2. John Briscoe Birch.
3. Robertson Francis Home Pughe.
4. William Robert Green.
5. Charles Armstrong Fisher.
6. Hector Munro.
7. Victor William Bertelsen.

William Barton Savi ... }
Jack Francis Needham }
Richard Augustus D'Oyly Bignell ... } (On deputation, seconded.)
8. Malcolm Fulcher Beamish.
9. *Charles Elphinstone Gouldsbury.*
10. *Herbert Vyvyan Hollis Roberts.*
11. *Louis Eusebe Fabre-Tonnerre.*
12. *George Dashwood Graham.*

District Superintendents of Police, fifth grade, on Rs. 600 (*twelve*).

1. Ian Hew Warrender Dalrymple-Clark.
2. Rivett Francis Guise.
3. George Broadfoot Havelock.
4. George William Stirling Cox.
5. Henry Samuel Schurr.
6. John Thurlow Rivett-Carnac.
7. Gopal Hari Mullick.
8. *Ernest St. George Kaye.*
9. *Percival Arthur Sandilands.*
10. *Thomas Chalmers Orr.*
11. *George Alexander Patten.*
12. *Walter Devereux Abercrombie.*

District Superintendents of Police, sixth grade, on Rs. 500 (*fourteen*).

1. Henry Edward Clarence Paget.
2. Walter Charles Fasson.
3. George Horace Pirie Livesay.
4. Alfred Stewart Judge.
5. Jadub Chunder Deb.
6. Frank Harrington Tucker.
7. Andrew Bigoe Barnard.

Herbert Cunningham Clogstoun (on deputation, seconded.)
8. *William Bolton Waller.*

Charles Stewart Murray, C.I.E. (on deputation, seconded).
9. *Edward Muspratt.*
10. *Rowley Lascelles Ward.*
11. *Hawtagne Macrae Parish.*
12. *Edward Charles Stewart Baker.*
13. *Francis Edwin Kemp.*
14. *Rowland Castle.*

Assistant Superintendents of Police, first grade, on Rs. 400 (*fourteen*).

1. Edward Halliday D'Oyly.
2. Arthur Shuttleworth.
3. Cecil Chichele Plowden.
4. Samuel Nicholls Walker.
5. Henry Willock Boileau.
6. Frederick Arthur Fullerton.
7. John Cowie.
8. Charles Macdonald Wintle.
9. *Robert Thomas Dundas.*
10. *Edward Charles Ryland.*
11. *Frederick Loch Halliday.*
12. *Henry Berners St. Leger.*
13. *Robert Nesbitt William Pritchard.*
14. *Sir William Augustus Ainsley Stewart, Bart.*

Assistant Superintendents of Police, second grade, on Rs 300 (*fifteen*).

1 Kinsey Beaumont Welford Thomas.
2. Alan Alfred Campbell.
3. Harry Charles Loftus Bamber.
4. Henry Archibald Reily.
5. William Thomas Moore.
6. Francis Charles Daly.
7. William Frederick Stanton Allen.
8. William Berlton Stuart.
9. Richard Fermor Godfrey Faussett.
Charles Edward Briscoe (on deputation, seconded).
10. *St. Quintin Byrne.*
11. *Alexander Robert Geoffry Hampton.*
12. *John Roland Berington.*
William Alfred Gayer (on deputation, seconded).
13. *Robert Henry Sneyd Hutchinson.*
14. *Rás Behari Biswas.*
15. *William Yates Reily.*

Probationers on Rs. 250 (*nine*).

1. Augustus Bryan Cantley Comber.
2. Francis Dawson Savi.
3. John Martin Coates.
4. John Astley Cave-Browne.
5. Zinnet Hosain Khan.
6. Frederick N. Warden.
7. Noël Williamson.
8. Colin Battie Drake-Brockman.
9. Hamilton Charles Gordon.

ORDER.—Ordered that the Resolution be published in the *Calcutta Gazette*, and that a copy of it be forwarded to the Inspector-General of Police and to the Accountant-General, Bengal, for information.

By order of the Lieutenant-Governor of Bengal,

H. J. S. COTTON,

Chief Secretary to the Govt. of Bengal.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 20th May 1893.

Division	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.					
BURDWAN DIVN.	1	Burdwan Kalna Katwa Raniganj	May 20, '93	Nil 0·20 0·43 0·04	Weather—hot. Cultivation of jute and *aus* commenced. Fodder and water sufficient. Prices of common rice :— Burdwan ... ... 11 to 13 Srs. per rupee. Kalna ... ... 10 to 13 Srs. per rupee. Katwa ... ... 13 Srs. per rupee. Raniganj ... ... 13 Srs. per rupee.
	2	Bankura Vishnupur	„ 20, '93 ...	Nil 0·28	Weather—exceedingly hot and fine. Sowing of rice has commenced. Fodder and water sufficient. No cattle-disease reported. Price of common rice 11½ seers per rupee both at Sadar and Vishnupur.
	3	Birbhum Rampur Hát	„ 20, '93 ...	Nil 1·25	Weather—very hot. Planting of sugarcane going on. Price of common rice 12 to 14½ seers per rupee. Fodder and water sufficient.
	4	Midnapore	„ 20, '93	Nil	Slight rain in all but Sadar subdivision. Prospect of *boro* good. *Aus* sowing going on. Prices of common rice :— Sadar ... ... 11 Srs. per rupee. Contai ... ... 14 Srs. per rupee. Tamluk ... ... 12 Srs. per rupee. Garhbeta ... ... 11 Srs. per rupee.
	5	Hooghly Serampore Jahanabad	„ 20, '93	Nil Nil Nil	Weather—very hot. Jute and winter rice being sown. *Aus* being transplanted in Serampore and Jahanabad. Cattle-disease much diminished. Prices of common rice :— Sadar ... ... 10 to 11 Srs. per rupee. Serampore ... ... 10 to 11½ Srs. per rupee. Jahanabad ... ... 11 to 12½ Srs. per rupee.
	6	Howrah Ulubaria	„ 20, '93 ...	Nil 0·10	Weather—hot. Sowing continues. Condition of cattle good. Fodder and water-supply sufficient. Rice 10 to 11½ seers per rupee.
PRESIDENCY DIVN.	7	24-Parganas	„ 20, '93	Nil	Weather—very hot. Sowing of *aus* and jute going on. Sufficient fodder and water. Prices of common rice :— Sadar ... ... 10 to 13 Srs. 8 c. per rupee. Diamond Harbour ... 12 Srs. 4 c. per rupee. Barasat ... ... 10 Srs. 9 c. per rupee. Dum-Dum ... ... 11 Srs. 8 c. per rupee.
	8	Nadia Kushtia Meherpur Chuadanga Ranaghat	„ 20, '93	Nil 0·60 1·56 2·30 Nil	Weather—seasonable. Sowing of paddy going on. Sugarcane doing well. Fodder and water sufficient.
	9	Khulna Bagerhat Satkhira	„ 20, '93	Nil Nil Nil	Weather—very hot. Land is being ploughed for *aman*, and *aus* and jute are being sown. Harvesting of *boro* continues. Common rice sells at 13 seers per rupee at Sadar and Bagerhat and at 11 seers per rupee at Satkhira. Fodder and water for cattle sufficient. Cattle-disease in some villages in Damuria.
	10	Jessore Jhenida Magura Narail Bangaon	„ 20, '93	Nil Nil 0·10 Nil 1·40	Weather—seasonable. Sowings of *aus* and *aman* paddy in progress. Prospects improved by the present hot weather. Cattle-disease reported from parts of thana Manirampur. Fodder sufficient. Water is wanted at places in the Bangaon subdivision. Prices of rice stationary.
	11	Murshidabad	„ 20, '93	Nil	Weather—very hot and sultry. Sowing of *aman* and *aus* paddy continues. Jute, indigo, sugarcane and mulberry plants doing well. Planting of sugarcane finished. Common rice sells at 11½ seers per rupee. Fodder available for cattle.

Division	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL—*concld.*					
CHITTAGONG DIVN.	12	Chittagong	May 20, '93	2·61	Weather—very hot. Prospects of crops good. *Aus* cultivation commenced. Prices stationary. Condition of cattle good. Supply of fodder sufficient.
	13	Noakhali	„ 20, '93	0·01	Weather—very hot with occasional strong wind. Sowing of *aus* paddy vigorously going on. Water and fodder sufficient. No cattle-disease. Price of rice ranges between 11 and 12 seers per rupee.
	14	Tippera	„ 20, '93	Nil	Weather—hot, steamy. Harvest of *boro dhan* almost completed. *Til* being gathered. Lands being prepared for *sali dhan.* Prices unusually high.
	15	Chittagong Hill Tracts.	„ 18, '93	1·59	Weather—excessively hot throughout the week. *Jum* burning over. Sowing in *jums* continues. No cattle-disease reported. Common rice being sold at 10 seers per rupee.
DACCA DIVN.	16	Dacca	„ 20, '93	Nil	Weather—very hot; slight rain fell in Manikganj and Munshiganj. Paddy and jute thriving. Ploughing and sowing continue. No cattle-disease. Fodder available. Common rice selling at from 10 to 12 seers per rupee.
	17	Faridpur	„ 20, '93	Nil	Weather—very hot. Sowing of *aus* and *aman* being pushed on vigorously, and the present hot dry weather is favourable to the young crops. *Boro* is still being harvested. Sugarcane and jute doing well. Common rice sells at 11 to 12 seers per rupee. Cattle-disease still in Palong and Shibchar thanas, otherwise cattle doing well and fodder available.
		Goalundo	...	0·15	
		Madaripur	...	Nil	
	18	Backergunge	„ 20, '93	Nil	Weather—seasonable; days very hot. Prospects of crops fair. Common rice selling at from 9 to 12 seers per rupee. Fodder and water sufficient.
	19	Mymensingh	„ 20, '93	0·03	Weather—very hot and sultry. State and prospects of crops good. Common rice selling at from 11 to 16 seers per rupee. Health of cattle good. Supply of fodder and water sufficient.
RAJSHAHI DIVN.	20	Dinajpur	„ 20, '93	Nil	Weather—very hot. Standing crops doing very well. Rain not wanted for a week or so. Prospects very good. Price of rice at Sadar 13½ seers per rupee; that at Thakurgaon 13 seers. Cattle in good condition. Fodder and drinking water plentiful.
		Thakurgaon	...	Nil	
	21	Rajshahi	„ 20, '93	0·01	Weather—very hot. Condition of crops good. A few cases of small-pox among cattle reported from Nator. Fodder and water plentiful. Price of common rice stationary.
		Nator	...	Nil	
		Naugaon	...	Nil	
	22	Rangpur	„ 20, '93	Nil	Weather—excessively hot. *Aus* and jute being weeded. Both crops promise well. Price of common rice 11 to 13 seers per rupee.
		Gaibanda	...	0·55	
		Nilphamari	...	Nil	
		Kurigram	...	Nil	
		Ulipur	...	Nil	
	23	Bogra	„ 20, '93	0·20	Weather—fine and hot. Sowing of *aus* and jute goes on. Prospects favourable. Common rice sells at 13½ seers per rupee. Fodder and water sufficient.
		Sherpur	...	0·68	
		Nowkhila	...	Nil	
	24	Pabna	„ 20, '93	Nil	Weather—hot and sultry. Sowing and weeding going on rapidly. Prospects of crops good. Price of rice at Sirajganj Rs. 3-2 to Rs. 5 per maund, and at Pabna 12 seers per rupee. Water-supply and fodder sufficient.
	25	Darjeeling	„ 20, '93	0·26	Weather—fine. *In the hills.*—Indian-corn, *marua, bhadoi* and potatoes progressing favourably. Wheat and barley being harvested. *In the terai:*—*Bhadoi* jute and sugarcane doing well. *Haimanti* paddy being sown in nurseries. Prices of coarse rice:— Srs. Hills ... ... 10 } per rupee. Terai ... ... 12 }
		Siliguri	...	0·51	
	26	Jalpaiguri	„ 20, '93	0·11	Weather—abnormally hot. Cultivation of jute and *bhadoi* completed. Common rice sells at 12 seers per rupee. Fodder and water-supply sufficient. No cattle-disease reported.

No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
BHAGALPUR DIVS.				
27	Monghyr Begusarai Jamui	May 20, '93	Nil Nil Nil	Weather—excessively hot. Ploughing for *bhadoi* going on. Indigo and sugarcane doing well. Cattle-disease reported towards Shekhpura. Fodder and water-supply sufficient. Prices of coarse rice:— Srs. Sadar ... ... 12 to 15 } per rupee. Begusarai ... ... 14 Jamui 11½
28	Bhagalpur Banka Madhipura Supaul	„ 20, '93	Nil Nil 0·06 0·14	Weather—hot and fine. Prospects of sugarcane and indigo good. *Bhadoi* and *aghani* sowings still in progress. Some more rain is wanted in the Bongong thana of Supaul subdivision. Common rice 14½ seers per rupee.
29	Purnea Kishanganj Araria	„ 20, '93	0·21 Nil 0·59	Weather—cloudy at beginning of the week; getting hotter daily; already very hot and close. Sowing of *aghani* going on. Other standing crops doing well. The fine weather after the late heavy rain has facilitated weeding. No cattle-disease. Fodder and water plentiful. Prices of common rice:— Srs. Sadar ... ... 13 } per rupee. Kishanganj ... ... 12 Araria 16
30	Malda Chanchal	„ 20, '93 ...	Nil 0·02	Weather—very warm and close during the week. Harvesting of *boro* paddy continues; estimated outturn 14 annas. *Bhadoi* crops thriving and are being weeded. Winter rice is being sown. Price of coarse rice varies from 11 to 14½ seers per rupee. No want of fodder or drinking water.
31	Sonthal Parganas Deoghur Godda Jamtara Pakur Rajmahal	„ 20, 93	Nil 0·50 Nil Nil Nil 3·59	Weather—growing very hot and oppressive with little wind. Sugarcane doing very well. *Boro dhan* being reaped. Land being prepared for *bhadoi* and winter paddy. Rice sells at from 11 to 13 seers per rupee. Fodder sufficient. Many wells drying up.
PATNA DIVISION.				
32	Patna	„ 20, '93	Nil	Weather—very hot. *Cheena* and sugarcane doing well. Fields being prepared for *bhadoi* crops. *Rabi* still being threshed and winnowed in places. Opium weighment has been completed. Prices of common rice:— Srs. Patna ... ... 15 } per rupee. Bihar ... ... 16¼ Barh ... ... 11¼ Dinapore 15
33	Gaya Nawada Jahanabad Aurangabad	„ 20, '93	Nil Nil Nil Nil	Weather—clear and hot. Ploughing for *bhadoi* crops begun. Sugarcane and *cheena* doing well. Mangoes are a failure. Price of rice slightly higher than before. Fodder and water-supply sufficient.
34	Shahabad	„ 20, '93	Nil	Weather—seasonable. Sugarcane thriving. *Cheena* crop being cut. Fodder and water sufficient. Prices stationary.
35	Darbhanga	„ 20, '93	Nil	Weather—very hot. Paddy, *mung* and indigo doing well. Lands being prepared for *bhadoi* sowings. No material change in prices. Fodder and water sufficient.
36	Muzaffarpur Sitamarhi Hajipur	„ 20, '93	Nil 0·15 Not received.	Weather—hot with west wind. Paddy being sown in low lands; that already sown germinating and doing well. Lands for *bhadoi* sowings being prepared. Fodder and water sufficient. A few cases of cattle-disease (*dokra*) reported from Sitamarhi subdivision; otherwise no cattle-disease.

	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR—*concld.*					
PATNA DIVISION—*concld.*	37	Saran	May, 20, '93	Nil	Weather—seasonably hot with west wind since five days. Threshing of *rabi* crop not quite completed. Ploughing for paddy going on. Prospects fair. Fodder and water sufficient. Prices of common rice:— Srs. c. Chapra ... ... 14 0; Siwan ... ... 12 0; Gopalganj ... ... 13 5 } per rupee.
		Siwan	...	Nil	
		Gopalganj	...	Nil	
	38	Champaran	„ 20, '93	Nil	Weather—very warm. Prospect of indigo fair, and that of food-crops good. Opium weighments have been finished. Fodder and water sufficient.
ORISSA.					
ORISSA DIVN.	39	Cuttack	„ 20, '93	Nil	Weather—warm. Sowing of *beali* has commenced. Supply of fodder and water sufficient. Price of rice unchanged.
	40	Puri	„ 18, '93	Nil	Weather—hot. Lands are being ploughed for the ensuing *sarad* crops. Miscellaneous crops good. Prices of rice stationary.
		Khurda	...	Nil	
		Banpur	...	3·61	
	41	Balasore	„ 20, '93	Nil	Weather—normal. Ploughing continues, but in parts has been impeded by excessive rain of last week. Prices stationary.
CHOTA NAGPUR.					
South-West Frontier Agency.					
CHOTA NAGPUR DIVN.	42	Hazaribagh	May, 20, '93	Nil	Weather—seasonable; very hot. Sugarcane doing well. Prospect of mango moderate. Fodder and water sufficient. Common rice at head-quarters 11 to 14 seers per rupee and at Giridi 8 to 12 seers per rupee.
		Giridi	...	0·37	
	43	Lohardaga	„ 20, '93	Nil	Weather—has become much hotter. Ploughing progressing. *Dhan* and *goondli* being sown.
	44	Palamau	...		Report not received.
	45	Singhbhum	„ 20, '93	Nil	Rain in the district, but none at head-quarters. It is still cloudy and hot. *Boro dhan* and cotton are the only crops on the ground. Price of common rice ranges from 10 seers per rupee in Ghatsilla to 12 seers in Chaibassa. Cattle-disease reported from one village in Kolhan.
	46	Manbhum	„ 20, '93	Nil	Weather—growing warmer daily. Ploughing in full swing. Mango crop very indifferent. Rice from 10 to 13 seers per rupee. Fodder and water sufficient.
		Gobindpur	...	Nil	

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 23rd May, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

PRICES-CURRENT (*RETAIL*) OF FOOD-GRAINS, FIREWOOD AND SALT IN THE HEAD-QUARTERS STATION BAZARS OF THE DISTRICTS OF BENGAL DURING THE FORTNIGHT ENDING THE 15TH MAY 1893.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the

QUANTITIES PER RUPEE IN

Number.	Division	DISTRICTS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE, COMMON.			JOWAR OR CHOLUM. (*Sorghum Vulgare.*)		
			Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		BENGAL.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
1	BURDWAN DIVISION.	Burdwan .	13 8	13 8	11 4	...	...	...	10 8	10 0	10 14	12 0	12 12	12 12	..	...	...
2		Bankura .	12 0	12 0	12 4	18 0	18 0	...	10 0	10 0	11 4	11 8	11 8	14 6		...	...
3		Birbhum ...	11 0	11 0	10 8	9 8	9 8	...	10 8	10 8	11 0	12 12	12 12	12 12	...	...	...
4		Midnapore ...	11 0	11 0	11 0	...	...	...	10 0	10 0	11 0	11 14	12 8	13 8	...	...	...
5		Hooghly ...	11 4	11 8	13 0	11 0	11 0	..	8 0	8 0	8 0	10 0	10 0	10 0	..	...	...
6		Howrah ...	...	...	...	...	...	...	9 0	10 0	9 0	12 0	13 5	11 8	...	...	...
	PRESIDENCY DIVISION.	Calcutta	12 8	12 0	10 15	18 13	18 13	14 7	7 6	7 6	7 13	10 0	10 0	10 7	20 0	20 0	15 3
7		24-Parganas ..	11 8	12 0	11 4	18 0	18 0	16 0	8 0	8 0	8 0	12 0	12 0	12 8	16 0	16 0	...
8		Nadia ..	14 6	14 6	11 13½	21 6	20 5	17 12½	9 15	9 11	10 0	12 4	11 3½	11 8½	...	...	...
9		Khulna ...	...	...	...	...	...	...	10 12	10 12	10 12	13 0	13 0	12 12	...	...	...
10		Jessore ..	11 8	12 0	10 0	...	...	...	10 0	10 4	10 0	12 8	13 4	13 0	...	...	...
11		Murshidabad ...	13 0	13 0	12 0	...	...	...	10 0	10 0	9 0	11 1	12 0	12 0	...	...	...
12	CHITTAGONG DIVISION.	Chittagong ...	10 0	10 0	9 4	...	...	...	11 0	11 0	8 8	13 0	13 4	11 5¼	...	...	...
13		Noakhali ...	...	...	...	...	...	...	9 13	9 5	11 0	11 8	12 0	12 0	...	...	...
14		Tippera ...	11 0	11 0	14 0	...	...	...	8 6	9 8	8 8	10 4	10 12	11 7	...	...	...
15		Chittagong Hill Tracts.	...	...	...	...	...	...	...	...	...	10 0	10 0	10 0	...	...	...
16	DACCA DIVISION.	Dacca ..	11 0	11 0	11 8	26 0	26 0	...	10 0	9 8	10 0	11 0	11 8	12 8	...	...	...
17		Faridpur ...	16 0	16 0	14 0	20 0	20 0	40 0	7 0	7 0	11 0	10 8	10 0	13 4	...	...	...
18		Backergunge ...	...	...	...	...	...	...	10 0	10 4	9 12	10 10	11 10	10 4	...	...	...
19		Mymensingh .	9 8	9 8	9 0	...	...	...	10 0	10 0	11 4	11 0	11 0	13 8	..	...	...
20	RAJSHAHI DIVISION.	Dinajpur ...	12 0	13 3	10 13	16 0	20 0	16 0	9 9	9 6	9 8	12 0	13 3	11 8	...	...	...
21		Rajshahi ...	15 0	11 4	12 12	24 0	24 0	19 8	10 2	10 8	10 8	11 4	11 10	11 4	...	..	...
22		Rangpur	10 0	12 12	10 0	...	...	...	8 11	10 0	9 0	11 0	11 0	11 0	...	...	...

A In the subdivisions the retail prices of salt per rupee are:—Kalna 10 seers, Katwa 11 seers, and Raniganj 10½ seers.
B At Vishnupur the retail price of salt is 11 seers per rupee.
C At Rampur Hat the retail price of salt is 11 seers per rupee.
D In the subdivisions the retail prices of salt per rupee are:—Contai 9 seers, Ghatal 10 seers 11 chitaks.
E In the subdivisions the retail prices of salt per rupee are:—Bhaddreswar 11½ seers and Jahanabad 11 seers 7 chitaks.
F At Ulubaria the retail price of salt is 11 seers per rupee.
G In the mufassal marts the retail prices of salt per rupee are:—Chetla Hát 12 seers 5 chitaks, Barasat 10 seers 10 chittaks, Magrahat 10 seers 10 chitaks, and Baduria 11 seers 7 chitaks.
H In the subdivisions the retail prices of salt per rupee are:—Bahadurkhali 10½ seers, Chuadanga 10 seers, Meherpur 10½ seers, and Ranaghat 10½ seers.
I In the subdivisions the retail prices of salt per rupee are:—Bagerhat 8 seers and Satkhira 11 seers.
J In the subdivisions the retail prices of salt per rupee are:—Jhenida 9 seers 9 chitaks, Magura 10 seers, Narail 9 seers 10 chitaks, and Bangaon 10 seers 11 chitaks.

Head-quarters Station Bazars of the Districts of Bengal on the 15th May, 1893.

Indian-corn or Maize. (*Zea Mays.*)			Arhar or Thur, Cadjan Pea. (*Cajanus Indicus.*)			Firewood.			Salt.			Wholesale prices per maund of 40 seers. Salt.			Districts.	Number.	Division
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.			
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.	BENGAL.		
...	...	...	22 0	20 0	17 0	106 0	106 0	100 0	A 11 2¼	11 2¼	11 4	3 6 8	3 6 8	3 5 4	Burdwan	1	Burdwan Division.
17 0	17 0	19 0	12 0	12 0	11 0	320 0	320 0	220 0	B 11 0	11 0	11 4	3 10 0	3 10 0	3 10 0	Bankura.	2	Burdwan Division.
...	...	...	14 0	12 0	11 4	240 0	250 0	200 0	C 10 12	10 12	10 8	3 12 6	3 12 6	3 10 0	Birbhum.	3	Burdwan Division.
...	...	...	19 0	19 0	10 8	210 0	240 0	120 0	D 11 7	11 7	10 8	3 7 0	3 7 0	3 12 0	Midnapore.	4	Burdwan Division.
...	...	...	11 0	11 0	11 0	140 0	140 0	140 0	E 11 0	11 0	10 0	3 6 0	3 6 0	3 12 0	Hooghly.	5	Burdwan Division.
...	...	...	10 10	10 10	12 4	105 0	105 0	100 0	F 10 10	10 10	10 8	3 8 0	3 8 0	3 6 0	Howrah.	6	Burdwan Division.
20 0	20 0	15 3	20 0	21 5	14 12	85 0	85 0	86 0	10 7	9 8	11 3	3 13 0	4 0 0	3 4 9	Calcutta.		
18 0	...	...	21 0	21 0	17 8	100 0	100 0	100 0	G 11 0	11 0	11 0	3 4 6	3 4 6	3 5 0	24-Parganas.	7	Presidency Division.
...	...	...	23 3	20 8	17 12½	128 0	128 0	128 0	H 10 14	10 0	10 10¼	3 7 0	3 8 0	3 8 0	Nadia.	8	Presidency Division.
...	...	...	10 12	10 0	...	160 0	160 0	140 0	I 10 8	10 8	9 0	3 12 0	3 12 0	4 0 0	Khulna.	9	Presidency Division.
...	...	...	16 0	16 0	18 0	120 0	120 0	160 0	J 9 14	9 14	9 2	3 10 0	3 10 0	3 10 0	Jessore.	10	Presidency Division.
...	...	...	20 0	20 0	17 0	200 0	200 0	200 0	K 10 8	10 8	10 8	3 7 0	3 7 0	3 12 0	Murshidabad.	11	Presidency Division.
...	...	...	..	...	...	106 0	106 0	110 0	9 0	10 0	9 0	3 14 0	3 12 0	4 6 0	Chittagong.	12	Chittagong Division.
...	..	...	...	...	9 0	...	...	...	L 10 0	10 0	8 0	3 13 0	3 14 0	4 12 0	Noakhali.	13	Chittagong Division.
...	...	...	12 0	12 0	8 0	...	.	...	M 10 13½	10 13½	9 0	3 12 0	3 12 0	4 0 0	Tippera.	14	Chittagong Division.
...	...	...	...	...	...	240 0	240 0	210 0	8 0	8 0	8 0	4 8 0	4 8 0	4 12 0	Chittagong Hill Tracts.	15	Chittagong Division.
...	...	...	16 0	16 0	14 0	120 0	120 0	120 0	N 10 0	10 0	10 0	3 9 0	3 9 0	3 8 0	Dacca.	16	Dacca Division.
...	...	.	...	...	...	...	...	...	O 10 12	10 12	10 0	3 12 0	3 12 0	3 15 0	Faridpur.	17	Dacca Division.
Musuri. 8 8	8 6	..	11 12	Mug. 8 6	...	80 0	80 0	80 0	P 11 4	10 8	10 0	3 10 0	3 8 0	3 12 0	Backergunge.	18	Dacca Division.
...	...	...	13 0	13 0	...	120 0	120 0	...	Q 10 0	10 0	10 0	4 0 0	4 0 0	3 15 0	Mymensingh.	19	Dacca Division.
...	...	...	18 6	24 0	16 0	160 0	160 0	160 0	10 8	10 8	10 4	4 0 0	4 0 0	3 12 0	Dinajpur.	20	Rajshahi Division.
...	...	...	20 2	20 14	20 1	240 0	240 0	240 0	R 9 9	9 9	9 9	3 10 8	3 10 8	3 10 8	Rajshahi.	21	Rajshahi Division.
...	...	..	8 0	8 0	9 0	160 0	160 0	100 0	S 9 0	9 0	10 0	4 0 0	4 0 0	4 0 0	Rangpur.	22	Rajshahi Division.

K In the subdivisions the retail prices of salt per rupee are :—Jangipur 10½ seers and Kandi 11 seers.
L At Fenny the retail price of salt is 9 seers per rupee.
M In the subdivisions the retail prices of salt per rupee are :—Chandpur 9 seers and Brahmanbaria 9 seers 2 chitaks.
N In the mufassal marts the retail prices of salt per rupee are :—Madanganj 10 seers, Manikganj 9 seers 13 chitaks, Mirkadim 10 seers, and Munshirhat 10 seers.
O In the Goalundo and Madaripur subdivisions the retail price of salt is 10 seers per rupee.
P In the subdivisions the retail prices of salt per rupee are :—Pirojpur 10¼ seers, Patuakhali 9 seers, and Bhola 9 seers.
Q In the Netrakona, Kishorganj, Kagmari, and Jamalpur subdivisions the retail price of salt is 10 seers per rupee.
R In the subdivisions the retail prices of salt per rupee are :—Nator 9 seers and Naugaon 9 seers 9 chitaks.
S In the subdivisions the retail prices of salt per rupee are :—Gaibanda 10 seers, Nilphamari 10 seers, and Kurigram 8 seers.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the Head-quarters

Division	Number.	DISTRICTS.	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum (Sorghum Vulgare.) Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
			QUANTITIES PER RUPEE IN														
BENGAL—*continued.*			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Rajshahi Division—*contd.*	23	Bogra ...	12 0	10 0	12 0	...	...	...	8 4	8 4	9 0	12 0	12 12	13 8	...	...	...
	24	Pabna	17 10	15 12	13 8	22 8	22 8	...	6 0	6 0	6 12	12 0	12 4	12 12	...	...	...
	25	Darjeeling	9 0	8 0	8 0	10 0	10 0	8 0	5 0	5 0	5 0	10 0	10 0	9 0	..	...	...
	26	Jalpaiguri	11 0	11 0	10 0	16 0	13 0	15 0	10 0	10 0	7 0	12 0	12 0	10 8	.	...	...
BIHAR.																	
Bhagalpur Division.	27	Monghyr ...	14 8 to 16 12	14 11 to 16 13	13 6 to 14 7	21 0 to 23 0	21 0 to 23 1	18 14	8 0 to 10 8	7 13 to 10 8	9 7	12 0 to 13 8	12 9 to 13 10	11 0	17 12	17 13	...
	28	Bhagalpur ...	15 2	14 10	13 10	18 15	18 15	16 6	12 10	12 10	10 1	11 8	15 2	11 6	...	...	...
	29	Purnea (Kasba)*	...	16 0	16 0	...	...	16 0	...	11 0	10 0	...	13 0	12 0	...	...	...
	30	Malda (English Bazar).	14 8	15 0	13 4	...	...	...	10 0	9 0	10 0	13 0	13 0	11 0	...	...	...
	31	Sonthal Parganas.	11 0	11 0	11 0	...	...	...	11 0	10 0	9 0	14 0	14 0	11 0	...	...	...
Patna Division.	32	Patna ...	16 0 15 0	Red. 14 8 White. 13 4	14 0 13 0	22 0	22 0	20 0	10 0	10 0	9 0	15 0	15 8	12 8	24 0	21 0	20 0
	33	Gaya ...	14 0	14 0	13 0	20 0	20 0	17 0	9 8	9 8	8 8	13 4	13 4	11 0	19 0	19 0	...
	34	Shahabad ...	14 0	13 0	13 8	18 0	18 0	18 0	8 0	8 0	8 0	14 0	13 12	11 0	...	...	...
	35	Darbhanga ...	13 3	13 3	13 3	13 0	19 0	17 9	11 0	10 8	9 14	11 5	13 8	12 1	...	...	...
	36	Muzaffarpur ...	14 0	14 0	12 0	20 0	21 0	17 0	8 0	8 0	10 0	11 0	14 0	11 0	...	...	...
	37	Saran ...	14 4	13 12	13 4	20 8	19 4	19 0	10 0	10 0	8 4	13 0	13 12	11 5	...	...	...
	38	Champaran ...	11 4	11 12	12 8	...	19 4	19 0	8 8	9 0	8 0 to 9 0	15 0	15 0	12 8 to 13 0	...	...	...
ORISSA.																	
Orissa Division.	39	Cuttack ...	13 2	13 2	10 13	...	...	...	10 8	10 8	9 3	14 7	14 7	13 2	...	...	...
	40	Puri ...	9 3	9 3	10 8	...	...	...	9 3	9 3	10 8	15 12	15 12	13 0	...	...	...
	41	Balasore ...	11 0	11 0	11 0	10 0	10 0	10 0	10 0	10 0	11 0	15 0	15 0	14 0	...	...	...
CHOTA NAGPUR.																	
Chota Nagpur Division.	42	Hazaribagh ...	11 8	13 0	12 8	15 0	15 0	14 0	7 0	7 0	8 0	11 8	12 8	13 0	...	...	...
	43	Lohardaga ...	10 0 to 12 0 7 0 to 8 0	Red. 12 0 White. 7 0 to 8 0	12 8 8 8 to 10 0	15 0	18 0	11 8	10 0 to 11 0	10 0 to 11 0	12 0	12 8 to 13 8	12 0 to 13 8	13 8 to 15 0	...	...	...
	44	Palamau ...	14 1	13 8	12 6	23 10	23 10	18 9	11 4	10 11	12 6	14 10	14 1	14 1	...	...	...
	45	Singhbhum ...	11 0	12 0	14 0	10 0	11 0	20 0	8 0	8 0	13 0	10 0	11 0	16 0	...	...	...
	46	Manbhum	13 0	13 8	11 0	16 0	16 0	20 0	9 0 to 9 8	9 0 to 11 0	12 0	11 0 to 14 0	11 8 to 14 0	17 0	...	...	...

* Present return not received.

T At Sirajganj the retail price of salt is 11 seers per rupee.
U In the Alipur subdivision the retail price of salt is 8 seers per rupee.
V In the Begusarai and Jamui subdivisions the retail price of salt is 10 seers per rupee.
W In the subdivisions of Banka, Madhipura, and Supaul the retail price of salt is 10 seers per rupee.
X In the subdivisions the retail prices of salt per rupee are—Kishanganj 10½ seers and Araria 10 seers.
Y In the subdivisions the retail prices of salt per rupee are :—Deoghur 10½ seers, Rajmahal 10 seers, Godda 9 seers, Pakur 10½ seers.
Z In the subdivisions the retail prices of salt per rupee are :—Barh 11 seers, Dinapur 10 seers, and Bihar 10 seers.
a In the subdivisions the retail prices of salt per rupee are :—Jahanabad 10 seers, Aurangabad 9½ seers, and Nawada 9 seers.

CALCUTTA,
The 23rd May, 1893.

Station Bazars of the Districts of Bengal on the 15th May, 1893—(concluded).

Indian-corn or Maize (*Zea Mays.*) Present return.	Next preceding return.	Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus indicus.*) Present return.	Next preceding return.	Corresponding return of last year.	Firewood. Present return.	Next preceding return.	Corresponding return of last year.	Salt. Present return.	Next preceding return.	Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt. Present return.	Next preceding return.	Corresponding return of last year.	Districts.	Number.	
															BENGAL—*continued.*		
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
...	...	...	...	...	...	90 0	90 0	90 0	9 10	9 10	9 12	3 14 8	3 13 4	3 14 8	Bogra.	23	Rajshahi Division—*concld.*
...	...	...	22 8	22 8	16 8	200 0	200 0	200 0	[T] 10 8	10 8	9 12	3 10 0	3 10 0	3 12 0	Pabna.	24	
11 0	11 0	12 0	8 0	8 0	8 0	120 0	120 0	120 0	8 0	8 0	8 0	4 10 0	4 10 0	5 0 0	Darjeeling	25	
...	...	...	10 0	10 0	8 0	120 0	200 0	160 0	[U] 10 0	10 0	10 0	4 0 0	4 0 0	4 0 0	Jalpaiguri	26	
															BIHAR.		
21 0 to 23 0	21 0 to 23 1	16 12 to 17 1	19 0 to 21 0	19 11 to 21 0	16 12 to 18 6	160 0	117 0 to 168 0	147 0 to 178 8	[V] 10 8 to 11 0	10 8 to 11 0	10 8 to 10 12	3 7 6	3 7 6	3 8 0	Monghyr.	27	Bhagalpur Division.
21 7	21 7	16 6	20 3	18 12	17 10	126 4	137 8	161 0	[W] 10 11	10 11	10 11	3 12 0	3 12 0	3 12 0	Bhagalpur.	28	
...	...	16 0	...	16 0	13 0	...	320 0	...	[X] ...	10 0	9 0	...	3 10 2	4 7 0	Purnea.	29	
...	.	...	11 0	11 0	...	160 0	160 0	120 0	10 0	10 0	10 0	4 0 0	1 0 0	3 12 0	Malda	30	
19 0	20 0	13 0	22 8	23 0	16 0	200 0	200 0	200 0	[Y] 10 8	10 8	10 0	3 10 3	3 10 3	3 10 3	Sonthal Parganas	31	
20 8	22 0	20 0	22 8	22 8	22 0	130 0	130 0	120 0	[Z] 11 0	11 8	11 8	3 11 0	3 8 0	3 8	Patna.	32	Patna Division.
19 8	19 0	16 8	19 0	19 0	18 0	120 0	120 0	160 0	[a] 10 0	10 0	10 0	3 12 0	3 12 0	3 14 0	Gaya.	33	
20 0	20 0	...	20 0	20 0	18 0	160 0	160 0	140 0	[b] 11 0	11 0	10 8	3 10 0	3 12 0	...	Shahabad.	34	
21 0	22 8	17 9	21 0	21 8	18 0	176 0	176 0	160 0	[c] 10 4	10 0	11 0	3 12 0	3 14 0	3 6 0	Darbhanga.	35	
19 0	21 0	16 0	20 0	21 0	18 0	160 0	160 0	160 0	[d] 11 0	11 0	11 0	3 10 0	3 10 0	3 10 0	Muzaffarpur	36	
20 4	20 8	18 4	21 8	20 12	19 8	210 0	210 0	160 0	[e] 10 8	10 8	10 8	3 11 0	3 11 6	3 12 0	Saran.	37	
22 4	21 8	17 8	Old. 15 12, New 19 0	19 0	19 0	160 0	160 0	160 0	[f] 10 4	10 8	10 8	3 13 0	3 12 0	3 12 0	Champaran.	38	
															ORISSA.		
...	..	...	18 6	18 6	16 6	80 0	80 0	80 0	[g] 9 4	9 4	11 0	3 10 0	3 10 0	3 12 0	Cuttack.	39	Orissa Division.
...	...	...	15 12	15 12	13 13	80 0	80 0	80 0	9 3	9 3	12 0	3 12 0	4 0 0	3 6 0	Puri.	40	
...	...	...	10 12	10 12	...	160 0	160 0	110 0	[h] 11 0	11 0	10 8	3 6 0	3 6 0	3 11 0	Balasore.	41	
															CHOTA NAGPUR.		
17 0	17 8	17 8	17 0	17 8	17 0	240 0	240 0	240 0	[i] 9 0	9 0	9 0	3 13 6	3 13 6	3 15 0	Hazáribágh.	42	Chota Nagpur Division.
20 0	20 0	18 0	Big. 13 0; Small. 16 0	Big. 13 0; Small. 16 0	Big. 11 0; Small. 13 0	110 0	110 0	160 0	9 8	9 8	9 0	4 1 0	4 2 0	4 8 0	Loharoaga.	43	
23 10	...	16 14	30 6	33 12	13 9	...	...	.	9 0	8 7	8 1	...	...	.	Palámau.	44	
...	...	...	13 0	11 0	16 0	100 0	100 0	160 0	9 0	9 0	9 0	4 6 0	4 6 0	4 4 0	Singbhum.	45	
18 0	18 0	...	17 0	18 0	15 0	...	...	...	[j] 10 10	10 10	10 10	3 11 0	3 11 0	3 14 0	Manbhum.	46	

b In the subdivisions the retail prices of salt per rupee are :—Buxar 10½ seers, Sasaram 10½ seers, and Bhabhua 9¾ seers.
c In the subdivisions the retail prices of salt per rupee are :—Samastipur 10 seers and Madhubani 11 seers.
d In the subdivisions the retail prices of salt per rupee are :—Sitamarhi 11 seers and Hajipur 10½ seers.
e In the subdivisions the retail prices of salt per rupee are :—Siwan 11 seers 5 chitaks, Gopalganj (Mirganj) 11 seers 13 chitaks.
f At Bettia the retail price of salt is 10 seers per rupee.
g In the subdivisions the retail prices of salt per rupee are :—Jajpur 9 seers, Kendrapara 9 seers, and Banki 11¼ seers.
h At Bhadrak the retail price of salt is 9 seers per rupee.
i At Giridih the retail price of salt is 11 seers per rupee.
j At Gobindpur the retail price of salt is 11 seers per rupee.

Published for general information.

H. H RISLEY,
Secretary to the Govt. of Bengal.

PRICES-CURRENT (wholesale) of Food-grains, Firewood, and Salt

Number.	MARTS.	Wheat.			Barley.			Rice, best sort.			Rice common.		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
1	Calcutta ...	3 3 0	3 5 0	3 5 9	2 3 0	2 2 0	2 7 6	5 6 0	5 6 0	4 13 6	4 0 0	4 0 0	3 9 3
2	Sirajganj ...	2 10 0	2 12 0	3 4 0	.	..	...	6 0 0	6 0 0	5 0 0	3 12 0	3 8 0	3 4 0
3	Dacca ...	3 10 0	3 10 0	3 8 0	1 8 0	1 8 0	..	1 4 0	4 4 0	4 0 0	3 8 0	3 13 0	3 2 0
4	Narayanganj*		...	...		...	...			3 0 0		...	2 10 0
5	Chittagong	4 0 0	4 0 0	4 2 0	...	...	...	3 6 0	3 6 0	4 8 0	3 0 0	2 15 0	3 8 8
6	Patna ...	2 8 0 2 10 0	Red. 2 11 6 White. 3 0 0	2 13 3 3 0 6	1 13 0	1 13 0	2 0 0	4 0 0	4 0 0	4 7 3	2 10 0	2 9 0	3 3 0
7	Balasore ...	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 8 0	2 10 0	2 10 0	2 14 0
8	Puri ...	4 4 0	4 4 0	3 12 9	...	...	...	4 4 0	4 4 0	3 12 9	2 8 0	2 8 0	3 1 3
9	Cuttack ...	3 0 0	3 0 0	3 8 0	...	...	...	3 10 0	3 10 0	4 4 0	2 12 0	2 12 0	3 0 0

* Return not received.

CALCUTTA,
The 23rd May, 1893.

in the undermentioned ***Marts of Bengal on the*** 15*th May*, 1893.

GRAM, CHANA, CHHOLA, KADALAY OR SUNAGA. (*Cicer Arietinum.*)			INDIAN-CORN OR MAIZE. (*Zea Mays.*)			ARHAR OR THUR, CADJAN PEA. (*Cajanus indicus.*)			FIREWOOD.			SALT.			MARTS.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
2 8 0	2 13 0	2 6 11	2 0 0	2 0 0	2 6 0	2 0 0	1 14 0	2 7 0	0 7 0	0 7 0	0 6 3	3 13 0	4 0 0	3 4 9	Calcutta.
3 0 0	3 4 0	2 1 0	...	...	...	...	...	...	0 6 6	0 6 6	0 6 6	3 9 0	3 8 0	3 7 0	Sirajganj.
3 0 0	3 0 0	2 10 0	...	...	...	2 8 0	2 8 0	2 13 0	0 5 0	0 5 0	0 5 0	3 9 0	3 9 0	3 8 0	Dacca.
...	...	3 4 0	...	...	...	...	...	3 8 0	...	...	0 8 0	...	...	3 8 0	Narayanganj.
3 8 0	3 8 0	3 6 0	...	...	...	...	...	...	0 6 0	0 6 0	0 5 0	3 14 0	3 12 0	4 6 0	Chittagong.
1 13 0	1 13 0	2 3 0	1 15 0	1 13 0	2 0 0	1 12 0	1 12 0	1 13 0	0 5 0	0 5 0	0 5 4	3 10 0	3 8 0	3 8 0	Patna.
2 14 0	2 14 0	2 12 0	...	...	...	3 10 0	3 10 0	...	...	...	...	3 6 0	3 6 0	3 14 0	Balasore.
2 8 0	2 4 0	2 15 0	...	...	...	2 8 0	2 8 0	2 15 0	0 8 0	0 8 0	0 8 0	3 12 0	4 0 0	3 6 0	Puri.
2 0 0	(Kalai.) 2 0 0	2 6 0	...	...	...	2 2 0	2 2 0	2 6 0	0 8 0	0 8 0	0 8 0	3 10 0	3 10 0	3 12 0	Cuttack.

Published for general information.

H. H. RISLEY,
Secretary to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS. Air pressure. Mean barometric height 8 A.M. reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. Prevailing direction.	Mean wind velocity.	Temperature. Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri	29·714	29·669	—	Calm	209	91·7	20th May	75·6	14th May	90·7	81·3	86·0
		Gopalpore	29·711	29·671	0	NNW	257	91·2	17th „	74·8	14th „	88·9	78·8	83·9
		False Point	29·720	29·682	—·003	W	219	91·0	20th „	71·1	14th „	90·0	78·2	84·1
	Cuttack	Cuttack	29·649	29·671	+·003	Calm	48	103·6	19th „	75·8	14th „	98·7	79·8	89·3
	Balasore	Balasore	29·675	29·676	+·004	SSW	115	96·4	20th „	75·7	14, 15th „	93·8	78·0	85·9
South-West Bengal.	Midnapore	Midnapore	29·592	29·686	+·015	S	173	103·4	20th „	77·1	14, 15, 16 „	99·7	78·5	89·1
	24-Parganas	Calcutta	29·716	29·682	+·002	SW	62	96·6	19th „	76·2	14th „	94·2	78·6	86·4
		Saugor Island	29·711	29·680	—·006	WSW	281	93·2	20th „	79·0	14th „	91·6	82·4	87·0
	Howrah													
	Hooghly													
	Nadia	*Krishnagar	29·682	29·677	+·002	SWly	85	?	?	?	?	?	?	-
	Khulna													
	Jessore	Jessore	29·704	29·684	—·009	SW	58	96·5	18, 19th „	75·4	14th „	94·4	78·5	86·5
	Burdwan	Burdwan	29·640	29·685	+·007	SW		100·1	20th „	76·7	14th „	95·4	79·0	87·2
		Raniganj	29·392	29·672	+·003	Variable	29	106·2	20th „	75·9	14th „	100·3	78·0	89·2
	Bankura	Bankura	29·404	29·619	+·005	Wly	56	105·1	20th „	77·5	14th „	99·6	78·9	89·2
	Birbhum													
	Murshidabad	Berhampore	29·664	29·678	—·002	SW	66	100·7	19, 20th „	74·3	14th „	96·5	78·6	87·6
North Bengal.	Pabna	Sirajganj	29·693	29·689	—·009	Calm	63	97·1	19th „	73·2	14th „	93·8	77·3	85·6
	Bogra	Bogra	29·661	29·674	—·004	Variable	47	98·2	19th „	74·2	14th „	95·1	76·9	86·0
	Rajshahi	Rampur Boalia.	29·657	29·676	—·004	SW	86	98·6	18, 19th „	72·7	14th „	95·3	77·4	86·1
	Malda	Malda	29·634	29·664	—	SW	55	100·6	19, 20th „	73·5	15th „	97·3	77·1	87·3
	Dinajpur	Dinajpur	29·615	29·685	—·025	Sly	39	98·6	19th „	76·2	14th „	96·0	78·7	87·4
	Rangpur	Rangpur	29·616	29·691	—·015	Calm	23	97·3	19th „	74·7	14th „	91·8	76·3	85·6
	Jalpaiguri	Jalpaiguri	29·465	29·701	—·013	ESE	45	100·0	19th „	71·6	14th „	95·7	75·1	85·4
	Kuch Bihar													
	Darjeeling	Darjeeling	22·983	—	+·055	Wly	135	69·1	17, 19th „	50·6	14th „	66·8	53·2	59·9
	Sikkim	Gnatong	19·223	—	—	Calm	64	53·9	18th „	26·1	14, 15th „	50·9	30·2	40·6
East Bengal.	Chittagong	Chittagong	29·669	29·637	—·035	NEly	71	91·2	18th „	74·1	19th „	90·1	76·5	83·3
	Chittagong Hill Tracts	Demagiri	Observations not received.											
	Backergunge	Barisal	29·728	29·686	—·008	Calm	40	95·3	17th May	73·9	14th „	93·2	80·2*	86·6*
	Noakhali	Noakhali	29·705	29·695	+·006	NWly	76	92·0	17 & 20 „	74·8	14th „	90·8	77·2	83·9
	Faridpur	Faridpur	29·719	29·713	0	Wly & Calm.	30	94·5	19th „	74·5	14th „	91·4	77·3	84·4
	Dacca	Dacca	29·715	29·685	—·022	Variable	68	95·1	18th „	77·7	14th „	93·3	79·0	86·2
	Tippera	Comilla	29·712	29·695	—·018	SW	66	94·3	17, 18, 19 „	75·8	19th „	93·3	78·2	85·7
	Mymensingh	Mymensingh	29·689	29·699	—·030	Variable	53	95·2	19th „	74·6	14th „	92·8	78·2	85·6
North Bihar.	Purnea	Purnea	29·597	29·674	—·007	Calm	22	101·3	19th „	74·2	14th „	97·8	76·9	87·4
	Bhagalpur	Bhagalpur	29·542	29·653	+·005	Calm	7	103·8	19th „	75·5	14th „	99·5	78·6	89·1
	Darbhanga	Darbhanga	29·544	29·661	—·015	E	48	103·5	20th „	73·7	14th „	98·9	75·5	87·2
	Muzaffarpur	Muzaffarpur	29·526	29·655	—	Calm	38	104·7	20th „	72·7	14th „	99·7	76·3	88·0
	Champaran	Motihari	29·476	29·655	—·006	Variable	62	105·2	20th „	69·8	16th „	100·5	71·9	86·2
	Saran	Chapra	29·526	29·656	+·016	Variable	108	107·2	20th „	73·6	17th „	103·0	78·5	90·8
South Bihar.	Shahabad	Dehri	29·342	29·639	+·011	Variable	54	108·4	20th „	72·0	16th „	104·7	77·7	91·2
		Buxar	29·464	29·653	+·016	E & W	80	106·5	19, 20th „	76·7	14, 18th „	103·2	79·5	91·4
		Arrah	29·511	29·649	+·020	Variable	64	107·4	20th „	75·0	14, 17th „	103·2	77·1	90·2
	Gaya	Gaya	29·326	29·647	+·007	SSE	126	108·1	19, 20th „	76·8	16, 17th „	104·0	79·7	91·9
	Patna	Bankipore	29·517	29·647	—·007	Variable	41	108·5	20th „	75·7	14th „	102·8	78·5	90·7
	Monghyr													
	Sonthal Parganas	Naya Dumka	29·219	29·656	—·013	ESE	71	105·2	20th „	74·3	14th „	99·1	78·9	89·1
Chota Nagpur.	Hazaribagh	Hazaribagh	27·744	29·646	+·020	Variable	165	101·7	20th „	73·8	15th „	97·5	75·8	86·7
	Lohardaga	Ranchi	27·626	29·646	+·016	Calm. SWly &	158	102·0	20th „	67·9	14th „	97·7	72·7	85·2
	Palamau	Daltonganj	29·607	—	—	N W	131	105·3	20th „	73·0	14th „	105·3	76·6	91·0
	Singhbhum	Chaibassa	28·962	29·660	+·023	SWly	36	106·8	20th „	73·2	14th „	101·4	78·1	89·8
	Manbhum													
Assam.	Sibsagar	Sibsagar	29·403	29·680	—·075	SW		95·6	17, 18, 20 „	75·0	14th „	94·7	77·3	86·0
	Goalpara	Dhubri	29·629	29·697	—·027	Calm	40	98·8	19th „	72·8	14th „	94·0	77·6	85·8
	Cachar	Silchar	29·650	29·704	—·044	Calm		98·1	19th „	74·3	14th „	94·7	76·2	85·5

* Means of 5 days. | † Mean of 6 days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period
The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 10
rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station
district, *i.e.*, from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one of

for the week ending Saturday, the 20th of May 1893.

Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	DISTRICT OBSERVATIONS. Of week. Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Rainfall. Since 1st of month. Mean for district.	Normal mean.	Variation.	Since 16th May 1893. Mean for district.	Normal mean.	Variation.	District.
—	84·7	82	4·3	Nil		0·64		0·85		1·68			0·33		Puri.
—0·7	83·8	82	0·1	Nil											
—1·2	85·4	79	4·6	Nil											
—1·0	86·1	71	1·7	Nil		0·56		0·94		1·84			0·38		Cuttack.
—0·6	85·9	82	0·4	0·07		0·88		1·41		2·93			0·60		Balasore.
+0·3	86·4	66	1·9	Nil	Nil	0·82	0·00	1·11	4·57	3·23	+1·34	Nil	0·48	—0·48	Midnapore.
+0·9	84·9	77	2·0	Nil	Nil	1·03	0·00	1·46	4·28	3·68	+0·60	Nil	0·63	—0·63	24-Parganas.
+0·8	85·5	80	5·7	Nil											
					Nil	0·94	0·00	1·39	4·82	4·10	+0·72	Nil	0·64	—0·64	Howrah.
					Nil	0·86	0·00	1·45	3·05	3·67	—0·62	Nil	0·61	—0·61	Hooghly.
	?	?	3·7	Nil	0·58	0·99	0·40	1·48	3·55	3·66	—0·11	Nil	0·69	—0·69	Nadia.
+0·8	84·7	82	4·1	Nil	Nil	0·93	0·00	1·27	4·01	4·34	—0·33	Nil	0·61	—0·61	Khulna.
					0·28	1·21	0·20	1·64	4·75	4·36	+0·39	Nil	0·76	—0·76	Jessore.
0	85·1	71	3·0	Nil	Nil	0·83	0·00	1·38	6·07	3·20	+2·87	Nil	0·60	—0·60	Burdwan.
+0·6	85·0	73	0	Nil											
—1·3	86·5	67	1·7	Nil	Nil	0·65	0·00	1·15	4·57	2·33	+2·24	Nil	0·47	—0·47	Bankura.
					Nil	0·60	0·00	1·12	2·71	1·91	+0·80	Nil	0·41	—0·41	Birbhum.
+1·4	83·8	79	3·9	Nil	0·05	0·70	0·33	1·39	2·28	2·73	—0·45	Nil	0·55	—0·55	Murshidabad.
+3·1	84·0	80	3·6	0·02	Nil	1·37	0·00	1·88	4·07	4·37	—0·30	Nil	0·93	—0·93	Pabna.
+2·4	85·2	75	0·1	0·20	0·22	1·09	0·50	1·61	5·43	4·19	+1·24	Nil	0·82	—0·82	Bogra.
+1·0	85·2	75	1·6	Nil	0·01	0·97	0·00	1·40	3·82	3·33	+0·49	Nil	0·56	—0·56	Rajshahi.
—	87·7	70	0	Nil	0·01	0·68	0·00	1·03	2·02	2·23	—0·21	Nil	0·44	—0·44	Malda.
+4·8	84·2	76	0·9	Nil	0·10	0·78	0·20	1·02	3·90	2·64	+1·26	Nil	0·57	—0·57	Dinajpur.
+5·6	84·8	83	0·3	Nil	Nil	1·91	0·00	2·05	4·13	5·59	—1·46	Nil	1·53	—1·53	Rangpur.
+6·3	83·8	71	3·7	0·12	0·11	1·65	1·00	2·26	1·71	5·58	—3·87	0·11	1·09	—0·98	Jalpaiguri.
					0·04	2·40	0·25	2·33	2·48	6·49	—4·01	0·04	1·78	—1·74	Kuch Bihar.
+3·1	60·1	88	5·4	0·26	1·58	2·21	1·60	2·80	4·12	5·74	—1·62	1·56	1·45	+0·11	Darjeeling.
—	47·0	70	1·9		1·69	2·05	2·50	1·88	6·89						Sikkim.
+1·4	82·1	87	7·1	2·52	1·69	2·05	2·50	1·88	6·89	6·43	+0·46	1·69	1·44	+0·25	Chittagong.
+3·0	85·1	79	3·9	Nil	1·69	1·44	4·00	1·90	10·67	6·70	+3·97	1·69	0·80	+0·89	Chittagong Hill Tracts.
					0·11	1·35	0·25	1·76	5·98	4·75	+1·23	0·11	0·87	—0·76	Backergunge.
+1·7	84·6	72	2·1	0·01	0·58	1·64	1·00	1·93	5·47	6·98	—1·51	0·58	1·13	—0·55	Noakhali.
+1·3	83·5	83	1·7	Nil	0·05	1·33	0·33	2·06	4·06	5·37	—1·31	Nil	0·95	—0·95	Faridpur.
+2·2	84·1	79	4·3	Nil	Nil	1·47	0·00	2·10	5·64	5·91	—0·27	Nil	0·88	—0·88	Dacca.
+3·2	84·3	84	3·0	Nil	N	1·65	0·00	2·12	7·28	7·14	+0·14	Nil	1·03	—1·03	Tippera.
+4·5	84·1	82	3·1	0·03	0·01	1·72	0·00	2·47	5·73	6·10	—0·37	Nil	1·07	—1·07	Mymensingh.
+3·3	85·2	71	0	Nil	Nil	0·71	0·00	0·96	1·35	2·68	—1·33	Nil	0·58	—0·58	Purnea.
+3·1	88·7	59	0·3	Nil	Nil	0·58	0·00	0·73	3·76	1·80	+1·96	Nil	0·46	—0·46	Bhagalpur.
+1·5	86·3	63	0	Nil	Nil	0·37	0·00	0·56	3·04	1·59	+1·45	Nil	0·24	—0·24	Darbhanga.
—	86·6	64	0	Nil	Nil	0·38	0·00	0·65	1·53	1·41	+0·12	Nil	0·29	—0·29	Muzaffarpur.
+1·4	85·7	57	0·3	Nil	Nil	0·42	0·00	0·71	1·34	1·66	—0·32	Nil	0·35	—0·35	Champaran.
+3·3	90·7	52	0·3	Nil	Nil	0·22	0·00	0·34	1·10	1·16	—0·06	Nil	0·18	—0·18	Saran.
+0·5	90·9	42	0	Nil											
+1·5	90·1	39	0·7	Nil	Nil	0·15	0·00	0·35	1·41	0·56	+0·85	Nil	0·09	—0·09	Shahabad.
+0·6	89·5	47	2·0	Nil											
+0·7	89·2	53	1·0	Nil	Nil	0·18	0·00	0·37	1·61	0·56	+1·05	Nil	0·15	—0·15	Gaya.
+2·2	92·3	38	0	Nil	Nil	0·22	0·00	0·33	1·92	0·86	+1·06	Nil	0·16	—0·16	Patna.
					Nil	0·36	0·00	0·63	2·26	1·13	+1·13	Nil	0·29	—0·29	Monghyr.
+0·7	88·3	56	0	Nil	Nil	0·56	0·00	0·97	4·15	1·89	+2·26	Nil	0·44	—0·44	Sonthal Parganas.
+0·3	88·1	35	0	Nil	Nil	0·20	0·00	0·50	2·29	1·12	+1·17	Nil	0·56	—0·56	Hazaribagh.
—0·6	86·2	38	0·1	Nil	Nil	0·45	0·00	0·65	2·58	1·13	+1·45	Nil	0·35	—0·35	Lohardaga.
—	89·5	41	0·0	0·02	Nil	0·023	0·00	0·47	0·02	0·51	—0·49	Nil	0·18	—0·18	Palamau.
—1·2	85·2	68	1·0	Nil	Nil	0·85	0·00	1·37	2·46	2·31	+0·15	Nil	0·68	—0·68	Singhbhum.
					Nil	0·63	0·00	0·84	2·14	1·62	+0·52	Nil	0·30	—0·30	Manbhum.
+7·0	82·7	83	2·3	Nil											Assam.
+0·3	83·7	77	3·1	Nil											
+5·2	83·8	82	5·7	0·32											

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 20th of May 1893.

Meteorological Division.	District.	Station.	Rainfall.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th May 1893.	Average rainfall from 16th May to date.
			Sunday, 14th.	Monday, 15th.	Tuesday, 16th.	Wednesday, 17th.	Thursday, 18th.	Friday, 19th.	Saturday, 20th.							
Orissa	Puri ...	Puri ...	...	...	...	...	...	...	...	Nil	Nil	0·68	2·76	1·52	Nil	0·40
		Khurda ...										0·93		1·99		0·59
		Banpur ...	...	...	...	...	...	...	...	Nil	Nil	0·24	4·98	1·31	Nil	0·07
		False Point ...	...	...	...	...	...	...	...	Nil	Nil	0·71	4·07	1·90	Nil	0·46
		Gop ...										?		?		?
		Satpara ...	...	...	...	...						?		?		?
		Pipli ...	...	...	...	...	...	...	...	Nil	Nil	?	3·64	?	Nil	?
	Cuttack ...	Jagatsingpore	...	...	...	...	...	...	...	Nil	Nil	0·31	7·16	1·75	Nil	0·18
		Banki ..	0·19									0·54		0·96		0·50
		Cuttack ...	...	...	...	...	...	...	...	Nil	Nil	0·62	5·53	1·82	Nil	0·43
		Kendrapara ...	...	...	...	...	...	...	...	Nil	Nil	0·72	4·50	2·31	Nil	0·42
		Jajpur ..	...	0·07	...	...	...	...	...	Nil	0·07	0·63		2·39	N l	0·36
		Dharmsala ...	...	...	...	...	...	...	...	Nil	Nil	?	4·34	?	Nil	?
		Salipore ...										?		?		?
		Pal Lahara .										?		?		?
	Balasore ..	*Akhyapada* ..	...	...	..	...	...	...	...	Nil	Nil	?	1·97	?	Nil	?
		Chandbali ..	...	...	...	...	...	...	...	Nil	Nil	0·52	3·89	3·06	Nil	0·47
		Bhadrak ..	...	...	...	...	...	...	...	Nil	Nil	1·19	2·59	3·14	Nil	0·87
		Soro ...										0·95		2·93		0·76
		Balasore ..	...	...	...	..	...	...	...	Nil	Nil	0·97	5·69	2·99	Nil	0·75
		Jellasore ...	..	...	...	...	...	...	...	Nil	Nil	0·61	4·07	2·19	Nil	0·45
		Baripodah ..	.	...	...	..	...	...	...	Nil	Nil	1·06	3·71	3·31	Nil	0·29
South-West Bengal.	Midnapore .	Contai ...	..	...	...	...	...	...	...	Nil	Nil	0·70	3·56	3·00	Nil	0·43
		Tamluk ..	...	...	...	...	...	...	...	Nil	Nil	0·81	5·08	3·06	Nil	0·43
		Midnapore ...	...	...	...	...	...	...	...	Nil	Nil	0·93	3·60	3·31	Nil	0·60
		Ghatal ...	...	...	...	...	...	...	..	Nil	Nil	0·82	5·85	4·02	Nil	0·46
		Kukrahaty ...	...	...	...	...	...	...	...	Nil	Nil	?	6·03	?	Nil	?
		Garhbeta ...	...	...	...	..	...	...	...	Nil	Nil	?	2·46	?	Nil	?
		Panskura ...	...	...	...	...	...	...	..	Nil	Nil	?	3·81	?	Nil	?
		Dantoon ..	...	...	...	...	...	...	...	Nil	Nil	?	3·75	?	Nil	?
	24-Parganas ...	Saugor Island	...	...	...	...	...	...	...	Nil	Nil	0·93	4·94	2·97	Nil	0·60
		Diamond Harbour ...	...	...	...	...	...	...	...	Nil	Nil	1·14	7·18	3·63	Nil	0·62
		Canning Town	...	...	...	...	...	...	...	Nil	Nil	?	8·19	?	Nil	?
		Alipore (Observatory.)	...	...	...	...	...	...	...	Nil	Nil	1·02	5·15	3·67	Nil	0·56
		Barrackpore...	...	...	...	...	...	...	...	Nil	Nil	0·83	1·78	3·47	Nil	0·31
		Dum-Dum ...	...	...	...	...	...	...	...	Nil	Nil	0·91	4·32	3·72	Nil	0·52
		Barasat ..	...	...	...	...	...	...	...	Nil	Nil	1·08	1·87	4·17	Nil	0·77
		Basirhat ...	...	..	...	...	...	...	...	Nil	Nil	1·31	4·70	4·15	Nil	1·05
	Howrah ...	Howrah	...	...	...	...	...	...	...	Nil	Nil	0·93	4·26	3·65	Nil	0·53
		Mohesreka ...	...	...	...	...	...	...	...	Nil	Nil	0·95	5·38	4·54	Nil	0·74
		Uluberia ...	...	...	...	...	...	...	...	Nil	Nil	?	5·14	?	Nil	?
	Hooghly ...	Serampore ...	...	...	...	...	...	...	...	Nil	Nil	0·61	2·26	3·54	Nil	0·37
		Hooghly ...	...	...	...	...	...	...	...	Nil	Nil	0·95	1·69	4·09	Nil	0·63
		Jahanabad ..	...	...	...	...	...	...	...	Nil	Nil	1·03	5·22	3·41	Nil	0·82
	Nadia ...	Ranaghat .	...	...	...	...	...	...	...	Nil	Nil	0·97	3·51	3·00	Nil	0·58
		Krishnagar ...	...	...	...	...	...	...	...	Nil	Nil	1·23	3·69	3·84	Nil	0·75
		Chuadanga ..	2·30	...	...	...	...	...	...	1	2·30	1·26	4·07	4·36	Nil	0·93
		Meherpore ...	...	...	...	...	...	...	...	Nil	Nil	0·56	3·26	3·19	Nil	0·31
		Kushtia .	0·60	...	...	...	...	...	...	1	0·60	0·92	3·21	3·87	Nil	0·72
	Khulna ...	Satkhira ..	..	...	...	...	...	...	...	Nil	Nil	0·69	4·56	3·82	Nil	0·46
		Bagerhat ..	...	...	...	...	..	...	...	Nil	Nil	1·17	4·48	4·68	Nil	0·85
		Khulna ...	...	..	..	...	...	...	...	Nil	Nil	0·94	3·00	4·54	Nil	0·52
		Nakipur ...										?		?		?
		Rampal ...	...	...	...	...	...	...	...	Nil	Nil	?	3·54	?	Nil	?
	Jessore ...	Narail .	...	...	...	...	...	...	...	Nil	Nil	1·33	4·66	4·81	Nil	0·30
		Jessore ...	...	...	...	...	...	...	...	Nil	Nil	1·24	7·02	4·82	Nil	0·68
		Jhenidah ...	...	...	...	...	...	...	...	Nil	Nil	1·29	4·31	3·98	Nil	0·95
		Magura ...	...	...	...	...	...	...	...	Nil	Nil	1·46	4·19	4·08	Nil	1·04
		Bangaon ...	1·40	...	...	...	...	...	...	1	1·40	0·75	3·59	3·25	Nil	0·34
	Burdwan ...	Kalna ..	...	...	...	...	...	...	...	Nil	Nil	0·72	3·55	3·43	Nil	0·51
		Burdwan ...	...	...	...	...	...	...	...	Nil	Nil	0·71	7·44	2·89	Nil	0·60
		Katwa ..	...	...	...	...	...	...	...	Nil	Nil	1·06	5·47	3·35	Nil	0·68
		Raniganj ...	...	...	...	...	...	...	...	Nil	Nil	0·77	6·55	1·80	Nil	0·61
		Mankur ...	...	...	...	...	...	...	...	Nil	Nil	?	4·68	?	Nil	?
	Bankura ..	Bankura ...	...	...	...	...	...	...	...	Nil	Nil	0·74	7·30	2·21	Nil	0·55
		Vishnupur ...	...	..	...	...	...	...	...	Nil	Nil	0·82	3·54	3·25	Nil	0·43
		Maliara ..	...	...	...	...	...	...	...	Nil	Nil	0·40	5·45	1·78	Nil	0·38
		Khatra ...	...	...	...	...	...	...	...	Nil	Nil	0·64	1·95	2·04	Nil	0·50
		Indas ..	...	...	...	...	..	...	...	Nil	Nil	?	5·48	?	Nil	?
		Kotalpur ..	...	...	...	...	...	...	...	Nil	Nil	?	2·44	?	Nil	?
		Onda	...	...	...	...	...	...	...	Nil	Nil	?	5·82	?	Nil	?
		Gangajalghati	..	...	...	...	...	...	...	Nil	Nil	?	5·71	?	Nil	?
		Raipur ...	...	...	...	...	...	...	...	Nil	Nil	?	4·32	?	Nil	?
		Sonamukhi ...	...	...	...	...	...	...	...	Nil	Nil	?	6·22	?	Nil	?
	Birbhum ...	Suri ...	...	...	...	...	...	...	...	Nil	Nil	0·71	2·68	1·87	Nil	0·33
		Hetampore ...	...	...	...	...	...	...	...	Nil	N l	0·28	2·73	1·62	Nil	0·20
		Rampur Hat...	...	...	...	...	...	...	...	Nil	Nil	0·63	4·55	2·24	Nil	0·50
		Bolpur ...	...	...	.	...	...	...	...	Nil	Nil	?	4·08	?	Nil	?
		Murarai ...	...	...	...	...	...	...	...	Nil	Nil	?	4·47	?	Nil	
	Murshidabad	Kandi ...	...	...	...	...	...	...	...	Nil	Nil	0·95	1·09	2·64	Nil	0·63
		Berhampore ...	...	...	...	...	...	...	...	Nil	Nil	0·73	1·41	3·03	Nil	0·58
		Lalbagh ...	...	...	...	...	...	...	..	Nil	Nil	0·67	2·45	2·89	Nil	0·64
		Azimganj ...	0·15	...	...	...	...	...	...	1	0·15	0·73	2·49	2·64	Nil	0·60
		Jangipur ..	0·20	...	...	...	...	...	...	1	0·20	0·46	3·79	2·30	Nil	0·30
		Lalgola ...	...	...	...	...	..	...	...	Nil	Nil	0·75	2·52	2·97	Nil	0·53
		Akhriganj ...	0·63	...	..	...	...	...	...	1	0·63	?	3·86	?	Nil	?
		Patkabari ...	...	...	...	...	...	...	...	Nil	Nil	?	2·30	?	Nil	?
North Bengal	Pabna ...	Pabna ...	...	...	...	...	...	...	...	Nil	Nil	1·07	3·83	4·17	Nil	0·81
		Sirajganj ...	...	...	...	...	...	...	...	Nil	Nil	1·67	4·29	4·55	Nil	1·04
	Bogra ..	[illegible]epore ...	0·68	...	...	...	...	...	...	1	0·68	1·30	4·80	4·50	Nil	0·87
		[illegible]ntia ...	...	...	...	...	...	...	...	Nil	Nil	0·89	6·08	3·97	Nil	0·63
		[illegible]a ..	0·20	..	...	...	...	...	...	1	0·20	1·15	4·01	4·47	Nil	0·79
		[illegible]ibi ...	...	...	...	...	...	...	...	Nil	Nil	1·02	6·79	3·80	Nil	0·89
	Rajshahi ..	[illegible] ...	0·04	..	...	...	...	...	...	Nil	0·04	1·12	2·59	3·29	Nil	0·82
		[illegible] ...	...	...	...	...	...	...	...	Nil	Nil	0·96	4·77	4·22	Nil	0·72
		[illegible]mon ...	...	...	...	...	...	...	...	Nil	Nil	0·83	4·14	2·49	Nil	0·15
		[illegible]re ...										?		?		?
		[illegible] ...														?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 20th of May 1893—contd.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 14th.	Monday, 15th.	Tuesday, 16th.	Wednesday, 17th.	Thursday, 18th.	Friday, 19th.	Saturday, 20th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th May 1893.	Average rainfall from 16th May.
North Bengal—concld	Malda ..	Malda ...	...	...	...	...	...	...	..	Nil	Nil	0·53	2·86	2·02	Nil	0·36
		Chanchal .	...	0·02	...	...	...	...	...	Nil	0·02	0·83	1·18	2·43	Nil	0·52
		Gajol ..	...	...	...	...	...	...	...	Nil	Nil	?	1·96	?	Nil	?
		Sibganj	...	...	...	...	...	...	...	Nil	Nil	?	7·10	?	Nil	?
	Dinajpur ...	Mohadebpore	0·50	...	...	...	...	...	...	1	0·50	0·62	9·25	2·81	Nil	0·28
		Churaman ..	...	0·02	...	...	...	...	...	Nil	0·02	0·73	0·90	2·30	Nil	0·63
		Raiganj ...	...	...	...	...	...	...	...	Nil	Nil	0·74	2·01	3·02	Nil	0·43
		Dinajpur ...	...	...	...	...	...	...	...	Nil	Nil	1·19	2·37	3·46	Nil	3·97
		Balurghat ...	...	...	...	...	...	...	...	Nil	Nil	0·54	4·98	1·51	Nil	0·52
		Thakurgaon .	0·81	...	...	...	...	...	...	1	0·81	?	4·37	?	Nil	?
	Rangpur ...	Bhawanigunge (*Gyabanda*)	...	...	...	...	...	...	...	Nil	Nil	1·85	1·19	5·07	Nil	1·53
		Rangpur ...	...	...	...	...	...	...	...	Nil	Nil	1·89	1·10	5·04	Nil	1·53
		Kurigaon ...	...	...	...	...	...	...	...	Nil	Nil	2·43	1·72	7·34	Nil	1·74
		Gobindgunge	...	...	...	...	...	...	...	Nil	Nil	?	5·57	?	Nil	?
		Bagdogra (*Nilphamari*)	..	...	...	...	...	...	...	Nil	Nil	1·46	0·18	4·90	Nil	1·30
		Ulipore ...	...	...	...	...	...	...	...	Nil	Nil	?	1·21	?	Nil	?
		Sundergunge...	...	...	...	...	...	...	...	Nil	Nil	?		?	Nil	?
	Jalpaiguri ...	Jalpaiguri ...	...	...	...	...	...	...	0·11	1	0·11	1·65	1·71	5·58	0·11	1·09
		Alipore Dooar	...	...	...	...	...	...	...	Nil	Nil	?	1·56	?	Nil	?
		Fallacotta ...	...	...	...	...	...	...	0·20	1	0·20	?	1·97	?	0·20	?
		Debiganj ...	...	...	...	...	...	...	...	Nil	Nil	?	1·33	?	Nil	?
		Bhagatpore (Nagrakatta)	...	...	...	...	...	...	5·80	1	5·80	?	10·25	?	5·80	?
	Kuch Bihar	Dinhatta ...	..	...	...	...	...	...	..	Nil	Nil	2·49	2·48	6·70	Nil	1·73
		Kuch Bihar ...	...	...	...	...	...	...	0·11	1	0·11	2·71	2·50	7·94	0·11	1·78
		Mickliganj ...	..	...	...	...	...	...	...	Nil	Nil	2·11	2·34	5·45	Nil	1·82
		Mathabhanga	...	...	...	...	...	...	0·05	Nil	0·05	2·27	2·59	6·84	0·05	1·80
	Darjeeling ...	Buxa ...	.	...	...	...	...	..	4·25	1	4·25	5·11	8·48	11·10	4425	4·05
		Siliguri ...	...	...	...	...	...	...	0·09	Nil	0·09	1·58	3·22	3·50	0·09	0·63
		Darjeeling ...	0·07	...	...	...	...	...	0·19	1	0·26	1·08	2·01	4·81	0·19	0·56
		Kalimpong ...	...	...	..	...	...	0·70	1·01	2	1·71	1·07	2·74	3·51	1·71	0·57
		Kurseong ...	...	...	...	...	...	...	7·40	1	7·40	?	10·52	?	7·40	?
		Pedong ...	...	...	...	...	...	0·38	0·80	2	1·18	?	2·76	?	1·18	?
East Bengal	Chittagong ..	Cox's Bazar ...	...	...	...	...	0·13	0·26	0·35	3	0·74	2·56	6·06	6·88	0·74	1·81
		Chittagong ...	...	...	...	...	0·07	1·20	1·37	2	2·64	1·53	7·90	5·96	2·64	1·07
		Kutubdia ...										?		?		?
		Satkanya ...	...	...	...	...	0·09									
		Kodala ...										?		?		?
		Fenoa ...										?		?		?
		Mirsarai ...	...	...	...	...	0·21	0·89	0·64	3	1·74	?		?		?
		Chandpur ...	...	...	...	...	...	1·20								
	Chittagong Hill Tracts.	Rangamati ...	...	...	...	0·24	0·41	0·59	0·45	4	1·69	1·44	10·67	6·70	1·69	0·80
		Bundarban ...	..	...	...	...	0·15	2·30	2·09	3	4·74	?	11·60	?	4·74	?
	Backergunge	Patuakhali ...	...	...	...	...	...	...	0·43	1	0·43	1·70	4·31	4·85	0·43	0·91
		Pirojpur ...	...	...	...	...	...	...	...	Nil	Nil	1·12	4·73	4·62	Nil	0·80
		Barisal ...	...	...	...	...	...	...	...	Nil	Nil	1·45	8·23	4·80	Nil	0·96
		Gournaddi ...	...	...	...	...	...	...	...	Nil	Nil	?	7·33	?	Nil	?
		Bhola ...	...	...	...	...	..	...	...	Nil	Nil	1·14	7·09	4·66	Nil	0·80
		Daulatkhan ...	...	...	...	...	...	...	...	Nil	Nil	?	8·75	?	Nil	?
		Bauphal ...	...	...	...	...	...	...	...	Nil	Nil	?	5·33	?	Nil	?
	Noakhali ...	Noakhali ...	...	...	...	...	...	0·01	...	...	0·01	1·49	4·54	6·34	0·01	0·94
		Fenny ...	..	...	...	...	0·60	0·55	...	2	1·15	1·79	6·40	7·61	1·15	1·32
		Harishpore ...	...	...	...	...	0·06	...	...	Nil	Nil	?	6·06	?	Nil	?
		Ramganj ...	...	...	...	...	...	...	...	Nil	0·06	?	5·01	?	Nil	?
	Faridpur ...	Madaripur ...	...	...	...	...	...	...	...	Nil	Nil	1·47	4·53	6·19	Nil	1·06
		Faridpur ...	...	...	...	...	...	...	...	Nil	Nil	1·39	3·34	5·09	Nil	1·01
		Goalundo ..	0·15	...	...	...	...	...	...	1	0·15	1·12	4·62	4·84	Nil	0·78
	Dacca ..	Munshiganj ..	...	...	..	...	...	...	...	Nil	Nil	1·68	6·86	6·16	Nil	0·91
		Dacca ...	...	...	...	..	...	...	...	Nil	Nil	1·44	4·63	5·84	Nil	0·88
		Narayanganj ..	...	...	...	..	...	...	...	Nil	Nil	1·20	5·19	3·52	Nil	0·68
		Manikganj ...	...	...	..	..	...	...	...	Nil	Nil	1·54	5·86	6·07	Nil	1·04
		Joydebpore ...	...	...	...	...	...	...	...	Nil	Nil	?	2·12	?	Nil	?
	Hill Tippera Tippera	Agartola ...	...	.	...	...	...	...	...	Nil	Nil	1·91	6·04	7·65	Nil	1·05
		Comilla ..	...	..	..	...	...	...	...	Nil	Nil	1·47	11·33	6·92	Nil	0·82
		Chandpore ...	...	..	...	...	...	...	...	Nil	Nil	1·02	6·61	6·46	Nil	0·86
		Brahmanbaria	...	...	...	...	...	...	...	Nil	Nil	2·18	4·97	7·50	Nil	1·39
		Ramchandrapore ...	...		...	...	...	...	...	Nil	Nil	?	3·02	?	Nil	?
		Nasirnagar ..	...	.	.	...	...	...	...	Nil	Nil	?	8·55	?	Nil	?
		Daudkandi ..	...	...	...	...	.	.	...	Nil	Nil	?	3·25	?	Nil	?
		Kasba ..	..	...	...	...	...	..	...	Nil	Nil	?	8·18	?	Nil	?
		Laksham ...	...	...	...	...	...	...	...	Nil	Nil	?	7·28	?	Nil	?
	Mymensingh..	Kishorgan	...	...	..	...	...	...	...	Nil	Nil	1·93	7·01	6·64	Nil	1·14
		Atia (*Tangail*)	...	.	...	...	..	...	...	Nil	Nil	1·50	4·91	4·85	Nil	1·04
		Mymensingh ..	0·03	...	...	..	...	...	...	Nil	0·03	1·91	5·13	0·48	Nil	1·20
		Jamalpur	...	..	...	...	...	...	...	Nil	Nil	1·55	3·83	6·09	Nil	1·06
		Netrakona ..	...	...	...	...	...	...	...	Nil	Nil	1·71	3·73	6·48	Nil	0·91
		Subornakhali	...	...	...	...	...	...	...	Nil	Nil	?	3·20	?	Nil	?
		Durgapore ..	..	...	..	...	...	...	...	Nil	Nil	?	2·80	?	Nil	?
		Sherepore Town	...	...	...	...	...	...	...	Nil	Nil	?	6·71	?	Nil	?
		Dewanganj ...	...	...	...	...	...	...	...	Nil	Nil	?		?	Nil	?
North Bihar	Purnea ..	Kishangan ...	...	...	...	...	...	...	...	Nil	Nil	0·76	1·35	2·84	Nil	0·52
		Araria ...	...	...	...	...	...	...	...	Nil	Nil	0·79	1·42	3·08	Nil	0·66
		Purnea ...	...	...	...	...	...	.	...	Nil	Nil	0·59	1·29	2·14	Nil	0·55
		Gonawara (Korah) ..	...	...	...	...	...	...	...	Nil	Nil	?	4·06	?	Nil	?
		Barsoe ...	...	...	...	...	...	...	...	Nil	Nil	?	2·00	?	Nil	?
		Forbesganj .	.	...	...	...	...	...	...	Nil	Nil	?	1·63	?	Nil	?
		Kaliaganj .	...	...	...	...	...	...	...	Nil	Nil	?	1·70	?	Nil	?
	Bhagalpur ...	Madhipura ...	..	...	...	...	...	...	...	Nil	Nil	0·68	0·78	2·39	Nil	0·68
		Bongaon (Syfabad) ...	...	...	...	...	...	...	...	Nil	Nil	?	0·33	?	Nil	?
		Supaul ...	...	...	...	...	...	...	...	Nil	Nil	0·57	1·58	2·11	Nil	0·40
		Protabganj ..	...	.	..	...	...	...	...	Nil	Nil	?	1·76	?	Nil	?
		Bhagalpur ..	.	...	..	...	...	...	...	Nil	Nil	0·39	0·64	1·28	Nil	0·35
		Banka ...	..	..	...	...	...	...	...	Nil	Nil	0·68	2·09	1·41	Nil	0·47
		Colgong ..	...	..	...	...	...	...	...	Nil	Nil	?	2·56	?	Nil	?
	Darbhanga ...	Tajpur .	...	...	...	...	...	...	...	Nil	Nil	0·22	3·22	1·35	Nil	0·12
		Darbhanga ...	...	...	...	..	..	...	...	Nil	Nil	0·33	4·01	1·03	Nil	[illegible]
		Madhubani ...	...	..	...	...	...	...	...	Nil	Nil	0·35	1·88	[illegible]	Nil	[illegible]
		Bahera	..	...	...	...	...	...	...	Nil	Nil	?	2·58	[illegible]	Nil	
		Roshera ...	.		...	...	...	...	...	Nil	Nil	?	[illegible]	?	Nil	[illegible]

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 20th of May 1893—concld.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 14th April.	Monday, 15th.	Tuesday, 16th.	Wednesday, 17th.	Thursday, 18th.	Friday, 19th.	Saturday, 20th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rain fall since 16th May 1893.	Average rainfall from 16th May.
NORTH BIHAR—concluded	Muzaffarpur...	Sitamarhi ...	...	...	...	...	...	...	...	Nil	Nil	0·50	1·27	1·65	Nil	0·31
		Muzaffarpur	...	...	...	...	...	...	...	Nil	Nil	0·42	1·61	1·63	Nil	0·37
		Hajipur ...	...	...	...	...	...	...	...	Nil	Nil	0·23	1·70	0·98	Nil	0·20
		Paru	...	...	...	...	...	...	...	Nil	Nil	?	0·81	?	Nil	?
		Mahwa (Chitwarra.)	...	...	...	...	...	...	...	Nil	Nil	?		?		?
		Siuhar ...	...	...	...	...	...	...	...	Nil	Nil	?	0·54	?	Nil	?
		Pupri ...	...	...	...	...	...	...	...	Nil	Nil	?		?		?
	Champaran ...	Motihari ...	...	...	...	...	...	...	...	Nil	Nil	0·40	1·01	1·48	Nil	0·37
		Bettiah ..	...	...	...	...	...	...	...	Nil	Nil	0·44	0·98	1·82	Nil	0·32
		Bagaha ...	...	...	...	...	...	...	...	Nil	Nil	?	5·20	?	Nil	?
		Burhurwa ..	...	...	...	...	...	...	...	Nil	Nil	?	1·56	?	Nil	?
	Saran ...	Gopalganj ..	...	...	...	...	...	...	...	Nil	Nil	0·28	1·02	1·84	Nil	0·23
		Siwan ...	...	...	...	...	...	...	...	Nil	Nil	0·19	1·17	0·86	Nil	0·13
		Chapra ...	...	...	...	...	...	...	...	Nil	Nil	0·19	1·11	0·80	Nil	0·17
		Sreepore ...	...	...	...	...	...	...	...	Nil	Nil	?		?		?
SOUTH BIHAR	Shahabad ...	Buxar ...	...	...	...	...	...	...	...	Nil	Nil	0·11	1·33	0·44	Nil	0·06
		Dehri ...	...	...	...	...	...	...	...	Nil	Nil	0·11	1·37	0·30	Nil	0·05
		Bhabhua ...	...	...	...	...	...	...	...	Nil	Nil	0·18	0·97	0·70	Nil	0·14
		Sasaram ...	...	...	...	...	...	...	...	Nil	Nil	0·26	1·40	0·63	Nil	0·15
		Arrah ...	...	...	...	...	...	...	...	Nil	Nil	0·10	2·00	0·73	Nil	0·07
		Mohanea ...	...	...	...	...	...	...	...	Nil	Nil	?	0·19	?	Nil	?
		Khiri ...	...	...	...	...	...	...	...	Nil	Nil	?		?		?
		Ageaon ...	...	...	...	...	...	...	...	Nil	Nil	?	1·50	?	Nil	?
		Ramagar ...	...	...	...	...	...	...	...	Nil	Nil	?	2·15	?	Nil	?
		Koath ...	...	...	...	...	...	...	...	Nil	Nil	?	0·89	?	Nil	?
		Sikroul ...	...	...	...	...	...	...	...	Nil	Nil	?	1·37	?	Nil	?
		Bassowan ...	...	...	...	...	...	...	...	Nil	Nil	?	0·89	?	Nil	?
		Monaharpur	...	...	...	...	...	...	...	Nil	Nil	?	1·04	?	Nil	?
	Gaya ...	Aurangabad ...	...	...	...	...	...	...	...	Nil	Nil	0·20	0·96	0·48	Nil	0·11
		Gaya ...	...	...	...	...	...	...	...	Nil	Nil	0·22	1·78	0·46	Nil	0·21
		Nawadah ...	...	...	...	...	...	...	...	Nil	Nil	0·18	1·50	0·70	Nil	0·17
		Jahanabad ...	...	...	...	...	...	...	...	Nil	Nil	0·11	2·18	0·56	Nil	0·11
		Arwal	...	...	...	...	...	...	...	Nil	Nil	?	1·61	?	Nil	?
		Daudnagar ...	...	...	...	...	...	...	...	Nil	Nil	?	1·16	?	Nil	?
		Sherghati .	...	...	...	...	...	...	...	Nil	Nil	?		?	Nil	?
		Rajauli ...	...	...	...	...	...	...	...	Nil	Nil	?	1·13	?	Nil	?
		Pakri Barawan	...	...	...	...	...	...	...	Nil	Nil	?	3·61	?	Nil	?
	Patna ...	Patna .	...	...	...	...	...	...	...	Nil	Nil	0·24	1·20	0·81	Nil	0·20
		Dinapore ...	...	...	...	...	...	...	...	Nil	Nil	0·16	1·09	0·59	Nil	0·12
		Bihar ...	...	...	...	...	...	...	...	Nil	Nil	0·22	3·69	0·97	Nil	0·16
		Barh ...	...	...	...	...	...	...	...	Nil	Nil	0·25	1·70	1·04	Nil	0·16
		Bickram ..	...	...	...	...	...	...	...	Nil	Nil	?	2·62	?	Nil	?
		Hilsa .	...	...	...	...	...	...	...	Nil	Nil	?	2·77	?	Nil	?
	Monghyr ..	Begusarai ...	...	...	...	...	...	...	...	Nil	Nil	0·39	2·31	1·18	Nil	0·27
		Monghyr ...	...	...	...	...	...	...	...	Nil	Nil	0·41	2·04	1·20	Nil	0·42
		Jamui .	...	...	...	...	...	...	...	Nil	Nil	0·29	2·41	1·04	Nil	0·19
		Goori ..	...	...	...	...	...	...	...	Nil	Nil	?	4·88	?	Nil	?
		Shaikpura ...	...	...	...	...	...	...	...	Nil	Nil	?	4·93	?	Nil	?
		Chahai Bamda	...	...	...	...	...	...	...	Nil	Nil	?	2·54	?	Nil	?
		Chupreon ...	...	...	...	...	...	...	...	Nil	Nil	?		?		?
		Rajmahal ...	...	...	...	...	...	...	...	Nil	Nil	0·64	5·98	2·65	Nil	0·42
	Sonthal Parganas.	Godda .	...	...	...	...	...	...	...	Nil	Nil	0·43	4·21	1·53	Nil	0·36
		Pakour ...	...	...	...	...	...	...	...	Nil	Nil	0·39	5·15	1·82	Nil	0·50
		Naya Dumka	...	...	...	...	...	...	...	Nil	Nil	0·54	4·10	1·74	Nil	0·43
		Deoghur	...	...	...	...	...	...	...	Nil	Nil	0·57	1·85	1·67	Nil	0·48
		Jamtara ...	...	...	...	...	...	...	...	Nil	Nil	0·69	3·20	1·92	Nil	0·42
		Belbodda ..	...	...	...	...	...	...	...	Nil	Nil	?	5·50	?	Nil	?
		Nanihat ...	...	...	...	...	...	...	...	Nil	Nil	?		?		?
		Pachamba (*Giridih*). ...	...	...	...	...	...	...	...	Nil	Nil	0·38	3·58	1·20	Nil	0·27
CHOTA NAGPUR.	Hazaribagh ...	Hazaribagh	...	...	...	...	...	...	...	Nil	Nil	0·33	2·37	1·00	Nil	0·15
		Semtaguran	...	...	...	...	...	...	...	Nil	Nil	0·14	1·32	1·26	Nil	1·14
		Mahudi Hills	...	...	...	...	...	...	...	Nil	Nil	0·14	1·98	0·85	Nil	1·22
		Jhumra Hill	...	...	...	...	...	...	...	Nil	Nil	0·04	2·20	1·28	Nil	0·04
		Barhi ...	...	...	...	...	...	...	...	Nil	Nil	?	2·12	?	Nil	?
		Chatra ...	...	...	...	...	...	...	...	Nil	Nil	?	1·23	?	Nil	?
		Karangdeha	...	...	...	...	...	...	...	Nil	Nil	?	1·89	?	Nil	?
		Ramgur ...	...	...	...	...	...	...	...	Nil	Nil	?	1·29	?	Nil	?
	Lohardaga	Lohardaga ...	...	...	...	...	...	...	...	Nil	Nil	0·40	1·31	0·78	Nil	0·39
		Ranchi ...	...	...	...	...	...	...	...	Nil	Nil	0·51	3·84	1·49	Nil	0·31
		Silli ...	...	...	...	...	...	...	...	Nil	Nil	?		?		?
	Palamau ...	Palamau (*Daltanganj*). ...	...	...	...	...	...	...	...	Nil	Nil	0·23		0·51		0·18
		Balumath ..	...	...	...	...	...	...	...	Nil	Nil	?	0·36	?	Nil	?
		Husainabad	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Garhwa	...	...	...	...	...	...	...	Nil	Nil	?	0·05	?	Nil	?
		Chaibassa ..	...	...	...	...	...	...	...	Nil	Nil	0·85	2·46	2·31	Nil	0·68
	Singhbhum ...	*Chakardharpur.*	...	...	...	...	...	...	...	Nil	Nil	?	2·29	?	Nil	?
		Ghatsila ..	...	...	...	...	...	...	...	Nil	Nil	?	2·66	?	Nil	?
		Baharagura	...	...	...	...	...	...	...	Nil	Nil	?	2·75	?	Nil	?
		Gailkeira ...	...	...	...	...	...	...	...	Nil	Nil	?	2·87	?	Nil	?
		Kalikapur ...	...	...	...	...	...	...	...	Nil	Nil	?	1·69	?	Nil	?
		Purulia ...	...	...	...	...	...	...	...	Nil	Nil	0·91	1·73	2·22	Nil	0·56
	Manbhum ...	Gobindpur .	...	...	...	...	...	...	...	Nil	Nil	0·35	2·55	1·02	Nil	0·23
		Raghunathpore.	...	...	...	...	...	...	...	Nil	Nil	?	3·50	?	Nil	?
		Barahabhum	...	...	...	...	...	...	...	Nil	Nil	?	1·10	?	Nil	?
		Jhalda ..	...	...	...	...	...	...	...	Nil	Nil	?	2·24	?	Nil	?
		Chas ..	...	...	...	...	...	...	...	Nil	Nil	?	1·86	?	Nil	?
		Pandra ...	...	...	...	...	...	...	...	Nil	Nil	?	3·17	?	Nil	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall column are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the 23rd May* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 20TH MAY 1893.

At the beginning of the week pressure was considerably above the normal in the north-western districts, and from there excess slowly diminished towards the south-east of the Bay where there was a small defect. In consequence of this arrangement of pressure, the most prominent feature being its uniformity, calm clear weather prevailed over the whole of Bengal and Orissa. With the almost continuous sunshine, temperature from being slightly below the normal in all districts, began to rise, and readings in excess of the normal were first reported from North Bengal and Assam. The area of excessive temperature gradually extended to the south-west, till by the end of the week there was a small excess even in Orissa and Chota Nagpur.

Pressure began to fall early in the week both in Bengal and over the Bay, and this downward change continued steadily, and latterly with somewhat greater rapidity in the south of the Bay, where gradients became much steeper, especially during the last two days of the week. These changes in the south of the Bay led to unsettled weather which advanced up the east of the Bay and caused general rain in Burmah. A few showers fell in East and North Bengal owing to the advance of moist winds, and this formed almost the whole of the rainfall received during the week.

The week has been characterised in Bengal by fine settled weather with rising, and almost for the first time this year, general excessive temperature.

Pressure.—A steady fall continued slowly almost throughout the week, and from being a tenth of an inch above the normal, readings fell to nearly a tenth of an inch below. The means for the whole week are practically normal, the difference being generally only a few thousandths of an inch.

Temperature—Rose steadily and at times rapidly, the rise beginning in the north-east of the province and spreading gradually to the south-west. It was only on the last day of the week that readings in Orissa and Chota Nagpur rose above the normal. Though there was general defect at the beginning of the week, means are above the normal in all districts except Chota Nagpur and Orissa, when there is defect of less than 1°. The mean excess varies from 0·4° in South-West Bengal to 3·9° in North Bengal. Excess is much greater in Assam, being more than 6°.

Rainfall.—With the exception of a few scattered showers on the first day of the week and again towards the close, rainless weather prevailed. On an average East Bengal received ·22 inch, South-West Bengal ·1 inch, North Bengal and Orissa less than ·1 inch. In Chota Nagpur and Bihar no rain was reported.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 20th of May 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th May 1893.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	103·6	74·1	92·4	79·2	85·8	—0·9	0·02	0·71	—0·69	0·07	1·10	—1·03	3·65	2·24	Nil	0·47
South-West Bengal ...	106·2	74·3	96·5	79·1	87·8	+0·4	0·10	0·88	—0·78	0·11	1·36	—1·25	4·01	3·38	Nil	0·58
North Bengal	100·6	71·6	95·4	77·0	86·2	+3·9	0·07	1·37	—1·30	0·20	1·66	—1·46	3·22	4·29	0·01	0·90
East Bengal	95·3	74·1	92·1	78·1	85·1	+2·5	0·22	1·57	—1·35	0·48	2·08	—1·60	5·88	6·05	0·21	1·01
North Bihar	107·2	69·8	99·9	76·3	88·1	+2·5	Nil	0·46	—0·46	0·00	0·64	—0·64	1·72	1·73	Nil	0·36
South Bihar	108·5	72·0	102·8	78·6	90·7	+1·0	Nil	0·34	—0·34	0·00	0·56	—0·56	2·45	1·07	Nil	0·24
Chota Nagpur	106·8	67·9	98·9	75·5	87·2	—0·6	Nil	0·39	—0·39	0·09	0·67	—0·67	2·03	1·27	Nil	0·47
Assam	98·8	72·8	94·5	77·0	85·8	+6·2										

METEOROLOGICAL OFFICE, BENGAL,
The 23rd May 1893.

C. LITTLE,
Offg. Meteorological Reporter to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 14th to 20th May 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature.				Hygrometry.				Wind.		Rain.	Weather.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
May	14th	155·2	11·0	29·748	84·9	91·9	1·57	76·2	78·9	0·908	76·3	77	SE and variable...	54	Nil	Chiefly clear, ⌓.
,,	15th	148·5	10·6	·694	85·7	94·4	17·3	77·1	78·9	·898	76·0	75	SSW and SW ...	59	Nil	Chiefly clear, ⌓.
,,	16th	151·9	11·8	·667	86·5	94·7	16·5	78·2	79·9	·935	77·2	75	SW and SSW ...	52	Nil	Chiefly clear, ⌓.
,,	17th	149·7	11·3	·671	87·3	94·9	15·9	79·0	81·0	·973	78·4	76	SSW	59	Nil	Chiefly clear, ⌓.
,,	18th	153·2	9·2	·636	88·0	96·6	18·1	78·5	81·4	·983	78·7	75	SWly, S and S ...	60	Nil	Chiefly clear, ⌓.
,,	19th	152·4	10·8	·588	88·6	96·1	16·2	79·9	81·3	·973	78·4	73	Sly, W and SE...	69	Nil	Chiefly clear, ⌓.
,,	20th	151·7	10·2	·545	89·3	96·9	16·4	80·5	81·8	·988	78·9	73	Sly, W and SE ...	48	Nil	Partially cloudy.

	Inches.
The mean pressure of the seven days	29·650
The average pressure of the corresponding period for 24 years, Surveyor-General's Office	29·675
	Hours.
The total number of hours of bright sunshine	74·9
The maximum possible number of hours of sunshine	92·4
	°
The mean temperature of the seven days	87·2
The average temperature of the corresponding period for 24 years, Surveyor-General's Office	86·5
The extreme variation of temperature	20·7
The maximum temperature	96·9
	Miles.
The highest velocity of the wind in one hour	8
	lbs
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	75
The average relative humidity of the corresponding period for 24 years, Surveyor-General's Office	73
	Inches.
The total fall of rain from 14th to 20th May 1893	Nil
The average fall of the corresponding period for 24 years, Surveyor-General's Office	0·98
The total fall from 1st January to 20th May 1893	12·17
The average fall of the corresponding period for 24 years, Surveyor-General's Office	7·54

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

⌓, dew.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;
Calcutta, the 15th May 1893.

J. H. GILLILAND,
For Meteorological Reporter to the Govt. of India.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 14th to 20th May 1893.

Month.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature.						Hygrometry.			Rainfall, past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vavour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
May ...	14th ...	29·837	85·3	94·0	17·4	76·6	88·6	80·5	·933	77·1	69	Nil
,, ...	15th ...	·787	86·2	95·5	18·7	76·8	90·6	81·3	·944	77·4	66	......
,, ...	16th ...	·729	86·8	95·8	18·0	77·8	91·1	81·0	·923	76·8	64	......
,, ...	17th ...	·739	87·4	96·0	17·2	78·8	90·6	82·5	1·003	79·3	70	......
,, ...	18th ...	·686	88·2	97·5	18·7	78·8	92·4	82·5	·973	78·4	64	......
,, ...	19th ...	·646	88·9	97·5	17·2	80·3	91·1	83·5	1·046	80·6	72	......
,, ...	20th ...	·600	89·4	98·0	17·2	80·8	93·1	81·5	·918	76·6	60	......

	Inches.
The mean 10 A.M. pressure of the seven days	29·718
	°
The mean temperature of the seven days	87·5
The extreme variation of temperature	21·4
The maximum temperature	98·0
	%
The mean 10 A.M. relative humidity of the seven days	6·6
	Inches.
The total fall of rain from 14th to 20th May 1893	Nil

The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 22nd May 1893.

IRRIGATION DEPARTMENT, BENGAL.

IRRIGATION OPERATIONS FOR THE OFFICIAL YEAR 1892-93.

Areas leased for irrigation up to end of March 1893.

Circle.	District.	Canal.	Estimated full discharge.	Average discharge in month.	Discharge utilised.	Approximate area of land irrigated during the year up to the end of the month.	Approximate area of land under irrigation up to the same date last year.	Details of areas leased. Five years, all crops.	Five years, kharif.	Annual leases. Kharif.	Rabi.	Sugarcane.	Bhadoi.	Hot-weather.	Total.	GRAND TOTAL.	Rainfall, 1892-93. During month.	Up to end of month.	Rainfall, 1891-92. During month.	Up to end of month.	REMARKS.
			C. ft.	C. ft.	C. ft.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Inches.	Inches.	Inches.	Inches.	
ORISSA	Cuttack	Taldanda, 1st reach	1,3[illegible]2	25	......	8,732	10,537	...	8,308	472	139	29	..	...	640	8,948	2·75	56·80	0·05	77·05	
		Ditto, 2nd "	566	25		27,430	33,404	....	25,084	2,601	125	23	...	...	2,749	27,833	3·35	57·31	..	62·84	
		Machgaon	760	...	...												3·40	49·12	..	42·23	
		Kendrapara	1,067	180	·06	50,232	48,416	...	51,359	37	1,746	38		...	1,821	53,180	2·[illegible]0	43·45	0·01	48·30	
		Gobri	372·82	42	13	2,610	3,063	......	3,307	......	50	......	......	....	50	3,357	2·67	52·17	....	73·33	
		Do. Extension	618	44·80	16·00	3,574	3,633	....	3,216	....	13	......	..	..	13	3,229	No gauge.		....	..	
		Pattamundai	887	81	32·70	12,027	13,[illegible]89	....	11,802	....	199	....	...	...	199	12,001	1·70	*15·12	No gauge.		*From September 1892.
		High Level, Range I	608	116·48	0·33	21,779	21,410	......	21,925	114	276	....	...	...	390	22,315	3·01	59·78	..	42·84	
		Ditto, ditto II	727·16	0·87	.....	2,584	2,759	......	2,329	114	45	......	...	...	159	2,488	..	......	......	..	
		Jajpur Canal	700	...	.....	791	1,366	......	1,381	......	......	.....	...	...	...	1,381	..	...	No gauge.		
	Balasore	High Level, Range III	727·16	4·45	.....	32,836	37,350	......	34,336	14	7	244	......	.....	265	34,601	3·55	58·56	...	62·00	
		Total	.....	..	...	162,584	175,128	...	163,077	3,352	2,600	334			6,286	169,363	..	.			
		Total of the corresponding period of last year	.....	......	...	......	...	......	179,044	2,444	3,884	293	...	...	6,621	185,665	....	..	....	...	
SOUTH-WESTERN.	Midnapore	Midnapore	1,111	38	......	81,501	76,673	......	82,629	13	....	......	....	....	13	82,642	2·00	44·16	......	55·09	28 days discharging.
		Panchkura	522	17	......	7,206	5,258	......	7,650	40	......	......	..	...	40	7,690	1·21	39·05	......	41·60	8 days discharging.
	Howrah	Tidal Reaches, Ranges I & II	......	......	....	835	375	....	855	30	......	......	..	.	30	885		..	....		
		Total	.....	....	...	89,602	82,306	.. ..	91,134	83	...	...	..		83	91,217	...	..	..		
		Total of the corresponding period of last year	....	......	...	..	......	....	83,905	.....	68	......	...	....	68	83,973	......	...	.....	.	
SONE	Shahabad	Western Main	4,3[illegible]2	1,678	[illegible]7	31,[illegible]65	56,157	16,485	...	3,457	12,194	...	..	807	16,458	32,943	0·88	43·30	.....	20·19	
		Buxar	1,226	252	[illegible]	102,857	127,7[illegible]2	60,871	......	7,591	30,238	...	54	4,093	41,976	102,847					
		Arrah	2,900	1,047	3·5	166,533	175,611	115,966	......	9,797	23,530	......	.....	4,076	37,403	153,369	0·39	37·72	....	25·33	
	Patna and Gaya.	Eastern Main	1,466	294	65	3,021	2,561	2,099	......	402	641	....	3	..	1,046	3,145	0·56	51·34	......	35·79	
		Patna				7[illegible],0[illegible]6	85,07[illegible]	60,137	...	6,481	5,198	...	29		11,708	71,845					
		Total	....			[illegible]	447,499	255,558	.. ..	27,728	71,801	....	86	8,976	108,591	364,149	.			.. ...	
		Total of the corresponding period of last year	....			. .	..	234,787	.. ...	37,431	135,476	1,035	522	9,888	184,352	419,139	.	.	......	......	
		Grand Total	.. .	.. ..	.	[illegible]	704,933	255,558	254,211	31,163	74,401	334	86	8,976	114,960	624,729	.. ...	.	. .	. .	
		Grand Total of the corresponding period of last year	......	......	....	....	......	234,787	262,949	39,875	139,128	1,328	522	9,888	191,041	688,777	......	......	....	......	

CALCUTTA,
The 22nd May 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 20th May 1893, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 20th May 1893.			Week ending Saturday, the 21st May 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	297	50,475	741	179	55,145	913
Jute	7	1,750	21	6	1,300	9
Firewood	175	95,325	1,375	73	39,885	629
Other articles	836	2,00,325	3,043	704	1,40,915	2,176
Total ...	1,315	3,47,875	5,180	962	2,37,245	3,727

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 13th May 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*280,602	*2,72,458 13 0	33,95,326 10	7,94,463 5 0	22,068 8 0	10,88,990 10 0	73,542	134,096¾	207,638¾
Or per mile of railway	......	169 2 10	......	493 14 0	13 11 3	676 2 11	......	......	.....
For previous 18 weeks of half-year	†5,311,126	†58,65,936 6 0	‡5,48,01,882 0	‡1,24,36,147 14 0	§3,43,019 15 0	1,86,45,104 3 0	1,404,112¼	2,081,260½	3,485,372¾
Total for 19 weeks ...	5,591,728	61,38,395 3 0	5,81,97,208 10	1,32,30,611 3 0	3,65,088 7 0	1,97,34,094 13 0	1,477,654¼	2,215,357	3,693,011¾
Comparison.									
Total for corresponding week of previous year	319,305½	3,00,018 9 10	33,53,628 30	9,23,821 9 7	25,402 6 8	12,49,242 10 1	74,649	157,069	231,718
Per mile of railway corresponding week of previous year .	......	186 4 8	......	573 10 0	15 12 4	775 11 0	.....	... ..	......
Total for corresponding 19 weeks of previous year	5,690,409½	61,53,293 4 6	5,66,76,683 20	1,37,62,246 6 8	3,73,310 11 3	2,02,68,850 6 5	1,501,173	2,237,512	3,738,685

* The decrease is due to figures for the corresponding period of 1892 having included traffic on account of eclipse of the moon.
† Deducted number of passengers 4,921 and Rs. 4,169 }
‡ Ditto Mds. 1,44,811 and " 9,731 } on account of difference between the approximate and audited figures for the week ended 8th April 1893.
§ Added " 5,009 }

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 13th May 1893 on 22¼ miles open.

	Coaching Traffic		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	22,029	5,224 3 0	10,208 20	378 0 0	17 0 0	5,619 3 0	855	113	968
Or per mile of railway	... ..	234 12 8	... ..	16 15 10	0 12 3	252 8 9	......	......	.....
For previous 18 weeks of half-year	*417,614	*1,09,094 13 0	†2,22,084 0	†7,476 8 0	223 0 0	1,16,794 5 0	16,206	1,862	18,068
Total for 19 weeks ...	439,643	1,14,319 0 0	2,32,292 20	7,854 8 0	240 0 0	1,22,413 8 0	17,061	1,975	19,036
Comparison.									
Total for corresponding week of previous year	20,704	5,112 5 10	24,765 20	258 9 0	6 9 9	5,372 8 7	867	161	1,028
Per mile of railway corresponding week of previous year	......	229 12 4	......	11 6 4	0 4 9	241 7 5	......	......	.....
Total for corresponding 19 weeks of previous year ...	446,633	1,15,654 0 2	3,61,114 30	12,071 13 9	234 14 6	1,27,960 12 5	17,158	2,181	19,339

* Added number of passengers 182 and deducted Rs. 110 }
† Do. Mds. 370 and " 11 } on account of difference between the approximate and audited figures for the week ended 8th April 1893.

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 13th May 1893, on 161⅝ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs A. P.			
Total traffic for the week ...	17,762	12,673 4 0	72,547 10	9,959 8 9	64 0 0	22,696 12 0	6,106	2,856	9,262
Or per mile of railway ...	......	78 8 4	......	61 11 4	0 6 4	140 13 2	...	... ...	...
For previous 18 weeks of half-year	*339,177	*2,52,956 14 0	†12,15,776 10	†1,60,062 14 0	‡884 0 0	4,13,903 12 0	99,666½	60,129	159,795½
Total for 19 weeks ...	356,939	2,65,630 2 0	12,88,323 20	1,70,022 6 0	948 0 0	4,36,600 8 0	106,072½	62,985	169,037½
Comparison.									
Total for corresponding week of previous year	18,665½	12,772 1 0	50,431 10	7,637 11 3	59 6 6	20,469 2 9	6,6[illegible]8	1,973	8,588
Per mile of railway corresponding week of previous year ..	......	79 2 1	......	47 5 2	0 5 11	126 13 2	.. ...	......	......
Total for corresponding 19⅔ weeks of previous year	325,665½	2,57,260 11 4	8,34,866 0	1,56,578 2 3	1,420 4 3	4,15,259 1 10	120,819	42,629	163,448

* Added number of passengers 1,435 and Rs. 146 }
† Do. Mds. 43,529 and deducted ,, 629 } on account of difference between the approximate and audited figures for the week ended 8th April 1893.
‡ Do. ,, 34 }

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for the week ended 13th May 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	171,486	80,660 0 0	6,95,205 0	91,070 0 0	10,600 0 0	1,82,330 0 0	27,146	28,818	55,964
Or per mile of railway	221	104 0 0	895 0	177 0 0	†1 0 0	222 0 0	......	......	...
For previous 18 weeks of half-year*	3,286,797	15,74,525 0 0	1,32,33,595 0	17,13,461 0 0	2,76,780 0 0	35,64,766 0 0	512,335	515,526	1,027,861
Total for 19 weeks ...	3,458,283	16,55,185 0 0	1,39,21,800 0	18,04,531 0 0	2,87,380 0 0	37,47,096 0 0	539,481	544,344	1,083,825
Comparison.									
Total for corresponding week of previous year	162,470	73,195 0 0	5,34,579 0	47,672 0 0	10,508 0 0	1,58,375 0 0	26,863	28,694	55,557
Per mile of railway corresponding period of previous year ...	209	94 0 0	688 0	96 0 0	†1 0 0	191 0 0	......	......	.. ..
Total to corresponding date of previous year	3,229,297	15,78,238 0 0	1,15,05,341 0	15,22,743 0 0	2,77,350 0 0	33,78,331 0 0	523,6[illegible]0	559,388	1,083,018

* Audited up to week ending 18th March 1893.
† Excluding steamer earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 13th May 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	35,329	10,240 0 0	68,981 0	3,280 0 0	40 0 0	13,560 0 0	3,766	1,990	5,756
Or per mile of railway	283	82 0 0	552 0	26 0 0	......	108 0 0	...	......	......
For previous 18 weeks of half-year*	562,365	1,99,385 0 0	12,58,523 0	77,660 0 0	2,417 0 0	2,79,462 0 0	66,617	35,520	102,216
Total for 19 weeks ...	597,687	2,09,625 0 0	13,27,504 0	80,940 0 0	2,457 0 0	2,93,022 0 0	70,383	37,589	107,972
Comparison.									
Total for corresponding week of previous year	29,374	10,094 0 0	39,569 0	2,766 0 0	60 0 0	12,9[illegible] 0 0	3,766	1,906	5,672
Per mile of railway corresponding week of previous year ...	235	81 0 0	316 0	22 0 0	......	103 0 0	.....	......	......
Total to corresponding date of previous year	576,117	2,03,049 0 0	11,61,605 0	71,400 0 0	1,949 0 0	2,76,398 0 0	70,480	38,923	109,403

* Audited up to week ending 18th March 1893.

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 13th May 1893, on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	*Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. S.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week	16,213	4,930 0 0	14,961 0	1,400 0 0	60 0 0	6,390 0 0	2,487	737	3,224
Or per mile of railway	189	57 0 0	173 0	16 0 0	1 0 0	74 0 0	.....	......	.....
For previous 18 weeks of half-year*	332,425	1,03,225 0 0	2,77,908 0	26,480 0 0	2,886 0 0	1,32,591 0 0	44,781	13,498	58,279
Total for 19 weeks	348,638	1,08,155 0 0	2,92,809 0	27,880 0 0	2,946 0 0	1,38,981 0 0	47,268	14,235	61,5[illegible]
Comparison.									
Total for corresponding week of previous year	14,385	4,473 0 0	9,434 0	732 0 0	74 0 0	5,279 0 0	2,527	737	3,[illegible]
Per mile of railway corresponding week of previous year	167	52 0 0	110 0	8 0 0	1 0 0	61 0 0	....	....	...
Total to corresponding date of previous year	323,693	1,04,901 0 0	3,21,325 0	19,878 0 0	3,106 0 0	1,27,885 0 0	48,157	13,999	62,1[illegible]

* Audited up to week ending 18th March 1893.

BENGAL AND NORTH-WESTERN RAILWAY.

(Includes the Tirhut State Railway.)

Approximate return of traffic for the week ending 13th May 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	109,560	43 170	4,50,070	79,790	12,300	1,35,260	14,092	18,797	32,889
Or per mile of railway	144·84	57·11	568·88	105·54	16·27	178·92	.....	....	.....
For previous 18 weeks of half-year*	1,783,415	7,62,161	85,71,251	12,42,238	2,26,319	22,30,718	251,476	352,310	603,816
Total for 19 weeks	1,892,915	8,05,331	90,01,321	13,22,028	2,38,619	23,65,978	265,568	371,137	636,705
Comparison.									
Total for corresponding period of previous year on 755 miles open	106,624	45,647	4,98,353	82,599	12,654	1,40,900	10,999	28,605	39,0[illegible]
Per mile of corresponding week of previous year	141·22	60·46	660·07	109·40	16 76	186 62	......	......	....
Total to corresponding date of previous year	1,838,729	8,81,671	74,46,849	11,32,514	2,28,239	21,72,124	231,260	394,738	625,9[illegible]

* Includes audited figures up to 25th March 1893.

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 6th May 1893 ...	15,166	0	0
Corresponding period of 1892 ...	16,211	0	0
Decrease ...	1,045	0	0
Receipts per mile for the week ending 6th May 1893 ...	297	6	0
Corresponding period of 1892 ...	317	13	11
Decrease ...	20	7	11
Receipts from 1st January to 6th May 1893 ...	2,02,944	0	0
Corresponding period of 1892 ...	2,03,055	0	0
Decrease ...	111	0	0

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 13th May 1893 ...	15,358	0	0
Corresponding period of 1892 ...	16,257	0	0
Decrease ...	899	0	0
Receipts per mile for the week ending 13th May 1893 ...	301	2	2
Corresponding period of 1892 ...	318	12	3
Decrease ...	17	10	1
Receipts from 1st January to 13th May 1893 ...	2,18,299	0	0
Corresponding period of 1892 ...	2,19,312	0	0
Decrease ...	1,013	0	0

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[REGISTERED No. 29.]

No. 22 of 1893.



SUPPLEMENT TO

The Calcutta Gazette.

WEDNESDAY, MAY 31, 1893.

OFFICIAL PAPERS.

Non-Subscribers to the GAZETTE *may receive the* SUPPLEMENT *separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

CONTENTS.

RESULTS OF EXAMINATION OF CANDIDATES FOR APPOINTMENT AS DEPUTY MAGISTRATES-COLLECTORS, AND SUB-DEPUTY COLLECTORS.

RESOLUTION—No. 101A—D.

APPOINTMENT DEPT.

Dated Darjeeling, the 22nd May 1893.

READ—

The Resolution of the 25th May 1892, reviewing the result of the examination held in March of that year, and appointing candidates to be probationers in the Executive Branch of the Provincial and Subordinate Civil Service.

The notification of the 15th November 1892, publishing rules for the examination for admission to the Executive Branch of the Provincial and Subordinate Civil Service of 1893.

The reports of the Examiners at the examination held on the 27th, 28th, 29th, and 30th March 1893.

As the result of the examination for the Subordinate Executive Service held in 1892, five gentlemen were selected to officiate as Deputy Magistrates and Deputy Collectors, twenty to be Probationary Deputy Magistrates and Deputy Collectors, and ten to be Probationary Sub-Deputy Collectors. The twenty Probationary Deputy Collectors have in due course been appointed to be Officiating Deputy Magistrates and Deputy Collectors, and the ten Probationary Sub-Deputy Collectors have also been absorbed either as substantive *pro tempore* or as Officiating Sub-Deputy Collectors of the 4th grade. The Lieutenant-Governor is glad to say that the report furnished by their official superiors of the working of these probationary officers has been satisfactory.

2. In November last it was notified that at an examination to be held in March 1893, seven candidates would be selected for Probationary Deputy Collectorships on a salary of Rs. 50 a month, and seven for Probationary Sub-Deputy Collectorships on a salary of Rs. 30 a month respectively. It was announced that four of the probationers for Deputy Collectorships would be appointed from the first four candidates on the list in order of merit, that three would be selected by the Lieutenant-Governor from amongst those who have obtained a minimum of one-third of the total marks, and that from the remainder of those qualified by obtaining one-third of the total marks, the Lieutenant-Governor would select seven more candidates as probationers for Sub-Deputy Collectorships.

3. The examination so notified was held on the 27th, 28th, 29th, and 30th of March 1893. No fewer than 154 competitors obtained permission to compete, and of these 147 (of whom all except eight* were graduates) actually appeared and sent in papers. Of these 147 candidates, 125 took up Bengali as their vernacular, 18 took up Hindi or Hindustani, and four took up Uriya. No less than 134 of the candidates have obtained the minimum of one-third marks necessary for appointment into the Subordinate Executive Service by nomination.

* Of these eight, four failed to obtain one-third marks.

4. Further consideration of the number of probable retirements during the present year, and of the number of vacancies which are likely to be occasioned by the deputation of officers on settlement or other special duty, has shown that the number of advertised vacancies is not sufficient, and the Lieutenant-Governor has accordingly been pleased to direct that the number of Probationary Deputy Collectorships to be now filled up shall be raised from 7 to 10, and the number of Probationary Sub-Deputy Collectors from 7 to 14. In order to avoid a block among the Probationary Sub-Deputies, the Lieutenant-Governor has also decided to select ten officers from that class during the year to officiate as Deputy Collectors, the choice being made with reference to character, qualifications, standing in the service, and the result of the competitive and departmental examinations.

5. The following Sub-Deputy Collectors, who passed 5th, 8th, 13th, 22nd and 25th respectively at the recent examination, will now be promoted to officiate at once as Deputy Collectors:—

Babu Jotendra Mohan Sinha, B.A.
,, Lolit Chundra Das Gupta, B.A.
,, Makhun Lall Chatterjee, M.A.
,, Akshoy Kumar Sen, B.A.
Mr. Rowland Nogendra Lall Chandra, M.A.

6. The following four gentlemen, who stood first in order of merit, are entitled to appointments as Probationary Deputy Collectors:—

	Number of marks.
Babu Debendra Kumar Mittra, M.A.	518
,, Nogendro Nath Dutt, M.A.	516
,, Bepin Bihary Banerjee, M.A.	508
,, Jyotish Chunder Sen, B.A.	502

The number of candidates to be selected by the Lieutenant-Governor from among those who have obtained one-third marks is raised from three to six. The choice has been carefully made with reference to the number of marks obtained, the claims upon Government of members of the candidate's family, the interests of the different classes of the community, and the requirements of the public service. The following are the candidates selected for appointment as Probationary Deputy Collectors:—

Babu Jogeshwar Biswas, B.L.
,, Brij Bansi Sahai, M.A., B.L.
Maulvi Mahomed Yusaf Ali, B.A.
Babu Mati Lal Roy, B.A. (No. I).
Mr. L. J. Clarke, B.A. (Oxon).
,, R. B. Bainbridge.

All these probationary officers will receive a salary of Rs. 50 per mensem, and if the report from the districts in which they are stationed is favourable,

they will, after such period of probation as may seem advisable, be appointed to be Officiating Deputy Magistrates and Deputy Collectors as vacancies occur. They will not ordinarily be vested with magisterial powers until they are so appointed. Separate orders will now be passed posting all the gentlemen above named to districts.

7. The following are the 14 candidates selected by the Lieutenant-Governor from among those who have obtained one-third marks to be Probationary Sub-Deputy Collectors:—

Babu Hem Kumar Mullick, B.A.
,, Himangshu Nath Chuckerbutty, M.A.
,, Chintaharan Chatterjee, B.A.
,, Charu Chundra Kumar, B.L.
,, Paramesh Prasanna Roy, B.A.
,, Harendro Nath Banerjee, M.A.
,, Hara Krishna Mahanti, B.A.
,, Monmotho Nath Sircar, M.A., B.L.
,, Bhupendra Nath Gupta, B.A.
,, Rai Krishna Bahadur, B.A.
,, Rama Ballabh Misra, M.A.
Maulvi Syed Abdul Salek, B.A.
,, Mohamed Habibar Rahman, B.A.
,, Syed Ali Mazhar, B.A.

The probationary officers will receive a salary of Rs. 30 per mensem at present, and will, if they are satisfactorily reported on, be gradually absorbed into the fourth grade of Sub-Deputy Collectors as vacancies occur. Separate orders will at once be passed posting them to districts.

ORDER—Ordered that the above Resolution be published in the *Calcutta Gazette*.

By order of the Lieutenant-Governor of Bengal,

H. J. S. COTTON,

Chief Secretary to the Govt. of Bengal.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 27th May 1893.

Division	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.					
BURDWAN DIVN.	1	Burdwan	May 27, '93	11·81	Weather—hot up to 23rd. High storms since 25th. Cultivation going on. Fodder and water sufficient. Prices of common rice :— Srs. Burdwan ... ... 11½ to 13 } per rupee. Kalna ... ... 10 to 13 } Katwa ... ... 13 } Raniganj ... ... 13 }
	2	Bankura	„ 27, '93	5·64	Weather—cloudy with incessant rain from Thursday (25th) attended with high winds. The heavy rain of the week has stopped all agricultural operations for the present and injured the standing crops (*til* and *kapas*) to some extent. Fodder sufficient. Price of rice 11 seers per rupee at Sadar.
	3	Birbhum	„ 27, '93	3·87	Cyclonic storms with unceasing rain since Thursday night. Temperature down to 80 degrees. Transplantation of sugarcane stopped owing to this unfavourable weather. Price of rice 12 to 14½ seers per rupee.
	4	Midnapore	„ 27, '93	6·97	Weather—cyclonic. Prospects uncertain while the rain continues, but believed to be good. Prices of common rice :— Srs. Sadar ... ... 11 } per rupee. Contai ... ... 13 } Tamluk ... ... 12 }
	5	Hooghly	„ 27, '93	5·32	Weather—cyclonic with very high winds and constant rain. Cultivation and sowing of jute and rice continue. Situation now very favourable for an early season. Prices of common rice :— Srs. Sadar ... ... 10 to 11 } per rupee. Serampore ... ... 10 to 11½ } Jahanabad ... ... 10 to 12¾ }
	6	Howrah	„ 27, '93	7·59	Weather—extraordinarily stormy and wet. Condition of cattle good. Fodder and water-supply sufficient. Rice 10 to 11½ seers per rupee. No information yet as to whether the district has suffered from the cyclone.
PRESIDENCY DIVN.	7	24-Parganas	„ 27, '93	9·68	Weather—rainy and stormy. In some parts of the district *aus* and jute seedlings have been flooded. Sufficient water and fodder. Prices of common rice :— Srs. C. Sadar ... ... 10 to 12 8 } per rupee. Basirhat ... ... 11 7 } Barasat ... ... 9 8 } Diamond Harbour ... 12 4 }
	8	Nadia	„ 27, '93	6·65	Weather—hot at the beginning of the week, cool and damp at the end of it. The very heavy rain may have done some damage to the *aus* rice on low lands which has just germinated, otherwise rice and sugarcane are doing well. By next week the effect of the rain on the crops will be better known. Prices stationary. Fodder and water for cattle sufficient.
	9	Khulna	„ 27, '93	8·97	Weather—hot in the beginning of the week; since then very stormy. All agricultural work is at a standstill since Tuesday last (23rd) on account of heavy rain and high wind. Prices stationary. Fodder and water for cattle sufficient.
	10	Jessore	„ 27, '93	7·33	Weather—hot in the beginning of the week, wet and stormy during the latter part. The heavy rainfall of the week will interfere with the sowing of *aman*. Harvesting of *til* has commenced. Fodder and water for cattle sufficient. Price of rice has slightly risen.
	11	Murshidabad	„ 27, '93	4·81	Weather—exceedingly hot in the beginning of the week and cloudy with strong east winds and rain since Thursday (25th). Sowing of *bhadoi* almost finished. Indigo plants promising. Harvesting of *til* has commenced. Fodder sufficient for cattle. Common rice sells at 11½ seers per rupee.

	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL—*concld.*					
CHITTAGONG DIVN.	12	Chittagong	May 27, '93	5·20	Weather—cyclonic. Prospect of crops good. Prices stationary. Cattle-disease in Chakaria and Garjania. Supply of fodder sufficient.
	13	Noakhali	" 27, '93	8·67	Almost incessant rain since 25th with high wind. Progress of sowing of *aus* retarded by heavy rain and storm and young plants damaged. Fodder and water ample. No cattle-disease. Prices stationary.
	14	Tippera	" 27, '93	7·09	Weather—hot in the beginning of the week; cool with storms of wind and rain at the close. *Til* being harvested. Reaping of *boro dhan* almost completed. Condition of *aman* and jute favourable. Prospects of crops good.
	15	Chittagong Hill Tracts.	" 25, '23	1·29	Weather—cloudy throughout the week. Sowing in *jums* still continues. No cattle-disease reported. Common rice being sold at 10 seers per rupee.
DACCA DIVN.	16	Dacca	" 27, '93	4·74	Weather—very hot throughout the week except the last two days which were rainy. Prospects of standing crops fair. Fodder available. No cattle-disease. Common rice selling at from 10 to 12 seers per rupee.
	17	Faridpur	" 27, '93	9·40	Weather—abnormally hot last Sunday (21st); since 23rd high south-east wind began to blow; from the 25th weather has been cyclonic. Standing crops doing well, but recent heavy rain will probably damage recent sowings. Common rice sells at from 11 to 12 seers per rupee. Cattle-disease still exists in two thanas; otherwise cattle are doing well and get fodder.
	18	Backergunge	" 27, '93	12·39	Weather—cyclonic; heavy rain and strong winds throughout the greater part of the week. The heavy rain has damaged the *aus* plants on low-lying lands. Common rice selling at from 9 to 12 seers per rupee. Fodder and water sufficient.
	19	Mymensingh	" 27, '93	2·88	Weather—first part of the week very hot, latter part wet. State and prospects of crops good. Common rice selling at from 11 to 13 seers per rupee. Health of cattle good. Supply of fodder and water sufficient.
RAJSHAHI DIVN.	20	Dinajpur	" 27, '93	0·44	Weather—hot and close during the early part of the week. Cyclonic storm with rain since the morning of Friday (26th). The rain has done good to the standing crops, which are doing very well. Prospects excellent. Prices of rice unchanged. Condition of cattle good. Fodder and drinking water sufficient.
	21	Rajshahi	" 27, '93	4·05	Weather—rainy and stormy. Prospects of standing crops good. The rain that was much wanted fell in great torrents in the latter part of the week. No cattle-disease reported. Fodder and water available. Price of common rice is the same as reported last week.
	22	Rangpur	" 27, '93	0·29	Weather—cloudy and warm; high wind with slight rain at close of week. Rain wanted for crops on high lands. Price of common rice 11 to 13 seers per rupee.
	23	Bogra	" 27, '93	0·01	Weather—hot in the early part of the week, stormy at the close. Sowings of *aus*, jute and sugarcane in progress. Lands are being prepared for *aman*. Prospects good. Common rice sells at 13½ seers per rupee. Fodder and water sufficient.
	24	Pabna	" 27, '93	5·10	Weather—first part of the week cloudy and sultry, the latter part rainy and stormy. It was cyclonish yesterday (26th). Owing to incessant rain most of the low-lying lands in thana Dulia could not be sown with *aus*. On high lands in this thana, as in other thanas, the *aus*, jute and sugarcane are doing very well. Price of common rice at Pabna 11½ seers per rupee. Fodder and water-supply sufficient. Condition of cattle good.
	25	Darjeeling	" 27, '93	0·74	Weather—early part of the week fair with warm sun; later part cloudy with showers and less sultry. *In the hills:*—*Bhutta* and *bhadoi* progressing well. *Chota marua* has been planted. Potatoes in some places being dug, in other places in flower. *Kangni* also doing well. *In the terai:*—Prospects of crops good. *Haimanti* sowings going on. Prices of course rice:— Srs. Hills ... ... 8 to 10 } per rupee. Terai ... ... 11 to 12 }
	26	Jalpaiguri	27, '93	0·03	Weather—hot; high winds in the latter part of the week. Prospects of *bhadoi* and jute favourable. Common rice sells at 12 seers per rupee. Fodder and water sufficient. No cattle-disease reported.

No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
BHAGALPUR DIVN.				
27	Monghyr	May 27, '93	Nil	Weather—cool and cloudy in the latter part of the week. Lands are being ploughed for paddy. *Bhadoi* sowings going on. *Cheena* is being harvested. Indigo and sugarcane in excellent condition. Plenty of fodder and water. Prices of common rice :— Srs. Sadar ... ... 13 to 15 } Begusarai ... ... 14 } per rupee. Jamui ... ... 11½ }
28	Bhagalpur	„ 27, '93	0·52	Weather—hot in the early part of the week, now cloudy and cool. Rain wanted in the north for the *bhadoi* and *aghani* sowings and transplanting, otherwise prospects generally good. Common rice 14½ seers per rupee.
29	Purnea	„ 27, '93	0·01	Weather—very hot till 25th; now overclouded, cold and stormy. Prospects of *bhadoi* and winter rice good. Weeding of former facilitated by fine weather. The approaching rain will do it good and is much wanted for indigo which was beginning to burn. *Kauni* harvest in progress with good outturn. Fodder and water plentiful. Prices of rice stationary :— Srs. Sadar ... ... 13 } Kishanganj ... ... 12 } per rupee. Araria ... ... 16 }
30	Malda	„ 27, '93	2·71	Weather—hot and oppressive in the beginning of the week, cyclonic during the last two days. Harvesting of *boro* rice in full progress. *Bhadoi* paddy is being weeded. Jute and indigo plants thriving. Coarse rice selling at from 11 to 15 seers per rupee. Supply of fodder and water ample.
31	Sonthal Parganas	„ 27, '93	3·34	Weather—strong easterly winds with rain in south and west. Hot west winds in north. *Boro dhan* being reaped—a good crop. Sugarcane doing well. *Bhadoi* sowings doing well. Ground being prepared for winter paddy. Prices unchanged. Fodder and water-supply good.
PATNA DIVISION.				
32	Patna	„ 27, '93	Nil	Weather—hot but cool about close of the week. Sugarcane and millets doing well. Fields being prepared for *bhadoi* and paddy sowings. Extraction of *banga* cotton going on in Barh. Fodder and water for cattle sufficient. Prices of common rice :— Srs. Patna ... ... 15 } Barh ... ... 11¾ } Bihar ... ... 16¾ } per rupee. Dinapore ... ... 15 }
33	Gaya	„ 27, '93	Nil	Weather—very hot early in week; cloudy, unsettled and cool latterly. *Bhadoi* ploughing going on, and sowing of *marua* millet begun. Sugarcane and *cheena* millet doing well. Prices stationary. Fodder and water-supply sufficient.
34	Shahabad	„ 27, '93	Nil	Weather—cloudy and close. Sugarcane doing well. *Cheena* being harvested. Prices stationary. Fodder and water abundant.
35	Darbhanga	„ 27, '93	Nil	Weather—cloudy and stormy. Paddy, *mung* and *cheena* doing well. *Mung* being gathered in places. Preparation of lands for *bhadoi* sowings still going on. Fodder and water for cattle sufficient. Prices stationary.
36	Muzaffarpur	„ 27, '93	Nil	Weather—hot with east wind. Agricultural operations in progress. Early shower of rain wanted. Fodder and water sufficient. Prices stationary. No disease among cattle.

	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR—*concld.*					
PATNA DIVISION—*concld.*	37	Saran	May 27, '93	0·21	Weather—moist and cloudy. East wind, hot. Crops on the ground good. Fodder and water ample. Prices of common rice:— Srs. c. Chapra ... ... 14 0 Siwan ... ... 12 0 } per rupee. Gopalganj 13 5
	38	Champaran	„ 27, '93	0·46	Weather—warm. Prospects of indigo fair and of food-crops good. Prices stationary. Fodder and water sufficient.
ORISSA.					
ORISSA DIVN.	39	Cuttack	...		Report not received.
	40	Puri	„ 25, '93	15·27	Weather—very hot during the first part of the week; in the latter part rainy and stormy. Ploughing and sowing stopped on account of the rain. Miscellaneous crops doing well. Rice sells at from 11 seers 13 chitaks to 17 seers 1 chitak per rupee.
	41	Balasore*	„ 27, '93	15·60	Weather—very stormy. The excessive rainfall and widespread floods have greatly injured cultivation and done much harm to rice seedlings and other crops. About the normal area of sugarcane seems to have been planted. Prices of rice:— Srs. Balasore ... ... 14 } per rupee. Bhadrak 16
CHOTA NAGPUR.					
South-West Frontier Agency.					
CHOTA NAGPUR DIVN.	42	Hazaribagh	May, 27, '93	0·73	Weather—seasonable up to 24th; very disturbed, cloudy and stormy since that date. Sugarcane doing well. Mango much damaged by high winds. Fodder and water sufficient. Common rice 10 to 14 seers per rupee at head-quarters and 8 to 11 seers per rupee at Giridi.
	43	Lohardaga	„ 27, '93	1·66	Weather—cool. Ploughing going on. Sowing of *gora dhan* and *goondli* continues. Common rice selling at 13 seers per rupee. Fodder and water sufficient.
	44	Palamau	„ 26, '93	0·13	Weather—very hot during the first part of week; cloudy and somewhat cooler since yesterday (25th). A little rain reported from some stations. Sugarcane doing well. Prices stationary.
	45	Singhbhum	„ 27, '93	4·98	Weather—very wet and stormy since the 24th. The rains have apparently set in. Ground is being prepared, and the *bhadoi* crop is being sown. Crops on the ground, viz., paddy, *boro dhan* and sugarcane, doing well. Price of common rice at Chaibassa 12 seers per rupee. Cattle-disease reported from some villages in pargana Dhalbhum.
	46	Manbhum	„ 27, '93	5·85	Weather—very stormy and rainy. Ploughing stopped. Sugarcane doing well. Rice selling at from 10 to 13 seers per rupee. Fodder and water sufficient.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 30*th May*, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS. Air pressure. Mean barometric height, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. Prevailing direction.	Mean wind velocity.	Temperature. Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri	29·447	29·402	—	NW	453	93·7	21st May	61·6	25th May	85·7	74·4	80·1
		Gopalpore	29·494	29·455	—·192	SWly	226	91·2	27th ,,	75·3	23rd ,,	86·9	79·2	83·1
		False Point	29·324	29·286	—·374	Nly	399	94·5	22nd ,,	73·6	26th ,,	86·4	77·0†	82·2†
	Cuttack	Cuttack	29·359	29·380	—·260	NW	141†	102·1	21st ,,	73·3	25th ,,	88·2	77·8	83·1
	Balasore	Balasore	29·364	29·365	—·279	ENE	272*	95·4	21st ,,	72·8	25th ,,	85·9	76·7	81·3
South-West Bengal.	Midnapore	Midnapore	29·316	29·410	—·233	NEly	245*	103·4	21st ,,	73·1	25, 27 ,,	89·2	76·8	83·0
	24-Parganas	Calcutta	29·411	29·377	—·276	ENE	298	97·1	21st ,,	72·2	27th ,,	86·7	77·0	81·9
		Saugor Island	29·372	29·341	—·316	ENE	647	93·2	21st ,,	59·4	26th ,,	85·9	75·9	80·9
	Howrah													
	Hooghly													
	Nadia	Krishnagar	29·454	29·449	—·197	ESE	291	99·2	22nd ,,	74·7	26, 27 ,,	88·9†	77·5†	83·2†
	Khulna													
	Jessore	Jessore	29·488	29·467	—·205	ESE	259	96·5	21, 22 ,,	74·4	25th ,,	89·0	78·0	83·5
	Burdwan	Burdwan	29·397	29·442	—·207	E	269	99·6	22nd ,,	74·2	27th ,,	90·2	78·3	84·3
		Raniganj	29·197	29·478	—·163	NE	207	104·2	22nd ,,	69·9	26th ,,	92·8	76·7	84·7
	Bankura	Bankura	29·200	29·447	—·169	NEly	159	100·1	22nd ,,	73·1	27th ,,	90·2	77·5	83·9
	Birbhum													
	Murshidabad	Berhampore	29·485	29·500	—·158	E	220	99·7	22nd ,,	74·3	25th ,,	92·0	78·5	85·3
North Bengal.	Pabna	Sirajganj	29·550	29·545	—·131	Ely	158	97·6	22nd ,,	73·7	26, 27 ,,	90·8	77·3	84·1
	Bogra	Bogra	29·534	29·547	—·108	E	170	98·7	22nd ,,	72·7	27th ,,	91·6	76·8	84·2
	Rajshahi	Rampur Boalia.	29·496	29·515	—·143	SEly	185	98·1	22nd ,,	72·1	26th ,,	90·7	76·8	83·8
	Malda	Malda	29·515	29·546	—	SEly	123	99·6	22nd ,,	73·5	27th ,,	92·5	78·2	85·4
	Dinajpur	Dinajpur	29·506	29·576	—·105	E & SE	133	99·1	22nd ,,	74·2	27th ,,	93·5	79·3	86·4
	Rangpur	Rangpur	29·514	29·590	—·094	Ely	89	97·3	21st ,,	73·7	27th ,,	92·7	78·0	85·4
	Jalpaiguri	Jalpaiguri	29·385	29·619	—·071	Variable	75	96·9	22nd ,,	75·1	26th ,,	93·3	77·8	85·6
	Kuch Bihar													
	Darjeeling	Darjeeling	22·523	—	—·027	Variable	154	72·6	25th ,,	54·1	26th ,,	69·5	56·7	63·0
	Sikkim	Gnatong	19·205	—	—	ESE	96	59·4	21, 22 ,,	33·6	22nd ,,	57·0	35·0	46·0
East Bengal.	Chittagong	Chittagong	29·547	29·581	—·144	SE	139	91·2	22nd ,,	74·1	25, 26 ,,	85·5	75·8	80·7
	Chittagong Hill Tracts	Demagiri						Observations not received.						
	Backergunge	Barisal	29·547	29·505	—·171	ESE	162	94·3	22nd May	74·9	25, 26, 27 ,,	86·9	79·2	83·1
	Noakhali	Noakhali	29·577	29·567	—·105	ESE	257	92·5	21st ,,	73·8	25th ,,	86·1	76·2	81·2
	Faridpur	Faridpur	29·549	29·543	—·148	Ely	198	95·5	22nd ,,	73·9	26th ,,	87·2	77·5	82·4
	Dacca	Dacca	29·568	29·538	—·147	Ely	220	96·1	22nd ,,	74·2	26th ,,	88·3	77·3	82·8
	Tippera	Comilla	29·581	29·563	—·128	Ely	185	95·3	22nd ,,	73·8	27th ,,	87·9	76·1	82·2
	Mymensingh	Mymensingh	29·567	29·576	—·130	ENE	159	96·2	22nd ,,	74·1	27th ,,	90·2	78·3	84·3
North Bihar.	Purnea	Purnea	29·437	29·513	—·144	ESE	76	101·3	22nd ,,	77·2	27th ,,	96·4	81·6	89·1
	Bhagalpur	Bhagalpur	29·435	29·546	—·080	Calm & E.	58	103·3	21st ,,	74·0	27th ,,	96·1	79·7	87·9
	Darbhanga	Darbhanga	29·457	29·574	—·076	ESE	143	102·0	21, 22 ,,	76·7	26th ,,	98·2	81·0	89·6
	Muzaffarpur	Muzaffarpur	29·443	29·570	—	ESE	101	104·7	22nd ,,	76·2	26th ,,	100·3	79·1	89·7
	Champaran	Motihari	29·390	29·568	—·066	ENE	118	105·2	22nd ,,	74·9	26th ,,	101·6	79·5	90·6
	Saran	Chapra	29·423	29·563	—·051	ESE	151	107·2	21, 22 ,,	78·6	26th ,,	102·8	82·1	92·5
South Bihar.	Shahabad	Dehri	29·257	29·534	—·067	Ely	221	109·4	22nd ,,	79·0	27th ,,	103·4	82·5	93·0
		Buxar	[illegible]	29·558	—·054	Variable	175	109·0	22nd ,,	[illegible]	[illegible] ,,	103·4	82·6	93·0
		Arrah	29·413	29·531	—·072	Ely	110	107·9	21, 22 ,,	[illegible]	26, 27 ,,	102·8	82·9	92·9
	Gaya	Gaya	29·213	29·535	—·078	E	188	109·1	22nd ,,	[illegible]	26th ,,	100·4	83·2	91·8
	Patna	Bankipore	29·421	29·551	—·07[illegible]	E	167	108·0	21st ,,	[illegible]	25th ,,	102·0	82·1	92·1
	Monghyr													
	Sonthal Parganas	Naya Dumka	29·066	29·506	—·119	ENE	380	101·7	22nd ,,	73·3	26, 27 ,,	93·9	78·3	86·1
Chota Nagpur.	Hazaribagh	Hazaribagh	27·601	29·525	—·093	Ely	378	101·7	22nd ,,	68·8	26, 27 ,,	91·9	74·0	83·0
	Lohardaga	Ranchi	27·468	29·505	—·116	NE	413	102·[illegible]	21st ,,	67·9	26th ,,	90·0	72·8	81·4
	Palamau	Daltonganj	28·829	—	—	Ely	1[illegible]	10[illegible]·3	22nd ,,	77·[illegible]	27th ,,	1[illegible]3·0	81·8	92·4
	Singhbhum	Chaibassa	28·712	29·441	—·173	Nly	168	106·8	21st ,,	73·2*	25, 27 ,,	90·7	76·5*	83·5*
	Manbhum													
Assam.	Sibsagar	Sibsagar	29·370	29·657	—·081	Variable		[illegible]5·6	22nd ,,	71·9	22nd ,,	95·2	76·2	85·7
	Goalpara	Dhubri	29·521	29·592	—·109	N	142	96·3	22nd ,,	74·8	27th ,,	92·1	78·3	85·2
	Cachar	Silchar	29·556	29·610	—·116	ENE		101·6	22nd ,,	59·4	27th ,,	97·0	74·5	85·7

* Means of 5 days. † Mean of 6 days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 10 rainfall the normal mean are the numerical average of the rainfall in that district determined from the returns sent in by the subdivisional station district, *i.e.*, from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one of

...for the week ending Saturday, the 27th of May 1893.

Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	DISTRICT OBSERVATIONS. Of week. Mean for district.	Normal mean.	Average number of rainy days.	Normal number of rainy days.	Rainfall. Since 1st of month. Mean for district.	Normal mean.	Variation.	Since 16th May 1893. Mean for district.	Normal mean.	Variation.	District.
—	80·9	87	8·6	18·17		0·86		1·07		2·54			1·24		
—2·4	82·5	73	6 6	1·58											Puri.
†—3·8	80·8	87	9·7	35·63											
—8·0	81·6	75	8·7	14·09		0·91		1·31		2 75			1·29		Cuttack.
—6·7	80·6	89	7·1	17·26		1 20		1·37		4·13			1·80		Balasore.
—8 1	79 8	84	7·9	6·67	11·75	0·80	4·50	1·33	16·32	4·03	+12·29	11·75	1·28	+10·47	Midnapore.
—4·9	80·8	87	9·0	9·68	8·28	1 01	4·43	1·61	12·56	4 69	+7·87	8·28	1·64	+6·64	24-Parganas.
—6·2	80·5	92	9·6	12·37											
					7·49	0·74	4·50	1·46	12·31	4·84	+7·47	7·49	1·38	+6·11	Howrah.
					8·16	0·92	4 33	1·71	11·21	4·59	+6·62	8·16	1·53	+6 63	Hooghly.
—5·1†	80·7†	83†	8·6†	6·65	5 18	1·60	2·40	1·08	8·73	5·26	+3·47	5·18	2 29	+2 89	Nadia.
					8·57	1·45	3·30	1·97	12·58	5·79	+6·79	8·57	2·06	+6·51	Khulna.
—3·8	81 5	87	7·9	7·38	6·02	1·63	2·80	2·21	10·77	5 99	+4 78	6·02	2 39	+3·63	Jessore.
—4·5	81·1	79	8·0	11·81	8·09	0·94	2·67	1·57	14·16	4·14	+10·02	8·09	1·54	+6·55	Burdwan.
—6·9	81·0	80	4·6	3·80											
—4·5	80·5	82	7·7	5 64	6 96	0·64	3·50	1 38	11·53	2·97	+8·56	6·96	1·11	+5·85	Bankura.
					4·31	0·74	2·50	1 37	7·02	2·65	+4 37	4·31	1·15	+3 16	Birbhum.
—2·7	81·3	84	8·0	4·81	3·77	1·17	2 00	1 66	6·05	3·90	+2·15	3·77	1·72	+2·05	Murshidabad.
—0·4	81·5	82	7·9	4·65	4·88	1·92	2·00	2·18	8·95	6·29	+2·66	4·88	2·85	+2·03	Pabna.
—1·1	81·7	82	3·4	3·12	2 81	1·97	2 00	2·22	8·24	6·16	+2·08	2·81	2 79	+0 02	Bogra.
—2·8	82·6	81	6·1	4·06	4·85	1·48	2·00	1·82	8·67	4·81	+3·86	4·85	2·04	+2 81	Rajshahi.
—	82·9	74	5·7	2·71	1·82	1·18	1·50	1·26	3·84	3·41	+0·43	1·82	1·62	+0·20	Malda.
+2·0	82 5	79	5·6	0·47	1·26	1·45	1·60	1·43	5·16	4·09	+1·07	1·26	2·02	—0·76	Dinajpur.
+3·2	82 5	82	2·1	0·29	0·70	3 24	1·25	2·84	4·83	8·83	—4·00	0·70	4·77	—4 07	Rangpur.
+4·7	83·2	75	6 6	0·03	0·03	3 99	0·00	3·58	1·74	9·57	—7·83	0·14	5·08	—4·94	Jalpaiguri.
+4·3	82·1	85	6·9	0 74	0 29	4·25	1·00	3 53	2·77	10 74	—7 97	0·33	6 03	—5 70	Kuch Behar.
					0 37	2·85	1·25	3·15	4·40	8·57	—4 08	1·93	4·28	—2·35	Darjeeling.
—	50·8	65	3·6	0·49	0·40										Sikkim.
—2·6	79·8	89	9·4	4 65		2·32		2·30		8·75			3·76		Chittagong.
					2·60	2·19	4·00	2 55	13·36	8·89	+4·47	4·38	2 99	+1 39	Chittagong Hill Tracts.
—1·9	81·3	86	9·7	11·58	13·38	1·97	4·75	2·24	19·36	6 72	+12·64	13·49	2 84	+10·65	Backergunge.
—2·7	80·3	84	6·9	8·67	6·14	2·28	3 00	2·62	11·61	9·26	+2·35	6·72	3·41	+3 31	Noakhali.
—2·3	80·2	88	7·0	9·40	8·63	2·22	2·33	2·47	12·69	7·59	+5·10	8·63	3 17	+5·46	Faridpur.
—2·1	80·4	85	8·9	4·21	4·71	1·81	3·00	2·29	10 35	7·72	+2 63	4·71	2 69	+2 02	Dacca.
—2·1	80·0	88	7·7	5·95	5 11	1·62	3·00	2·44	12·39	8·76	+3·63	5·11	2·65	+2·46	Tippera.
+2·3	81·5	83	6·7	2·88	3·67	2·40	2·00	2·46	9·40	8·50	+0·90	3·67	3·47	+0·20	Mymensingh.
+3·1	85·4	72	1·7	0·07		1·20		1·30		3·88			1 78		Purnea.
—0·3	86·0	67	5·4	0·52	0·69	0·42	0·50	0·96	4·45	2·22	+2·23	0·69	0·88	—0·19	Bhagalpur.
+2·4	86·3	66	4·6	Nil	0·28	0·44	0·67	0·69	3·32	2·03	+1 29	0·28	0·68	—0·40	Darbhanga.
—	87·0	68	2·0	Nil	Nil	0·44	0·00	0·82	1·53	1·85	—0·32	Nil	0·73	—0·73	Muzaffarpur.
+3·1	86·8	67	4·3	0·46	0·84	0·60	1·00	0·81	2·18	2·26	—0·08	0·84	0·95	—0·11	Champaran.
+1·8	88·6	62	4·6	0·21	0·23	0·38	1·00	0·55	1 33	1·54	—0·21	0·23	0 56	—0 33	Saran.
+0·4	90·2	50	2·6	Nil											
+0·6	89·3	56	3·0	Nil	0·12	0·19	0 40	0·45	1·53	0·75	+0·78	0·12	0·28	—0·16	Shahabad.
+0·6	89·1	60	1·1	0·03											
—1·0	87·7	73	5·1	Nil	0·20	0·74	0·75	0 59	1·81	1·30	+0·51	0·20	0·89	—0·69	Gaya.
+0·9	90·4	54	5·1	Nil	0·29	0·59	1·25	0·71	2·21	1·45	+0·76	0·29	0·75	—0·46	Patna.
					0·06	0·54	0 33	0·62	2·32	1·67	+0·65	0·06	0·83	—0·77	Monghyr.
—4·2	82·4	73	5·3	3·34	2·77	0·79	1·83	1·11	6·92	2·68	+4·24	2·77	1·23	+1·54	Sonthal Parganas.
—4·5	79·9	67	8·1	0·80		0·75		1 12		1·87			1·31		Hazaribagh.
—6·5	78·3	69	5·9	1·66	1·17	0·78	150	1·09	3·75	1·91	+1·84	1·17	1·13	+0·04	Lohardaga.
—	88·7	55	0·0	0·27		0·37		0·58		0·88			0·55		Palamau.
—9·6*	80·8†	85†	7·6	4·93	4·98	1·07	4·00	1·16	7·44	3 38	+4·06	4·98	1·75	+3·23	Singhbhum.
					4·79	0·60	2·00	0·95	6·93	2·22	+4·71	4·79	0 99	+3·80	Manbhum.
+4·3	80·9	87	5 7	1·10											
+3·5	82·4	83	6·7	0·35											Assam.
+3·5	83·6	79	8·9	0·48											

for the last ten years. The variations are *negative* when the mean for the week is less than he corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 27th of May 1893.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 21st.	Monday, 22nd.	Tuesday, 23rd.	Wednesday, 24th.	Thursday, 25th.	Friday, 26th.	Saturday, 27th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th May 1893.	Average rainfall from 16th May to date.
ORISSA	Puri ...	Puri ...	...	...	3·90	6·76	1·61	2·90	...	4	18·17	0·64	20·93	2·16	18·17	1·04
		Khurda ...	...	...	3·19	2·25						0·90		2·89		1·40
		Banpur ...	...	...	1·40	0·52	0·54					0·43		1·74		0·50
		False Point ...	...	...	4·79							1·16		3·36		1·92
		Gop ...										?		?		?
		Satpara ...	...	...	1·29							?		?		?
		Pipli ...	...	...	2·80	5·48	4·50					?		?		?
	Cuttack ...	Jagatsingpore	...	5·80								0·71		2·49		0·92
		Banki ...	...	.	1·26	1·85	1·06					0·31		1·27		0·81
		Cuttack ...										1·02		2·84		1·43
		Kendrapara ...	...	0·26	5·93	11·35	9·31	8·78	...	5	35·62	1·08	40·12	3·39	35·62	1·50
		Jaipur ...	...	0·47	5·20	11·17	6·10	4·15				1·38		3·77		1·74
		Dharmsala ...	...	3·60	5·10	7·24	5·65					?		?		?
		Salipore ...										?		?		•
		Pal Lahara ...										?		?		?
	Balasore ..	*Akhyapada* ...	...	...	3·70	3·60	3·15	1·10				?		?		?
		Chanabali ...										1·49		4·55		1·96
		Bhadrak ...	...	0·20	4·59	8·66	5·18		3·41			1·38		4·52		2·25
		Soro ...										1·48		4·11		2·24
		Balasore ..	...	...	1·61	4·65	5·18	3·08	1·07	5	15·60	1·12		4·11		1·87
		Jellasore ...										0·81		3·00		1·26
		Baripodah .										0·89		4·20		1·18
SOUTH WEST BENGAL.	Midnapore	Contai ...	.	0·09	1·00	2·76	4·89	6·41	0·95	5	16·10	0·88	19·66	3·88	16·10	1·31
		Tamluk ...	...	..	0·01	1·53	1·92	5·58	1·47	4	10·51	0·12	15·51	4·18	10·51	1·55
		Midnapore ...	...	.	...	0·55	1·50	2·52	2·90	4	6·97	0·55	10·57	4·04	6·97	1·35
		Ghatal ...	...	0·12	...	0·52	0·40	5·02	7·35	5	13·41	0·16	19·26	4·18	13·41	0·92
		Kakrahaly ..	...	..	0·39	1·05	2·31	4·38	0·57	5	8·61	?	14·64	?	8·61	?
		Garhbeta ...	...	...	...	0·18	0·20	3·60	4·60	4	8·58	?	11·04	?	8·58	•
		Panskura ...	...		...	0·44	1·61	5·60	2·08	4	9·13	?	12·94	?	9·13	?
		Dantoon	...	0·03	0·42	1·12	3·65	2·10	0·90	5	8·52	?	12·27	?	8·52	?
	24-Parganas ..	Saugor Island	...	0·03	0·92	1·91	6·08	1·35	2·07	5	12·37	1·19	17·31	4·16	12·37	1·79
		Diamond Harbour ...			0·72	0·63	0·86	4·12	2·10	5	8·43	0·73	17·61	4·36	8·43	1·35
		Canning Town	...	...	...	0·92	2·60	5·89	2·89	4	11·61	?	15·89	?	11·61	•
		Alipore (Observatory.)	...	...	0·05	0·43	0·88	6·15	2·17	4	9·68	0·99	14·83	4·60	9·68	1·55
		Barrackpore ...	...	0·50	...	0·07	1·22	3·71	1·90	4	7·40	0·89	9·18	4·36	7·40	1·20
		Dum-Dum ...	...	...	0·18	0·15	1·95	3·05	2·27	5	7·61	1·16	11·92	4·88	7·60	1·68
		Barasat ...	...	...	0·19	...	0·12	3·14	1·90	4	5·65	0·90	7·52	5·07	5·65	1·67
		Basirhat ...	...	0·44	...	...	1·28	2·40	2·68	4	6·80	1·24	11·50	5·31	6·80	2·29
	Howrah ...	Howrah .	...	..	..	10·63	0·46	4·55	1·95	4	7·59	0·85	11·85	4·50	7·59	1·38
		Mohesrekha ...	...	0·43	0·07	0·25	0·87	2·11	3·65	5	7·38	0·62	12·76	5·16	7·38	1·36
		Ulubaria ...	...	0·05	...	0·44	0·92	4·15	2·54	4	8·10	?	13·24	?	8·10	?
	Hooghly ...	Serampore ...	...	0·35	0·20	0·23	0·32	4·09	2·18	6	7·37	0·82	9·63	4·36	7·37	1·19
		Hooghly ...	..	...	...	...	0·21	2·55	2·56	3	5·32	1·04	7·01	5·13	5·32	1·67
		Jahanabad ..	...	0·80	...	0·03	0·20	3·21	7·56	4	11·80	0·89	17·02	1·30	11·80	1·71
	Nadia ...	Ranaghat ..	...	0·77	...	...	...	2·87	2·91	3	6·55	1·13	10·06	4·13	6·55	1·71
		Krishnagar ...	...	0·04	...	0·01	0·05	2·62	3·93	2	6·65	1·00	10·34	4·93	6·65	1·84
		Chuadanga ...	...	...	...	...	...	2·10	2·28	2	4·38	2·21	8·15	6·57	4·38	3·14
		Meherpore ...	..	..	..	...	...	0·53	2·18	2	3·01	1·60	6·27	4·70	3·01	1·91
		Kushtia	...	...	...	0·13	...	2·30	2·87	3	5·30	1·99	8·51	5·86	5·30	2·71
	Khulna ...	Satkhira		..	0·13	..	1·45	2·19	1·59	4	5·18	1·34	10·01	5·16	5·48	1·80
		Bazerhat .	...	..	0·04	0·07	1·64	7·91	1·62	3	11·27	1·12	15·75	6·10	11·27	2·27
		Khulna ..	...	0·04	0·03	0·08	1·49	6·58	0·75	3	8·97	1·60	11·97	6·14	8·97	2·12
		Nakipur ...	..	...	0·30	0·27	1·10	1·82				?		?		?
		Rampal ...	...	0·30	0·59	0·10	2·12	4·50	1·20	6	8·72	?		?		?
	Jessore ...	Narail	...	0·07	...	...	0·30	3·06	1·56	3	4·99	1·57	9·65	6·38	4·09	2·37
		Jessore ..	...	...	...	0·13	0·53	3·50	3·42	4	7·38	1·90	14·10	6·72	7·38	2·58
		Jhenidah	...	.	...	...	0·03	3·87	2·11	2	6·01	1·63	10·32	5·61	6·01	2·58
		Magura	...	..	...	...	0·05	4·62	3·05	2	7·72	1·98	11·91	6·96	7·72	3·02
		Bangaon ...	..	...	...	...	0·22	2·10	1·65	3	3·97	1·08	7·56	4·33	3·97	1·42
	Burdwan .	Kalna	...	0·20	...	...	...	3·07	4·45	3	7·72	1·05	11·27	4·48	7·72	1·56
		Burdwan ...	..	...	..	0·28	0·01	1·90	9·62	3	11·81	1·00	19·25	3·89	11·81	1·60
		Katwa	...	0·01	...	...	...	1·65	3·07	2	4·73	0·77	10·20	4·12	4·73	1·45
		Raniganj ..	...	.	..	...	...	1·05	2·75	2	3·80	0·62	10·35	2·12	3·80	1·23
		Mankur ..	...	...	...	...	...	1·80	6·57	2	8·37	?	13·05	?	8·37	?
	Bankura .	Bankura	...		...	0·42	0·06	1·85	3·31	3	5·64	0·76	12·91	2·97	5·64	1·31
		Vishnupur ...	...	0·08	...	0·30	0·11	2·60	5·90	4	8·99	0·80	12·53	4·05	8·99	1·23
		Malsara .	...	...	...	0·12	..	1·37	2·25	3	3·74	0·50	9·19	2·28	3·74	0·88
		Khatra .	...	.	0·47	...	0·28	3·10	5·60	4	9·45	0·18	11·40	2·52	9·45	0·93
		Indas	...	0·07	.	0·18	...	2·50	9·02	3	11·57	?	17·05	?	11·57	?
		Kotalpur .	...	..	...	...	0·76	3·12	4·52	3	8·40	?	10·84	?	8·40	?
		Onda	...	...	...	...	0·30	2·75	3·85	3	6·90	?	12·72	?	6·90	?
		Gangajalghati	...	...	...	0·51	...	1·74	3·39	3	5·57	?	11·28	?	5·57	?
		Raipur ..	...	...	...	...	0·45	4·55	5·35	3	10·95	?	15·27	?	10·95	?
		Sonamukhi ..	...	...	...	...	...	1·53	7·32	2	8·85	?	15·07	?	8·85	?
	Birbhum ...	Suri	...	...	0·18	...	...	0·83	2·86	3	3·87	0·87	5·95	2·74	3·87	1·20
		Hetampore ...	.	0·93	...	...	...	1·21	2·95	3	5·09	0·78	7·82	2·40	5·09	0·98
		Rampur Hat...	...	...	...	...	...	1·28	3·21	2	4·19	0·70	7·04	2·94	4·49	1·20
		Bolpur	...	..	...	...	...	2·11	4·00	2	6·11	?	10·19	?	6·11	?
		Murari ..	...	...	...	..	...	1·22	1·73			?	7·42	?	2·95	?
	Murshidabad	Kandi	...	...	...	...	...	0·95	2·80	2	3·75	1·08	4·84	3·72	3·75	1·71
		Berhampore ...	...	...	...	...	...	1·41	3·41	2	4·81	1·19	6·22	4·22	4·81	1·77
		Lalbag ..	.	...	...	...	...	1·29	3·15	2	4·44	1·09	6·89	3·98	4·44	1·73
		Azimganj ...	...	..	...	...	...	1·45	2·18	2	3·63	0·93	6·12	3·57	3·63	1·53
		Jangipur .	..	...	..	...	...	1·02	1·65	2	2·67	1·14	6·46	3·41	2·67	1·44
		Kalgola .	...	...	...	...	.	1·20	2·10	2	3·30	1·59	5·82	4·56	3·30	2·12
		Akhriganj ..	..	...	..	..	...	1·75	1·69	2	3·44	?	7·30	?	3·41	?
		Patkabari	...	...	...	...	...	1·20	1·90	2	3·10	?	5·40	?	3·10	?
NORTH BENGAL	Pabna ..	Pabna ..	...	...	...	...	...	2·46	2·64	2	5·10	1·92	8·93	6·09	5·10	2·73
		Serajganj ..	...	.	...	...	...	0·71	3·94	2	4·65	1·92	8·94	6·47	4·65	2·90
	Bogra ..	Sherpore .	..	...	...	...	...	0·10	3·07	2	3·47	2·32	8·27	6·82	3·47	3·2
		Nowkhilla ..	.	...	...	...	0·16	0·35	1·98	3	2·49	1·21	8·57	5·18	2·49	1·8
		Bogra .		...	...	...	0·01	0·11	3·00	2	3·12	2·04	7·13	7·11	3·12	3·4
		Panchbibi ...	...	...	..	...	...	.	2·15			1·72	8·94	5·32	2·15	2·6
	Rajshahi ..	Boalia ...	...	...	...	...	...	1·66	2·39	2	4·05	1·21	6·64	4·50	4·05	2·0
		Nator ...	...	...	...	...	0·66	1·25	4·70	2	6·01	1·73	10·78	5·95	6·01	2·4
		Naogaon ...	...	...	..	...		2·00	2·50	2	4·50	1·51	8·64	4·00	4·50	1·6
		Lalpore			..	..	2·59	2·41	...	2	4·90	?		?		
		Manda ...	..	...		..	...	3·61	1·18	2	4·79	?		.		

—Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 27th of May 1893—*contd.*

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 21st.	Monday, 22nd.	Tuesday, 23rd.	Wednesday, 24th.	Thursday, 25th.	Friday, 26th.	Saturday, 27th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month	Total rainfall since 16th May 1893.	Average rainfall from 16th May.
NORTH BENGAL—*concld.*	Malda	Malda	...	...	...	...	...	0·26	2·45	2	2·71	0·94	5·57	2·96	2·71	1·39
		Chanchal	...	...	...	...	0·05	0·08	0·80	1	0·93	1·12	2·11	3·84	0·93	1·93
		Gajol	...	...	...	...	...	0·62	0·73	2	1·35	?	3·31	?	1·35	?
		Sriganj	...	...	...	...	...	0·35	2·59	2	2·94	?	10·04	?	2·94	?
	Dinajpur	Mohadebpore	...	...	...	...	...	0·31	2·95	2	3·26	0·90	12·51	3·71	3·26	1·18
		Churaman	...	...	...	...	0·21	...	0·73	2	0·94	0·55	1·84	2·85	0·94	1·18
		Raiganj	...	...	...	...	...	...	0·35	1	0·35	1·92	2·36	1·94	0·35	2·35
		Dinajpur	...	...	...	...	...	0·10	0·31	2	0·41	2·04	2·81	5·19	0·41	5·09
		Balurghat	...	...	...	...	...	...	1·33	1	1·33	1·85	6·31	3·36	1·33	2·77
		Thakurgaon	...	...	0·13	...	...	...	...	1	0·13	?	4·50	?	0·13	?
	Rangpur	Bhawanigunge	...	...	...	...	...	0·36	1·40	2	1·76	1·99	2·95	7·06	1·76	3·74
		(*Gyabanda*)	...	...	...	...	...	...	0·29	1	0·29	3·38	1·39	8·42	0·29	4·91
		Rangpur	...	...	...	...	...	0·25	1·02	2	1·27	?				?
		Peerganj	...	...	...	...	...	0·15	0·56	2	0·71	3·41	2·13	10·75	0·71	5·15
		Kuriaon	...	...	...	...	...	...	2·20	1	2·20	?	7·77	?	2·20	?
		Gobindgunge	...	...	...	...	...	...								
		Bagu gia						...	0·04	Nil	0·04	4·17	0·22	9·07	0·04	5·17
		(*Nilphamari*)	...	...	0·42	...	...	...	0·87	2	1·29	?	2·50	?	1·29	?
		Ulipore	...	...	...	...	...	...	0·18	1	0·18	?		?		?
		Sundergunge	...	...	...	...	...	0·03	...	Nil	0·03	5·99	1·74	9·57	0·14	5·08
	Jalpaiguri	Jalpaiguri	...	...	...	...	...	0·65	...	1	0·65	?	2·21	?	0·65	?
		Alipore Dooar	...	...	...	...	...	0·65	...	1	0·65	?	2·62	?	0·85	?
		Fallacotta	...	...	...	...	...	0·06	0·06	1	0·32	?	1·65	?	0·52	?
		Debiganj	...	0·29	...	...	...									
		Bhagatpore				0·03	...	0·27	...	1	0·30	?	10·55	?	6·10	..
		(*Nagrakatta*)	...	...	...	...	...	0·01	0·12	2	0·34	4·77	2·82	11·47	0·34	6·50
	Kuch Bihar	Dinhatta	...	0·20	0·01	...	...	0·25	...	1	0·25	4·57	2·75	12·51	0·33	6·35
		Kuch Bihar	...	...	...	...	...	...	...	Nil	Nil	3·62	2·34	9·07	Nil	5·14
		Mekliganj	...	...	...	...	...	0·56	...	1	0·56	4·02	3·15	9·86	0·61	5·82
		Mathabhanga	...	...	...	0·10	...	0·09	...	1	0·19	5·85	8·67	16·95	4·44	9·90
	Darjeeling	Buxa	...	...	...	...	...	0·18	...	1	0·18	2·27	3·49	5·77	0·27	2·91
		Siliguri	...	0·11	...	...	...	0·57	0·06	2	0·74	2·24	2·75	7·05	0·93	2·80
		Darjeeling	...	...	...	...	0·07	0·31	...	1	0·38	0·97	3·12	4·48	2·09	1·54
		Kalimpong	...	...	...	...	...	0·36	0·18	2	0·54	?	11·31	?	7·94	?
		Kurseong	...	0·02	...	...	0·05	0·39	0·03	1	0·49	?	3·16	?	1·58	?
		Pedong	...	0·82	0·31	1·80	2·81	1·70	8·39	6	15·82	2·31	21·88	9·19	16·56	4·12
EAST BENGAL	Chittagong	Cox's Bazar	0·03	0·51	...	...	0·71					2·32		8·28		3·39
		Chittagong	1·19									?		?		?
		Kutubdia	0·34	0·13	...	0·15	0·85	1·40				?		?		?
		Satkania										?		?		?
		Kodala										?		?		?
		Fenoa	0·36	0·21	...	...	0·24	0·59	2·16	5	3·56	?		?		?
		Mirsarai	0·58	...	...	...	0·30	1·13				?		?		?
		Chandpur	...	0·14	...	...	0·11	0·52	2·12	4	2·69	2·19	13·36	8·80	4·38	2·39
	Chittagong Hill Tracts.	Rangamati	0·76	0·43								?		?		?
		Bundarban														
	Backergunge	Patuakhali	...	...	0·25	0·27	3·30	9·25	3·20	5	16·27	2·24	20·58	7·09	16·70	3·15
		Pirojpur	...	...	0·35	0·71	1·53	9·18	2·45	5	14·22	1·87	18·95	6·19	14·22	2·67
		Barisal	0·52	...	...	0·22	1·23	4·82	5·60	5	12·39	1·93	21·62	6·79	12·39	2·89
		Gournaddi	...	...	...	0·23						?		?		?
		Bhola	0·17	0·09	...	..	0·91	2·90	6·27	4	10·64	1·84	17·73	6·50	10·64	2·64
		Daulatkhan	0·62	...	...	...	0·37	3·31	9·31	4	14·23	?	22·58	?	14·23	?
		Bauphal										?		?		?
	Noakhali	Noakhali	1·58	0·01	...	...	0·26	1·80	5·02	4	8·67	2·37	13·21	8·71	8·68	3·31
		Fenny	...	..	...	...	0·09	0·42	3·10	2	3·61	2·18	10·01	9·75	4·76	3·50
		Harishpore	0·67				0·13	1·37				?		?		?
		Ramganj	...	...	...	...						?		?		?
	Faridpur	Madaripur	...	...	...	...	0·22	3·56	5·11	3	8·89	2·27	13·42	8·46	8·89	3·24
		Faridpur	...	...	...	...	...	2·95	6·45	2	9·40	2·31	12·44	7·40	9·40	3·32
		Goalundo	...	...	...	...	...	3·45	4·15	2	7·60	2·08	12·22	6·92	7·60	2·85
	Dacca	Munshiganj	...	..	0·17	...	...	1·31	2·64	3	4·12	1·81	10·98	7·97	4·12	2·72
		Dacca	...	..	0·28	...	...	1·30	3·16	3	4·74	2·15	9·37	7·99	4·74	3·13
		Narayanganj	...	...	0·67	...	...	1·09	2·64	3	4·40	1·28	9·59	6·80	4·40	1·96
		Manikganj	...	...	0·15	...	..	1·62	3·82	3	5·59	2·00	11·15	8·07	5·59	3·04
		Joydebpore	...	...	0·02	...	...	0·96	3·57	2	4·55	?	6·67	?	4·55	?
	Hill Tippera	Agartola	...	...	...	...	...	0·11	3·14	2	3·25	1·70	9·29	9·35	3·25	2·75
	Tippera	Comilla	0·05	0·20	0·13	0·08	...	0·30	6·33	4	7·09	1·74	18·42	8·66	7·09	2·53
		Chandpore	...	...	...	...	0·15	1·68	3·53	3	5·36	1·03	11·97	7·49	5·36	1·80
		Brahmanbaria	...	0·05	0·10	...	...	0·30	4·30	3	4·75	2·00	9·02	9·50	4·75	3·51
		Ramchandrapore	...	...	0·02	...	...	8·05	3·02	1		?		?		?
		Nasirnagar	...	...	...	...	...	0·75	1·30	2	3·09	?	6·11	?	3·09	?
		Daudkandi	...	...	...	...	...	0·50	3·50	1	2·40	?	5·65	?	2·49	?
		Kasba	...	...	...	...	...	...	..	3	3·50	?	11·68	?	3·50	?
		Laksham	...	...	0·75	...	...	0·25	5·05	3	6·05	?	13·33	?	6·05	?
	Mymensingh	Kishorganj	...	0·14	...	...	...	0·61	5·08	3	5·83	2·25	12·04	8·89	5·83	3·39
		Atia (*Tangail*)	...	...	...	...	...	1·16	3·62	2	4·78	1·75	9·61	6·60	4·78	2·79
		Mymensingh	...	...	...	...	...	0·38	2·50	2	2·88	3·21	8·01	9·39	2·88	4·41
		Jamalpur	...	...	...	...	...	0·23	1·45	2	1·69	1·98	5·51	8·07	1·68	3·04
		Netrakona	...	...	...	...	...	...	3·20	1	3·20	2·81	6·?3	9·21	3·20	3·72
		Subornakhally	...	...	...	...	0·03	1·48	3·11	1	4·62	?	7·82	?	4·62	?
		Durgapore	...	...	..	...	...	...	1·89	1	1·89	?	4·69	?	1·89	?
		Sherepore Town										?		?		?
		Dewanganj	...	...	...	...	...	...	2·46	1	2·46	?	9·17	?	2·46	?
NORTH BIHAR	Purnea	Kishanganj								1	0·25	1·60		4·44		2·12
		Araria	...	...	...	...	...	0·25	...	Nil	0·07	1·14	1·67	4·22	0·25	1·80
		Purnea	...	...	...	...	...	0·01	0·06	1	0·13	0·85	1·33	2·90	0·07	1·49
		Gondwara (*Korah*)	...	...	...	..	..	0·13	...			?	4·19	?	0·13	?
		Barsoe	...	...	...	...	...	0·10	0·30	2	0·40	?	3·00	?	0·40	?
		Forbesganj	...	0·23	...	...	...	...	...	1	0·23	?	1·85	?	0·23	?
		Kaliaganj										?		?		?
	Bhagalpur	Madhipura	...	...	...	...	...	0·04	...	Nil	0·04	0·78	0·82	3·17	0·04	1·19
		Bongaon (*Sujabad*)										?		?		?
		Supaul	...	...	0·32	...	..	...	0·16	2	0·48	0·71	2·06	2·82	0·48	1·11
		Protabganj	...	...	...	...	...	...	...	Nil	Nil	?	1·76	?	Nil	?
		Bhagalpur	..	..	...	...	...	...	0·52	1	0·52	0·68	1·16	1·96	0·52	1·?3
		Banka	...	...	...	...	...	...	1·72	1	1·72	0·49	4·71	1·90	1·72	0·96
		Colgong	...	...	...	...	...	...	0·49	1	0·49	?	3·05	?	0·49	?
	Darbhanga	Tajpur	...	...	0·52	...	...	0·03	...	1	0·55	0·30	3·77	1·05	0·55	0·42
		Darbhanga	...	...	...	..	..	...	...	Nil	Nil	0·45	4·01	2·08	Nil	0·60
		Madhubani	...	...	...	..	...	0·30	...	1	0·30	0·57	2·18	2·34	0·30	0·54
		Bahera	...	...	...	...	.	0·53	0·30	2	0·83	?	3·11	?	0·83	?
		Roshera	.	...	...	..	...	...	...	Nil	Nil	?	1·50	?	Nil	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 27th of May 1893—concld.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 21st.	Monday, 22nd.	Tuesday, 23rd.	Wednesday, 24th.	Thursday, 25th.	Friday, 26th.	Saturday, 27th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rain fall since 16th May 1893.	Average rainfall from 16th May.
NORTH BIHAR—*concluded.*	Muzaffarpur...	Sitamarhi ...	...	...	..	..	...	...	...	Nil	Nil	0·48	1·27	2·13	Nil	0·79
		Muzaffarpur	...	...	...	...	...	...	...	Nil	Nil	0·52	1·61	2·15	Nil	0·89
		Hajipur ...	...	...	...	...	...	...	...	Nil	Nil	0·31	1·70	1·29	Nil	0·51
		Paru ...										?		?		?
		Mahwa (Chitwara.)										?		?		?
		Sirhar ...										?		?		?
		Pupri ...										?		?		?
	Champaran	Motihari ...	...	...	...	...	...	...	0·46	1	0·46	0·62	1·47	2·10	0·46	0·99
		Bettiah	...	0·05	...	...	...	...	1·16	1	1·21	0·57	2·19	2·39	1·21	0·59
		Bagaha ...	...	0·71	...	...	...	0·06		1	0·77	?	6·06	?	0·77	?
		Burhurwa .	...	...	...	...	...	...	0·11	1	0·11	?	1·67	?	0·11	?
	Saran ..	Gopalganj ..	...	...	...	. .	...	...	0·04	Nil	0·04	0·49	1·06	2·24	0·04	0·63
		Siwan ...	...	...	..	...	...	...	0·45	1	0·45	0·55	1·62	1·41	0·45	0·68
		Chupra ...	...	...	0·06	...	...	...	0·15	2	0·21	0·19	1·32	0·93	0·21	0·36
		Sreepore ..	...	...	. .	...	...					?		?		?
SOUTH BIHAR	Shahabad ...	Buxar ...	...	...	...	...	...	...	...	Nil	Nil	0·10	1·33	0·54	Nil	0·16
		Dehri ..	...	...	...	...	...	...	..	Nil	Nil	0·09	1·37	0·39	Nil	0·14
		Bhabhua ...	..	...	0·18	...	...	...	0·09	1	0·27	0·24	1·24	0·93	0·27	0·37
		Sasaram ...	...	0·26	...	...	...	...	...	1	0·26	0·19	1·66	0·82	0·26	0·34
		Arrah ...	...	...	...	...	...	0·05	...	Nil	0·05	0·35	2·05	1·08	0·05	0·42
		Mohanea .	...	...	...	...	...	...	...	Nil	Nil	?	0·19	?	Nil	?
		Khiri ...										?		?		?
		Ageaon ...	...	...	...	...	...	. .	...	Nil	Nil	?	1·50	?	Nil	?
		Ramagar ...	...	...	...	...	...	...	...	Nil	Nil	?	2·15	?	Nil	?
		Koath ...	...	..	...	...	...	...	...	Nil	Nil	?	0·89	?	Nil	?
		Sikroul ...	...	...	...	...	...	...	...	Nil	Nil	?	1·37	?	Nil	?
		Bassowan ...	...	...	...	...	...	...	...	Nil	Nil	?	0·89	?	Nil	?
		Monaharpur	...	...	...	...	...	...	...	Nil	Nil	?	1·04	?	Nil	?
	Gaya ..	Aurangabad ...	...	...	...	...	...	...	0·10	1	0·10	0·61	1·06	1·09	0·10	0·72
		Gaya ...	...	...	...	...	...	...	..	Nil	Nil	0·89	1·78	1·35	Nil	1·10
		Nawadah ...	...	...	...	...	...	...	0·17	1	0·17	0·92	1·67	1·62	0·17	1·09
		Jahanabad ...	...	...	...	...	...	...	0·52	1	0·52	0·52	2·70	1·08	0·52	0·63
		Arwal	...	...	...	...	...	...	...	Nil	Nil	?	1·51	?	Nil	?
		Daudnagar ...	...	...	...	...	...	...	...	Nil	Nil	?	1·10	?	Nil	?
		Sherghati										?		?		?
		Rajauli ...	...	...	0·05	...	...	...	0·09	Nil	0·14	?	1·27	?	0·14	?
		Pakri Barawan										?		?		?
	Patna ...	Patna .	...	...	...	...	...	...	...	Nil	Nil	0·50	1·20	1·31	Nil	0·70
		Dinapore ...	...	...	..	...	...	...	0·10	1	0·10	0·39	1·19	0·98	0·10	0·51
		Bihar ...	...	...	0·30	...	...	...	0·10	2	0·40	0·72	4·69	1·69	0·40	0·88
		Barh ...	...	...	0·53	...	...	0·13	.	2	0·66	0·74	2·36	1·78	0·66	0·90
		Bickram ...	...	...	...	...	...	...	...	Nil	Nil	?	2·62	?	Nil	?
		Hilsa	...	...	...	...	...	...	...	Nil	Nil	?	2·77	?	Nil	?
	Monghyr ..	Begusarai ..	...	...	...	...	...	...	...	Nil	Nil	0·51	2·31	1·69	Nil	0·78
		Monghyr ...	...	...	...	...	...	...	...	Nil	Nil	0·57	2·04	1·77	Nil	0·99
		Jamui	...	...	...	...	...	...	0·19	1	0·19	0·54	2·69	1·58	0·19	0·73
		Gauri .	..	...	...	...	...	...	...	Nil	Nil	?	4·88	?	Nil	?
		Shaikpura ...	...	...	...	...	...	...	...	Nil	Nil	?	4·33	?	Nil	?
		Chakai Bamda	...	...	...	...	...	...	1·61	1	1·61	?	4·15	?	1·61	?
		Chupreon ...										?		?		?
	Sonthal Parganas.	Rajmahal ..	...	...	...	...	...	..	1·64	1	1·64	1·06	7·62	3·71	1·64	1·48
		Godda	...	...	...	...	...	0·07	1·17	1	1·24	0·69	5·45	2·22	1·24	1·05
		Pakour ...	...	...	...	...	...	0·35	2·43	2	2·78	0·83	7·93	2·65	2·78	1·33
		Naya Dumka	...	...	...	...	...	0·98	2·36	2	3·34	0·74	7·14	2·48	3·34	1·17
		Deoghur	...	...	...	...	...	0·45	2·95	2	3·40	0·63	5·25	2·30	3·40	1·11
		Jamtara ...	...	...	0·34	...	...	0·75	3·11	3	4·20	0·76	7·40	2·68	4·20	1·18
		Belbodda ..										?		?		?
		Nanihat ...	...	...	...	...	...	...	2·75	1	2·75	?		?		?
CHOTA NAGPUR.	Hazaribagh ...	Pachamba (*Giridih*). ...	...	...	...	...	...	0·55	2·16	2	2·71	0·73	6·29	1·93	2·71	1·00
		Hazaribagh	...	...	...	...	..	0·16	0·64	2	0·80	0·69	3·17	1·69	0·80	0·84
		Semtakuran	...	...	...	...	0·32	0·59	...	2	0·91	0·98	2·23	2·24	0·91	2·12
		Mahudi Hills										0·73		1·58		1·95
		Jhumra Hill										0·60		1·88		0·64
		Parhi ..	...	...	0·11	...	...	0·27	0·47	3	0·85	?	2·97	?	0·85	?
		Chatra ...	...	...	...	...	...	0·36	0·16	2	0·52	?	1·75	?	0·52	?
		Karangdeha	...	...	...	...	..	...	1·65	1	1·65	?	3·54	?	1·65	?
		Ramgur ...	...	...	...	...	0·66	0·84	...	2	1·50	?	2·79	?	1·50	?
	Lohardaga ..	Lohardaga ...	...	...	...	...	...	0·32	0·05	1	0·37	0·81	1·68	1·59	0·37	1·20
		Ranchi ...	...	...	...	...	...	0·94	1·03	2	1·97	0·75	5·81	2·24	1·97	1·06
		Silli ...						1·10				?		?		?
	Palamau ...	Palamau (*Daltanganj*). ...										0·37		0·85		0·55
		Balumath ...										?		?		?
		Husainabad	...	...	...	...	...	...	...	Nil	Nil	?		?		?
		Garhwa										?		?		?
	Singhbhum ...	Chaibassa ...	...	...	...	0·98	0·55	2·30	1·15	4	4·98	1·07	7·14	3·38	4·98	1·75
		Chakardharpur.	...	0·22	0·48	0·33	2·01	0·16	0·02	5	3·26	?	5·55	?	3·26	?
		Ghatsila ..	...	...	...	0·30	0·50	2·20	4·35	4	7·35	?	10·01	?	7·35	?
		Baharagura										?		?		?
		Gaikera ...	...	...	0·85	0·60	1·58	...	...	3	3·03	?	5·90	?	3·03	?
		Kalikapur ...	...	...	...	0·85	0·33	2·24	3·56	4	7·00	?	8·69	?	7·00	?
	Manbhum ...	Purulia ...	...	...	...	...	...	1·20	4·65	2	5·85	0·70	7·58	2·92	5·85	1·26
		Gobindpur	...	...	...	...	...	0·82	2·90	2	3·72	0·50	6·27	1·52	3·72	0·73
		Raghunathpore.	...	...	...	...	...	1·52	2·30	2	3·82	?	7·32	?	3·82	?
		Barahabhum	...	...	...	0·80	0·50	2·20	3·30	4	6·80	?	7·90	?	6·80	?
		Jhalda ..	...	...	...	...	1·64	1·88				?		?		?
		Chas ..	...	...	...	...	...	0·40	2·50	2	2·90	?	4·76	?	2·90	?
		Pandra ..	...	...	...	...	...	1·24	5·13	2	6·37	?	9·54	?	6·37	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the 30th May* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 27TH MAY 1893.

THROUGHOUT the greater part of the week weather in the north of the Bay, and latterly in Lower Bengal, has been under the influence of a depression which appears to have commenced in the extreme south of the Bay some days before, and taking an almost northerly course up the Bay, began to affect the general weather conditions on the north-west coast on Saturday, the 20th, the last day of the previous week.

On the 17th, as for some days before that, the conditions which are supposed to lead up to and initiate stormy weather in the Bay were unusually well marked, viz., very uniform pressure with light winds and cloudless skies. The change from these conditions began to appear in the south of the Bay in steeper gradients, and by the northward advance of a moist current in the east of the Bay, giving heavy rain in Burma and Arakan. The storm was then probably not well defined, but in any case the centre of the disturbance must have been too far from any of the observatories on the coast for its position to have been even guessed at, far less determined. The only information to hand regarding its early history is from the log-book of the S. S. *City of Cambridge*, which left Ceylon on the 17th, and passing through the disturbance reached the head of the Bay on the 20th. At first a gale from the south was experienced, and afterwards from the north-east, while pressure was very unsteady. The bad weather was left behind, and in the extreme north of the Bay ordinary weather prevailed.

On Sunday, the 21st, the first day of the week under review, after a steady fall of pressure for several days all round the coast, a depression was shown covering the whole of the north of the Bay, but it had not then begun to cause bad weather at any of the meteorological stations. The sea was very rough at Diamond Island, and a fairly strong wind was blowing, but after a day or two both wind and sea began to moderate. When this improvement was established at Diamond Island, the depression had become better defined in the north-west of the Bay, and it then appeared that the disturbance was similar in character to the ordinary small storms which occur frequently in the rainy season.

On Monday, the 22nd, pressure was rising briskly in the south-east of the Bay and changes were small everywhere, while wind velocity was low except at Diamond Island and in Ceylon. After this, however, its motion was slow towards the north, the centre probably passing in an almost northerly direction, and at no great distance from the North Orissa Coast. On Tuesday, the 23rd, pressure fell rapidly at False Point, the wind remaining north-easterly until the evening, when communication with the station ceased. Pressure had fallen to 29 inches, and this fall was accompanied by a strengthening wind and incessant heavy rain. At 8 A.M. on Wednesday morning the centre appeared to be almost east of False Point, and wind velocity was increasing at all the stations on the north-west coast, as well as over all Lower Bengal, but rainfall, though very heavy in Orissa, and gradually extending to South-West Bengal, was very partial at stations further inland or entirely absent. During Wednesday and Thursday the motion of the depression must have been very slow, and at times it appeared to be almost stationary, but it was steadily developing. On the afternoon of Thursday it seemed to be moving in a more westerly direction, so as to pass well to the west of Balasore, as the wind directions at Saugor Island, Calcutta and Balasore began to change to south through east, and the velocity fell considerably at the first two. In the evening of Thursday, however, the winds returned to their previous north-easterly directions and began to increase rapidly in strength. On the near approach of the centre, pressure fell with great rapidity at Saugor Island, the lowest reading reported being at 5 o'clock on Friday morning, when it was 28·423 inches. The centre must then have been a short distance to the west of Saugor Island. A hurricane began about 4 A.M., and continued for many hours. At 5 A.M. the velocity was reported to be not less than 90 miles an hour, and the continuance of these high winds is shown by the average velocity from 8 A.M. on Friday to 8 A.M. on Saturday being 50 miles an hour. After passing Saugor Island the centre moved more to the west, passing about half way between Calcutta and Midnapore in the early part of the afternoon. It then returned to its previous direction, and passed slowly across the central and eastern districts of Bengal, but with steadily diminishing intensity.

The weather in Lower Bengal was necessarily very unsettled during the last half of the week. Strong cyclonic winds were blowing at all stations, and a good deal of rain was falling; but in Bihar and North Bengal fine weather continued till the end of the week. After the storm centre crossed the coast, very heavy rain preceded and accompanied its advance. Rainfall, however, became lighter and less general after the area of lowest pressure passed the central stations, and it never extended to North Bengal and Bihar. The north-easterly motion of the centre had evidently an important influence on the quantity of rain and its distribution in the northern districts, as the cyclonic circulation of winds which prevailed over a wide area meant westerly directions, and comparative absence of moisture even when the centre was still within a short distance from Calcutta.

Pressure.—The passage of the depression caused large fluctuations, and at the centre pressure was probably considerably lower than even at Saugor Island, where it reached 28·423 inches. At False Point it fell to 29 inches before communication ceased, and at Calcutta, Midnapore, and Balasore readings on Friday were very little over 29 inches. Owing to the slow motion of the depression changes during Friday were very small except at Saugor Island, Balasore and Midnapore, and at Sirajganj and Faridpur, where there was a rapid fall owing to the advance of the depression in that direction. Defect was very large for several days, and has affected the means for the week at all stations in Orissa and South Bengal. The largest mean defect is ·316 inch at Saugor Island, and it exceeds a quarter of an inch at Cuttack, Balasore and Calcutta. In the northern districts defect was very little over a twentieth of an inch.

Temperature.—Owing to the cloudy weather which prevailed in Lower Bengal and Orissa during the whole or a considerable part of the week, day temperatures were many degrees below the normal and night readings also, though to a much smaller extent. In North Bengal and Bihar, however, where the influence of the cyclone has been very slight, ordinary temperatures have continued. Defect in mean temperature is over 8° at Cuttack and Midnapore, and over 5° in many parts of South-West Bengal and Chota Nagpur. Average defect for Chota Nagpur is 6·9°, Orissa 5·7° and South-West Bengal 5°. In East Bengal there is defect of only 1·6° and South Bihar of half a degree, while in Assam, North Bengal and Bihar there is excess ranging up to 3·7° in Assam.

Rainfall has been unusually heavy in Orissa and South-West Bengal; the detailed falls will be found in the accompanying tables. In Chota Nagpur and also East Bengal considerably more than normal amounts have fallen, but in North Bengal and Bihar falls are either average or under. The mean fall for the whole of Orissa is 17·76 inches, in South-West Bengal 6·91 inches, East Bengal 6·98 inches, and in Chota Nagpur 2·66 inches. North Bengal received 1·98 inches as compared with a normal fall of 2·39 inches, South Bihar ·88 inch and North Bihar ·39 inch.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 27th of May 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th May 1893.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	102·1	61·6	86 6	77·0	82·0	—4·2	14·11	1·02	+13·09	3·40	1·27	+2·13	17·76	3·26	14·11	1·49
South-West Bengal ...	104·2	59·4	89·3	77·4	83·3	—5·0	6·91	1·10	+5·81	3·28	1·68	+1·60	10·95	4·48	6·91	1·68
North Bengal	99·6	72·1	92·2	77·8	85·0	+0·9	1·98	2·39	—0·41	1·52	2·30	—0·78	5·20	6·68	1·99	3·38
East Bengal	96·2	73 8	87 5	76·9	82·2	—1·6	6·98	2·06	+4·92	3·13	2·40	+0·73	12·80	8·11	7·19	3·07
North Bihar	107·2	74·0	99·2	80·5	89·9	+2·0	0·39	0·62	—0·23	0·75	0·86	—0·11	2·11	2·35	0·39	0·98
South Bihar	109·4	73·3	101·0	81·9	91·5	—0·5	0·88	0·57	+0·31	1·00	0·72	—0·28	3·33	1·64	0·88	0·81
Chota Nagpur	106·8	67·9	90·8	74·4	82·6	—6·9	2·66	0·72	+1·94	2·13	1·04	+1·09	4·69	1·99	2·06	1·19
Assam	101·6	69·4	94·7	76·2	85·5	+3·7										

METEOROLOGICAL OFFICE, BENGAL,
The 30th May 1893.

C. LITTLE,
Offg. Meteorological Reporter to the Govt. of Bengal.

Results of the Meteorological Observations taken at the Alipore Observatory from 21st to 27th May 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature.				Hygrometry.				Wind.		Rain.	Weather.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
May	21st	159·0	9·6	29·537	88·5	96·6	15·6	81·0	79·9	0·906	76·2	68	E, calm and variable.	63	Not measurable.	Partially cloudy, o, g, d, t, <.
,,	22nd	151·0	4·5	·566	86·0	93·4	12·2	81·2	79·1	·902	76·1	72	E and ESE ...	183	0·02	Chiefly cloudy, o, g, d.
,,	23rd	124·3	Nil	·549	81·2	85·0	7·8	77·2	77·3	·885	75·5	83	E and ESE ...	278	0·32	Cloudy, o, g, d, p, t.
,,	24th	95·5	,,	·491	77·8	80·9	5·9	75·0	74·9	·827	73·5	87	ENE and E ...	362	0·78	Cloudy, o, g, d, p, /.
,,	25th	84·1	,,	·375	77·4	78·7	5·3	73·4	75·8	·872	75·1	93	ENE and E ...	410	5·01	Cloudy, o, g, d, p, ●, /, u.
,,	26th	84·5	,,	·060	76·6	77·7	4·4	73·3	75·2	·856	74·6	93	ENE, ESE and SSW.	552	2·80	Cloudy, o, g, d, p, ●, /, u.
,,	27th	93·5	,,	·233	76·7	79·7	7·3	72·4	74·9	·842	74·0	92	SSW, W and WNW.	447	3·01	Cloudy, o, g, d, p, ●, /.

	Inches.
The mean pressure of the seven days	29·402
The average pressure of the corresponding period for 24 years, Surveyor-General's Office	29·625
	Hours.
The total number of hours of bright sunshine	14·1
The maximum possible number of hours of sunshine	93·5
	°
The mean temperature of the seven days	80·6
The average temperature of the corresponding period for 24 years, Surveyor-General's Office	86·8
The extreme variation of temperature	24·2
The maximum temperature	96·6
	Miles.
The highest velocity of the wind in one hour	36
	lbs
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	84
The average relative humidity of the corresponding period for 24 years, Surveyor-General's Office	74
	Inches.
The total fall of rain from 21st to 27th May 1893	11·94
The average fall of the corresponding period for 24 years, Surveyor-General's Office	1·06
The total fall from 1st January to 27th May 1893	24·11
The average fall of the corresponding period for 24 years, Surveyor-General's Office	8·60

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h, and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; d, drizzling rain; p, passing temporary showers; t, thunder; <, lightning; ●, continued rain; /, strong wind; u, threatening.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;
Calcutta, the 29th May 1893.

J. H. GILLILAND,
For Meteorological Reporter to the Govt. of India.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 21st to 27th May 1893.

Month.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature.						Hygrometry.			Rainfall, past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vapour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
May ...	21st ..	29·582	89·4	98·0	17·2	80 8	91·6	81·5	·940	78·2	63	......
„ ...	22nd ...	·583	87·4	94·0	13·2	80·8	88 6	81·0	·951	77·7	69	......
„ ...	23rd .	·608	81·2	84·6	6·8	77·8	79·4	76·5	·875	75·2	87	0·09
„ ...	24th ...	·524	78·6	79·9	2·7	77·2	79·4	76·5	·874	75·7	87	0 51
„ ...	25th ...	·437	76·1	77·9	3·6	74·3	76·6	71·6	·701	68·6	75	1·40
„ ...	26th ...	·008	76·3	77·9	8·3	74·6	77·6	76·5	·900	73·6	95	5·47
„ ...	27th ...	·161	77 9	81·9	8·1	73·8	77·1	76·5	·907	73·4	98	2·11

		Inches.
The mean 10 A.M. pressure of the seven days	... ...	29·415
		°
The mean temperature of the seven days	... ...	81·0
The extreme variation of temperature	... ...	24·2
The maximum temperature	... ...	98 0
		%
The mean 10 A.M. relative humidity of the seven days	... ..	82
		Inches.
The total fall of rain from 21st to 27th May 1893	... ...	9 58

The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 29th May 1893.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 27th May 1893, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 27th May 1893.			Week ending Saturday, the 28th May 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	143	19,925	298	184	61,175	918
Jute	6	2,650	31	14	4,800	53
Firewood	60	44,100	675	138	68,465	1041
Other articles	351	1,06,280	1,670	906	1,81,270	2,662
Total ...	560	1,72,955	2,674	1,242	3,15,710	4,677

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 20th May 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	* Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*278,775	*2,79,142 13 9	34,60,932 20	8,12,643 15 0	24,003 2 0	11,15,789 14 0	73,940½	135,188½	209,129
Or per mile of railway	......	173 5 3	......	504 9 5	14 14 6	692 13 2	......	......	......
For previous 19 weeks of half-year	5,598,247	61,55,280 3 0	5,85,97,899 10	1,32,33,246 3 0	3,70,306 7 0	1,97,58,832 13 0	1,477,654½	2.215,357	3,693,011½
Total for 20 weeks ...	5,877,022	64,34,423 0 0	6,20,67,831 30	1,40,45,890 2 0	3,94,309 9 0	2,08,74,622 11 0	1,551,595½	2,350,545½	3,902,140½
Comparison.									
Total for corresponding week of previous year	283,720	2,49,941 14 11	37,66,172 0	9,45,443 13 0	24,012 11 8	12,19,398 7 7	73,008	163,253	236,261
Per mile of railway corresponding week of previous year ...	......	155 3 1	......	587 0 10	14 14 7	757 2 8	......	......	......
Total for corresponding 20⅞ weeks of previous year	5,974,135½	64,03,235 3 5	6,04,42,855 20	1,47,07,690 3 8	3,97,323 6 11	2,15,08,248 14 0	1,574,181	2,400,765	3,974,946

* Increase is partly due to a deduction from the figures of the corresponding period of 1892 on account of revision of working agreement with I. M. Railway in connection with Agra Bridge toll, and partly to development of traffic at Howrah and some of the stations in B. district.

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 20th May 1893 on 22¼ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	18,129	4,636 2 0	8,082 10	374 6 0	13 0 0	5,023 8 0	843	125	968
Or per mile of railway	......	208 5 10	......	16 13 3	0 9 4	225 12 5	......	......	......
For previous 19 weeks of half-year	*445,740	*1,16,544 0 0	†2,34,341 20	†7,910 8 0	‡234 0 0	1,24,688 8 0	17,061	1,975	19,036
Total for 20 weeks ...	463,869	1,21,180 2 0	2,42,423 30	8,284 14 0	247 0 0	1,29,712 0 0	17,904	2,100	20,004
Comparison.									
Total for corresponding week of previous year	17,872	4,357 9 11	18,735 20	428 14 6	7 15 0	4,794 7 5	863	157	1,020
Per mile of railway corresponding week of previous year ..	......	195 13 7	......	19 4 5	0 5 8	215 7 8	......	......	......
Total for corresponding 20⅞ weeks of previous year ...	464,505	1,20,011 10 1	3,79,850 10	12,500 12 3	242 13 6	1,32,755 3 10	18,021	2,338	20,859

* Added number of passengers 6,097 and Rs. 2,245 }
† Do. Mds. 2,040 and " 56 } on account of difference between the approximate and audited figures for the week ended 15th April 1893.
‡ Deducted " 6 }

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 20th May 1893, on 161⅝ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	18,910	13,771 10 0	76,837 20	10,782 10 0	62 0 0	24,616 4 0	6,636	3,093½	9,729½
Or per mile of railway ...	......	85 5 2	......	66 12 11	0 6 2	152 8 3	......	......	......
For previous 19 weeks of half-year	*357,727	*2,65,409 2 0	†12,90,246 20	†1,69,590 6 0	‡946 0 0	4,35,945 8 0	106,072½	62,985	169,057½
Total for 20 weeks ...	376,637	2,79,180 12 0	13,67,084 20	1,80,373 0 0	1,008 0 0	4,60,561 12 0	112,708½	66,078½	178,780½
Comparison.									
Total for corresponding week of previous year	17,401½	13,540 7 9	48,074 10	8,482 14 0	50 6 3	22,073 12 0	6,767	2,097	8,864
Per mile of railway corresponding week of previous year ..	......	83 14 4	......	52 8 11	0 5 0	136 12 3	......	......	......
Total for corresponding 20¾ weeks of previous year	343,067	2,70,801 3 1	8,82,940 0	1,65,661 0 3	1,470 10 6	4,37,332 13 10	127,586	44,726	172,312

* Added number of passengers 788 and deducted Rs. 221 }
† Do. Mds. 1,923 and deducted " 432 } on account of difference between the approximate and audited figures for the week ended 15th April 1893.
‡ Deducted " 2 }

BENGAL AND NORTH-WESTERN RAILWAY.

(Includes the Tirhut State Railway.)

Approximate return of traffic for the week ending 20th May 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	102,400	41,660	5,60,460	79,760	12,700	1,34,120	13,867	19,306	33,173
Or per mile of railway ...	135·45	55·11	741·31	105·50	16·80	177·41	......	......	......
For previous 19 weeks of half-year*	1,891,863	8,06,978	90,16,894	13,16,386	2,36,886	23,60,250	265,083	371,562	636,645
Total for 20 weeks ...	1,994,263	8,48,638	95,77,344	13,96,146	2,42,586	24,94,370	278,950	390,868	669,818
Comparison.									
Total for corresponding period of previous year on 755 miles open	102,836	43,483	5,34,105	83,164	14,945	1,41,592	12,647	27,295	39,942
Per mile of corresponding week of previous year	136·21	57·59	707·42	110·15	19·80	187·54	......	......	......
Total to corresponding date of previous year	1,911,565	8,55,154	79,80,954	12,15,678	2,43,184	23,14,016	243,907	422,035	665,946

* Includes audited figures up to 1st April 1893.

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No. 23 of 1893.



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CONTENTS.

RESOLUTION ON THE SURVEY AND SETTLEMENT REPORTS.

REVENUE DEPARTMENT—LAND REVENUE.

Calcutta, the 29th May 1893.

RESOLUTION No. 2306.

READ—

Report of the Director of Bengal Surveys for the year ending 30th September 1892.

Read also—

Board's No. 386A., dated the 19th April 1893, submitting the Report of the Director of Land Records on settlements during the same year.

Submission of reports; charge and inspection.

The date originally fixed for the submission of these two Reports was the 15th November, but the Report of the Director of Surveys was not submitted till the 16th March 1893, while the Report of the Director of Land Records reached Government through the Board on the 20th April 1893. In Colonel Sandeman's case, his absence on leave during the recess prevented the report from being commenced at the proper time, and in Mr. Macpherson's case the pressure of urgent work in connection with the commencement of settlement operations in Bihar and Tippera and the necessity for inspecting the work in progress in Orissa, Chittagong, and elsewhere, compelled him to postpone the less essential work of report-writing. The Director of Land Records points out that the present arrangement does not leave him sufficient time to print, read, consider, abstract, and comment upon the local officers' reports. Separate orders will be issued after further consultation, but it is

very desirable that the task of writing the report should be completed before the active work of the cold season is entered upon. Colonel Sandeman, who submits the report on surveys, was appointed to be the Director of Bengal Surveys from the 1st April 1892, but was placed on special duty from the 27th January preceding for the purpose of making preliminary arrangements for the Bihar Survey, and assumed charge of the survey parties working in Bengal from the 8th March 1892. He went on furlough for six months on the 15th April 1892, making over charge to Colonel Strahan. Mr. Maude was in charge of the Department of Land Records from the 1st October 1891 to the 3rd November, and Mr. Finucane from the latter date to the 3rd May 1892, when he went on leave, being relieved by Mr. Macpherson, who remained in charge for the rest of the year. The Report of the Director of Land Records follows the order laid down by Government, giving precedence to the three important settlements of Orissa, Chittagong, and the Western Duars. The Director of Bengal Surveys deals first with the Bihar Survey, which is the most important work under his supervision, but which is not dealt with by the Director of Land Records, as settlement work did not commence in Bihar during the year of report. Colonel Sandeman as well as Messrs. Finucane and Macpherson were active in inspection and made a number of useful tours. The several Settlement and Assistant Settlement Officers of Orissa and Chittagong were generally out in camp for the greater part of their respective terms of employment during the year, and much good work was done. In Jalpaiguri and Chittagong the staff and establishment suffered much from sickness.

General results.

2. Surveys and settlements are now in progress over the whole of the regulation portion of the Orissa Division, and in portions of all the other Divisions except Chota Nagpur, where the Bengal Tenancy Act is not at present in force. The advisability of extending portions of the Act to this Division, under the provisions of Act XIV of 1874, for the purpose of a general survey and record of rights in order to allay agrarian disturbances and to facilitate the commutation of predial services, has long engaged the attention of Government, but no final decision has been arrived at pending the receipt of a report by the Board on certain subsidiary questions. The outturn of survey work by professional agency amounted during the year to 4,712 square miles of traverse survey, 2,290 square miles of cadastral survey, 327½ square miles of forest survey, and 556 square miles of topographical survey including 194 square miles of hill sketching in Chittagong, besides 187 square miles of skeleton boundary survey of tea grants and jungle and 17 square miles of detail survey of tea lands. With the exception of the forest survey, the Bhutan boundary survey, the Rajapur drainage survey, and the survey of the Town of Calcutta, all the surveys in progress have for their object the settlement of revenue or rent. It is true that the main purpose of the Bihar Survey is to record rather than to settle rents; still the former process tends almost inevitably to lead to the latter, as under the law it is open to either landlord or tenant to apply for the settlement of a fair rent. The total area in which the settlement of revenue or rents was being carried on during the year was 6,600 square miles of temporarily-settled tracts and Government estates, 1337 square miles of wards' estates, and 121 square miles of private estates. The cost of surveys and settlements incurred by Government in temporarily-settled tracts and Government estates (chiefly in Orissa, Chittagong, and the Western Duars of Jalpaiguri) since the commencement of the operations up to 30th September 1892 was Rs. 20,46,408; but the increase of revenue which these operations will yield has not yet been realised, nor can its amount be estimated with any approach to accuracy. The costs incurred by wards' estates for the same period amounted to Rs. 4,10,083; the increase of rent actually obtained is Rs. 61,728, and the additional increase expected Rs. 18,500, or altogether 15 per cent. on the outlay; the corresponding figures for private estates are Rs. 59,364, Rs. 7,239, and Rs. 1,213, which show an increase amounting to 12·2 per cent. on the outlay. Regarded therefore purely from the landlord's point of view the process of survey and settlement brings in a sufficient return to recommend it on financial grounds; while the tenants obtain an adequate set-off for the increase in their rent by having their status recorded and by being protected against further enhancement for a period of fifteen years. An examination of the record shows,

moreover, that the greater part of the increased rental brought out by settlement operations is not due to enhancement properly so called, but to the fact that the tenants have been found to be in possession of land materially in excess of the area for which they were paying rent.

Principles of Procedure.

3. A notable feature of the year's work has been the attempt to draw up a more uniform procedure for conducting survey and settlement operations throughout Bengal. In most of the other provinces of India the conditions governing settlement work are tolerably constant over the whole area affected; the same village systems prevail, the same agency is available, and consequently there is no great difficulty in laying down a standard procedure from which there will be only occasional departures. This, however, is not the case in Bengal. In different parts of the country very diverse conditions have to be considered and dealt with: the agency available for survey, the nature of the tenures, the extent of subinfeudation, and the character of the people themselves, vary materially in the areas under settlement. For these reasons, in the operations undertaken during the last few years, it has been impossible to adhere closely to the procedure laid down in the Survey and Settlement Manuals, and in practice the standard system has been constantly modified with reference to local peculiarities and the views of the Settlement Officers in charge. Efforts are now being made to work on more uniform lines. The leading principle is that the officers of the survey and Settlement Departments should be treated, while engaged in writing the records, as a single staff working with the common object of producing a correct record of the actual facts. With this end in view, rules for the writing of the record in Bihar, Orissa, and Tippera have been drawn up by the Directors of Surveys and Land Records, so as to adapt the general system laid down in the Manuals to the varying local requirements. These rules have been translated into the vernacular for the use of the survey amins and inspectors. The great advantage of combining the two establishments for the purpose of making the record is that the revenue officers employed on settlement work proper are constantly checking and supervising the khanapuri work or writing of the khasra (field index) and khatian (tenant-roll) drawn up by the survey officers, and the double test which is thus applied at all stages of the work will, it is believed, result in producing a correct record at the lowest possible cost compatible with requisite accuracy.

The Chittagong system.

4. In illustration of the differences between the old and the new methods, it is only necessary to compare the procedure under which the Chittagong Survey has been completed, with that which is now being carried out in Orissa, Bihar, and all other settlements in these provinces in which a professsional survey is made. In Chittagong the survey amins were strangers who could not understand the language of the country. They surveyed precisely what they saw, and entered on the map in pencil the boundaries of every subdivision of a field, a number of which sub-divisions, locally designated *kotas*, forms an integral field. The areas originally marked off as villages in the Revenue Survey, though generally too large for a single sheet of the map, were treated as units for the purpose of the settlement, instead of being divided into convenient unit blocks, so that there are on the average five sheets to a village. Traces of these maps were made for the Settlement Department, and settlement amins (local men) were sent to draw up the khasra and khatian, leaving the area columns blank. Their first business was to eliminate the *kotas* and find out which were the actual fields occupied by a separate tenant, and to give serial numbers to those fields; but as each amin worked on a separate sheet, this method brought out five separate series of preliminary numbers to each village. When the traces thus numbered were returned, the Survey Department re-numbered the true fields in one consecutive series for the whole village, worked out the areas, and made over the area lists to the Settlement Department. From the area lists prepared in the survey office, the settlement office muharrirs copied the areas into the khasras and khatians after correcting the numbers originally given in pencil to the fields in these records. The extra labour involved in this system and the additional risk of error are obvious, but the work was too nearly completed, when Colonel Sandeman took charge, to make it worth while for him to attempt to introduce the better system which he has devised.

The Bihar and Orissa system.

5. Under that improved system, as now followed in Orissa and Bihar, the survey amins are required to survey the boundaries of fields only, inking them at the same time without putting down the numbers. The maps are sent to the survey office for scrutiny and testing, after which khanapuri is commenced by the survey amins. If the amin who prepares the maps is an up-country man, as in Orissa he generally is, a local man, who has been taught survey, is deputed from the Survey Office to do khanapuri. Experience has shown that the local amins work too slowly and too inaccurately to be employed on surveying. For the purpose of khanapuri the local amin is supplied with a map sheet, blank sheets of the khasra, khatian, and khewat forms, and jamabandi papers previously obtained from the landlords. A second amin is at the same time employed to prepare the khatian simultaneously with the khasra. All the entries in the khasra and khatian, except such as require the interference of the Settlement Officer, are made by the survey amins, and are read out and explained to the landlords and tenants daily, *parchas*, or slips containing the relevant entries, being given to the tenants, which they can get read and explained to them in the village at leisure, and so feel confidence in the correctness of the entries, or else state clearly what precise entry they object to. Entries which are the subject of dispute are made in red ink or are underlined in red; and disputes are entered in a separate list for the Settlement Officer's decision. The amins who write the records are under the supervision and control of the revenue officers as well as of the survey staff; in so far as the survey and measurements are concerned, they are under the supervision of the Survey Department alone. When the map and records have been prepared in the above manner, they are sent to the survey office in order that areas may be extracted. After areas have been extracted and entered in the records, all the papers, including the map, or a trace of the map, are made over to the revenue officers for final attestation.

Advantages of new system.

6. It will be seen that, as was stated above, the prominent feature of the new procedure is the amalgamation of the Survey and Settlement Departments as parts of one establishment working jointly towards a common end. Each cadastral camp is thus *de facto* the settlement office, and the Survey Inspectors and amins or patwaris here become the Settlement Officers' establishments for purposes for which separate establishments had hitherto to be employed in the field. The unit of survey is no longer the *kitta*, or *kota*, or *kiari*, which is a mere cultivating division of the field, and in many places liable to constant change, but it is the true field of the cultivator. Another radical change introduced is that demarcation, which was formerly carried out under the orders of the Settlement Officer by a separate staff, is now effected by the survey officials, who issue notices under the Survey Act to the proprietors to put up boundary marks. All these improvements appear to the Lieutenant-Governor to be excellent. The Chittagong procedure involves—(i) risk of unfair manipulation of boundaries by settlement amins; (ii) unnecessary survey of innumerable plots of *kotas*; (iii) unnecessary numbering which leads to error and confusion; (iv) want of supervision by the Survey Department over the record-writing amins. Under the Orissa procedure, on the other hand, which has been further improved in Bihar, the records are written simultaneously under the joint control and supervision of the Survey and Settlement Departments. This ensures greater despatch, precision and cheapness. In Chittagong the cost of survey, exclusive of record-writing, but including only the following processes, viz., traverse, detailed survey, completion of maps, area extraction, inking of maps after elimination of *kotas*, and entering of numbers, amounted in the year to Rs. 269-1 per square mile; in Orissa the whole cost of survey, inclusive of record-writing, was Rs. 179 per square mile in 1890-91, and Rs. 157 in 1891-92.

Training of local surveyors.

7. Another satisfactory feature of the year's work is the progress made in training local men in survey work. The employment of local agency on survey and settlements not only materially reduces the cost, but provides an efficient means of maintaining the maps and records when the work is complete. During the season under notice the following local establishments were put through a course of instruction and will be utilized as far as possible:—

In the Champaran district, 180 patwaris and their relatives.

In the Muzaffarpur district, 270 patwaris and their relatives and other local men (80 more were under training).

In Tippera, 300 local men (Bengalis).

In the coparcenary villages in Bihar, it is possible that some difficulty may be experienced in arranging for a patwari or other resident of the village to do the survey and record writing, but it is hoped that this difficulty may not be insurmountable. Section 5 of Regulation I of 1819 empowers the Collector, with the approval of the Board of Revenue, to appoint patwaris in such villages with or without reference to the proprietors, and if it is found that the latter cannot agree among themselves to nominate a joint patwari, it may be necessary to take action under this section.

In the Western Duars no local agency has been trained, nor are any local patwaries available. In Chittagong a few local man were trained when the operations first commenced, but they have not been utilized to any appreciable extent.

Petty settlements.

8. The distinct advance which has thus to be recorded in the system of conducting the larger survey and settlements is due to the enlightened experience of Colonel Sandeman, and to the unwearied supervision exercised by him and by Mr. Macpherson. It is not to be wondered at if the management of petty settlements shows as yet no corresponding improvement. It must freely be admitted that the conduct of these settlements by Collectors in the past has been very often unsatisfactory. The procedure has been slow and hesitating, and the work dilatory and expensive. In consequence of large additions to the duties of the Director of Land Records in connection with the more important surveys and settlements, Government has found it necessary to relieve him of the supervision of this class of work. It is possible that in some cases arrangements may be made to include the survey, the Khanapuri and the record-writing of such settlements in the professional survey programme, leaving the attestation to be done under the supervision of the local officers. But as a general rule the petty settlements must be carried out by District Officers in direct subordination to the Commissioner of the Division, and as they will no longer submit progress reports to the Director of Land Records, it becomes all the more essential for the Board to take the matter in hand, and to issue simple rules to ensure correct procedure and steady progress. What seems to be generally wanting is a correct understanding of the procedure and an intelligent forecast of the rate at which the work ought to be done. District Officers have often not the experience which is required to tell them how much an amin should be able to survey in a month and how large a staff is required to be put in the field so as to carry the fieldwork through the cold weather, leaving the hot weather for attestation and case work and not allowing the business to drag. The worst instances mentioned in the Director's Report are those in which the progress has been unreasonably slow, and unnecessary cost has been incurred and irritation caused. Thus, Khosalpur is a Government estate in Nadia with an area of 425 acres, contained in 13 villages; of which the survey began as far back as April 1889. A re-measurement appears to have been made in the year 1891-92. The survey should have been completed by two amins in a month. Out of 3,525 acres comprised in the Atmi Ward's estate in Shahabad, 1,250 acres were surveyed during the year, but no khanapuri or attestation appears to have been done. Lot Syamdaspur is a patni tenure in the Bankura district, having an area of 82 acres, the survey and settlement of which was sanctioned by the Commissioner of Burdwan on the application of the tenure-holder in March 1890. An amin was appointed to measure the estate in July 1891. He worked under the orders of the Settlement Officer, the Sub-divisional Officer of Bishenpur, and submitted his map and measurement papers in February 1892. The raiyats disputed the correctness of the measurement, and a fresh measurement was ordered at the expense of the tenants, which was completed in April 1892. The settlement was still pending at the end of September 1892. Such delay in disposing of a petty case is lamentable and must discourage proprietors from making applications under Chapter X of the Tenancy Act. In the case of the survey and settlement of nine petty private estates in Midnapore, the settlement cost on the

average about ten times as much as the survey—a proportion which appears to the Lieutenant-Governor most unreasonably high.

Standard procedure to be drawn up.

9. As a first step towards effecting an improvement in this branch of a District Officer's work, the Lieutenant-Governor considers that the Board may with advantage prepare a plain manual stating the procedure to be adopted for an estate of a given size, and specifying how many amins should be employed, when they should begin the work, and how long they should take over it, what system should be adopted for writing the khasras and khatians and giving out parchas while the survey is going on, how supervision should be exercised, how attestation should be effected after the khatians have been finished, and so on through the various stages of the work up to the publication of the record. Having before him these particulars worked out for a standard estate, a Collector ought to find little difficulty in adapting the model scale to any estate which he has to deal with, and he will thus be in a position to exact from his settlement subordinates a definite rate of progress. One factor no doubt is variable. The number of entries disputed will differ in different parts of the country according to the bitterness of party feeling, the nature of the holdings, or the character of the people, and this may make a material difference in the duration of the settlement. It may be expected, however, that even under this head experience will render it possible to work out average rates of progress for different areas which will afford some guidance in judging whether a particular settlement is being unduly delayed.

Progress of Work—Bihar Survey.

10. The following paragraphs show the progress made in the larger survey-settlements. The Bihar survey was sanctioned by the Government of India in their letter No. 2135—112, dated the 18th September, 1891. A notification under the Bengal Survey Act V (B.C.) of 1875, dated the 17th November 1891, was accordingly published in the *Calcutta Gazette* for the survey of the districts of Muzaffarpur, Darbhanga, Saran, and Champaran. The preliminary arrangements for the traverse survey in Muzaffarpur and in Champaran were made by His Honour the Lieutenant-Governor during his visit to Bihar in the early part of November 1891, with the advice of Mr. Finucane, immediately before the survey party took the field. Work actually commenced on the 19th December 1891, as there was some delay in issuing notices under the Survey Act on landholders and others, but it was not till about the 10th January 1892 that the survey party mustered in full strength. During the experimental survey under the Tenancy Act of the Muzaffarpur district in 1885-86, Colonel Barron had traversed 803 square miles, of which 414 square miles were cadastrally surveyed. Out of the 389 square miles remaining to be surveyed in 1891-92, village trijunction points were found marked by stones in 301 square miles, and this was the first area taken in hand during the season. The survey party worked till 17th June 1892, when it went into recess. The area traversed during this period was 1,247 square miles covered by 2,144 villages in Muzaffarpur, and 363 square miles covered by 238 villages in Champaran, or a total of 1,610 square miles, which is only 90 square miles less than the season's estimate. Including the 301 square miles of Colonel Barron's survey, over 1,900 square miles were made ready for cadastral work during the season 1892-93.

Employment of patwaris.

11. In March 1892, Colonel Sandeman was present at a meeting at Muzaffarpur presided over by the Commissioner of the Division. The Maharaja of Darbhanga and about 30 representative planters and zamindars attended. The object of the meeting was to explain to the parties interested the financial and other advantages of utilizing the village patwari for the purposes of the survey. The meeting unanimously approved the principles of employing local agency, but with the qualification that before the patwari was trained and employed at the zamindar's expense, he should be released from Government control. Mr. Gibbon, Manager of the Bettia estate, alone engaged to place the services of 250 patwaries at the disposal of the Survey Department by way of experiment. Subsequent to the meeting, Babu Ramdhari Sahai, the Secretary of the Landholders' Association, and Mr. (now Sir W.) Hudson asked permission to

send their patwaries for training. The Maharaja of Darbhanga also requested the Director of Bengal Surveys to give some of his patwaries a professional training, in order to save him the cost of employing amins to make yearly corrections in the maps of his estate. Sir Charles Elliott notes with satisfaction the favourable attitude of the zamindars with regard to the training of a local agency; and trusts that they will give further support to the operations as they become more assured of the care and accuracy with which the records are being framed. His Honour desires especially to place on record his acknowledgments to Mr. Gibbon for the support which he has given to the Survey and Settlement Officers.

Boundary pillars.

12. With regard to boundary pillars, the Director of Surveys reports that the stones used for marking trijunctions and certain other intermediate traverse stations were all of one pattern, viz., blocks of sandstone 2 feet long, rough hewn to $4\frac{1}{2}$ inches from the end, which was cut into a triangular prism of three sides. These were obtained from the Bengal Stone Company at Mirzapur. The Director of Surveys has made arrangements for the future with Messrs Burn and Company for new kinds of marks made of Raniganj pottery; those meant for ordinary traverse stations being only glazed pipes 2 feet long and 2 inches in diameter, costing 2 annas each, and those for trijunction points being cylindrical cones marked S ↑ I, measuring $2\frac{1}{2}$ feet long and 8 inches diameter, and costing 12 annas each. These when filled with clay will answer the same purpose as stones, and will be much cheaper.

Orissa.

13. The following statements show the area to be dealt with in Orissa, the survey work done previous to the season 1891-92, and that done during the season :—

District.	Permanently settled area.	Temporarily-settled area.	Area under revenue settlement.	Permanently-settled or revenue free area under settlement of rents.	Total of columns 4 and 5.	Work done before 1891-92.		Work done in 1891-92.		Remarks.
						Traverse.	Cadastral.	Traverse.	Cadastral.	
1	2	3	4	5	6	7	8	9	10	11
	S. miles.	S. miles.	S. miles.	S. miles.	S. miles.	S. miles.	S. miles.	S. miles.	S. miles.	
Cuttack ...	1,503	2,189	2,073	254	2,327	711	321	1,252	1,459(a)	(a) Includes 364 square miles canal irrigated land previously surveyed and now revised.
Puri ...	191	1,784	976(b)	194	1,170	856	716	167	307	(b) Excluding Khurda.
Balasore ...	372	1,697	1,697	Nil	1,697	Nil	Nil	588	Nil	
Total ...	2,066	5,670	4,746	448	5,194	1,567	1,037	2,007	1,766	

It appears that the survey work remaining to be done in the three districts at the end of September 1892 was as follows :—

	Traverse.	Cadastral.
Cuttack	Nil	320
Balasore	1,100	1,697

Floods in Cuttack.

14. Heavy floods interfered to a serious extent with the work in the Cuttack district. There was heavy rain on the 8th, 9th and 10th of June, and on the 11th the survey camps stationed on the banks of the Byturni river were swamped. So great was the rise of the floods that boats of 500 maunds capacity were rowed into the camp for the rescue of the survey records. It was due to the presence of mind and energy of Mr. Smart that the whole of the records of the season's work were not destroyed. The 1,459 square miles shown as cadastrally surveyed in Cuttack included 364 square miles of canal irrigated lands, in which the work consisted of bringing up to date the maps of 1878-79, and doing the khanapuri. This turned out unavoidably to be little less arduous than entirely fresh work.

Causes of delay.

15. The report of the Director of Surveys demonstrates clearly the fact that the work of record-writing was retarded owing to the want of precise rules. No less than four different forms of khasra and three different forms of khatian were introduced

during the season. The Lieutenant-Governor does not under-rate the difficulties which had to be contended with in adapting the standard forms to local conditions, and he is prepared to admit that the form to be finally adopted cannot be expected to be arrived at on the first attempt. But the amount of change in the Orissa forms was clearly excessive. It is also a matter for regret that precise instructions for the record-writing were not translated into the vernacular and placed in the hand of the amins until June 1892. As already noted, however, a definite plan of procedure was laid down during the year in consultation between the Survey and Settlement Departments. This plan was revised in December 1892, with the concurrence of the Lieutenant-Governor, in certain points of detail. It is hoped that no large changes will in future be necessary, and that the experience acquired in Orissa and Bihar will materially facilitate the preparation of final forms for all other settlements.

The report of the Director of Surveys shows that record-writing was done during the year in 1,145 square miles of Cuttack and 307 square miles of Puri. The Director of Land Records states that the record of rights and of rents had been attested in only 1,425 square miles up to the end of the year. The area of attestation given in square miles shows that attestation is considerably behind the record-writing. Twenty-three per cent. of the khasra entries in Cuttack, and thirty-two per cent. in Puri, were checked jointly by Europeans of the Survey Department, by Assistant Settlement Officers, and Native Inspectors; the superior officers of the Survey and Settlement Department only checked 5 per cent. of these, which seems to be hardly enough.

Cost of work.

16. The rates paid by the Survey Department for the various descriptions of work done in the Division, as compared with the previous season, were as follows, per square mile:—

	1890-91.			1891-92.		
	Rs.	A.	P.	Rs.	A.	P.
Traverse survey	34	4	9	29	9	7
Cadastral "	72	4	9	63	9	7
Khanapuri	27	0	0	34	0	0
Completion of records	45	7	2	29	12	0
Total ...	179	0	8	157	0	0

These figures show a saving of Rs. 22 per square mile, though the decrease in the rate for cadastral work is perhaps to a certain extent due to the inclusion in it of the 364 square miles of revision survey of canal irrigated lands in Cuttack. The rate for survey for the season under review was not quite 4 annas per acre, and must be considered satisfactory, having regard specially to the disadvantages already referred to, under which khanapuri work had to be done, and to the drawback to the full employment of local agency presented by the constitutional laziness and clumsiness of the Uriya amin. The improvements since effected in the procedure may be trusted to show a further reduction in the rates. The figures for khanapuri and completion of records are satisfactory.

Assessment work did not begin, nor was there any settlement of fair rents in Orissa in 1892-93. Soil maps constructed with the object of facilitating assessment have been prepared for 1,038 villages in Cuttack and 633 in Puri.

Chittagong.

17. The survey work done during the year consisted of 167 square miles of traverse and 462 square miles of cadastral survey in the head-quarters sub-division, and 130 square miles of traverse and 26 square miles of cadastral work in Cox's Bazar. The work remaining to be done at the end of the year comprised some 500 square miles of traverse survey in Chakaria, Moheskhal, and Teknaaf, and a cadastral survey of 110 to 120 square miles out of this area.

The total number of villages under survey and settlement is 933 in the head-quarters sub-division and 147 in the Cox's Bazar sub-division, including Ramu. Up to the end of the year the khasras of 825 villages of the head-quarters sub-division had been written by the khanapuri amins, but khatians had been completed and the area columns in the khasras filled up for only 655 villages, in only 355 of which had attestation been done. Khanapuri work of thana Ramu

was completed in 1890. No khanapuri had been done up to September 1892 for the rest of the Cox's Bazar sub-division. The slow progress of khanapuri work in Chittagong is due to the cumbrous procedure already explained. Existing rents were recorded and status determined for 119,871 raiyats and 70,393 other tenants in the Sadar sub-division during the year. Fair rents had been settled for a small number of tenants only down to the end of the year.

Western Duars.

18. The outturn of survey work for the year was 22·74 square miles of cadastral survey of jotes scattered over the whole tract, which had been omitted in previous seasons for various reasons, 327·53 square miles of forest survey on the 4″ scale, 337·17 square miles of waste land survey on the 2″ scale, and 17·52 square miles comprised in two blocks of tea land, which the Settlement Officer had in the previous season decided to reserve against tea. Survey work in the Western Duars came to a close in the year.

The unit of the map in the Duars is a cluster of jotes. There are no villages in the survey sense of the word, the territorial divisions being parganas or taluks, which are too large for units. Altogether 10,303 jotes and khas blocks have been under survey and settlement. Attestation of all the jotes, with the exception of 946, had been completed up to the end of the year. Settlement of rent and revenue had been completed only in 4,170 jotes comprising the Mainaguri tahsil. In this tahsil the revenue has been raised by the settlement from about Rs. 1,28,000 to Rs. 2,09,000; and the Lieutenant-Governor has learned with satisfaction that the new revenue has been collected for the first year without any difficulty.

The smaller Government estates.

19. Arrangements have been made for the survey by a professional party during 1892-93 of the Jaipur khas mahal in the Bogra district, covering an area, in a fairly compact block, of 44 square miles, and of the Pataspur estates in Midnapur, with an area of 56½ square miles. The smaller Government estates under settlement were the following. In all of these the survey was non-professional, with the exception of some of the estates of Backergunge:—

Burdwan Division.—There was only one small estate Bhetia in Midnapore. The completion of the settlement awaits a decision on the position of the aymadars, which is stated to be analogous to that of the itmamdars of Chittagong.

Presidency Division.—The only estate under settlement under the Tenancy Act was a petty one named Khosalpur in the Nadia district. Though the settlement is reported to have been concluded in October last, the final report has not yet been submitted. The extraordinary delay in completing this little settlement has already been noticed.

Dacca Division.—One estate named Jowar Joymongal in the Dacca district, 14 small estates called the Kalkini estates in Faridpur, and 21 Government estates with an aggregate area of nearly 95 square miles in Backergunge, were under settlement under the Tenancy Act. The inordinate delay in the case of the first-named estate has been already mentioned. The settlement of the Kalkini estates was originally taken up in 1889 under the Regulations, but in 1891 the proceedings were brought under the Bengal Tenancy Act. After some correspondence it was decided that no new settlement would be required if the survey previously made proved to be correct after testing 10 per cent. of the field measurements. The settlement of these estates has proceeded very slowly, and it has been found necessary, since the close of the year, to appoint a special Settlement Officer for them.

The settlement of 17 of the Backergunge estates, with an area of 52,590 acres, was in charge of Mr. Dwija Das Dutt. Babu Peary Mohan Basu, Settlement Officer of the Dakhin Shabazpur Ward's Estate, was in charge of three with an area of 6,520 acres, while the Sub-divisional Officer of Bhola was in charge of the remaining one, the area of which is 1,062 acres. The description of the work done during the year, given in the report of the Director of Land Records, shows the work done, but does not show how much remained to be done at the end of the year.

Chittagong Division.—Sixteen small estates in Tippera and three in Noakhali were under settlement under the Tenancy Act. In the case of six of the

Tippera estates all proceedings from demarcation to confirmation were concluded within the year. This is satisfactory, and should be the usual rule in all such settlements. The settlement of these six estates resulted in an increase of Rs. 1,068 over the previous rental of Rs. 2,023. In the case of seven other estates in this district the proceedings were originally started under the Regulations, but eventually the Bengal Tenancy Act had to be applied. The settlement of these estates was also completed within the year, though copies of khatians remained to be distributed. The settlement of another estate, Maizurdi, standing over from the previous year, was also completed, while fair progress had been made in the settlement of the remaining two. In the Noakhali district there were three estates, the settlement of only one of which was completed during the year and awaited the final sanction of the Board; in the case of the other two, settlements of fair rents have been made, but the proceedings have not yet been completed. In one of these the amins' papers were prepared very badly and took an unduly long time to examine and attest.

Patna Division.—Only two small estates with an area of 2,014 acres were under settlement under the Tenancy Act. The settlement of both was concluded during the year, but it is not stated when it was commenced. The rent-roll of the two estates was increased from Rs. 2,721 to Rs. 3,437 in the case of one, and from Rs. 4,848 to Rs. 5,565 in the case of the other. The cost incurred was only Rs. 268 in the former and Rs. 235 in the latter, which is satisfactory.

Wards' Estates.

20. The Wards' estates under survey and settlement were portions of the Burdwan Raj Estate situated in Burdwan, Bankura, Midnapore, Hooghly, Nadia, containing an aggregate area of 141 square miles (exclusive, however, of Bankura), and Kujang with an area of over 226 square miles in Cuttack; the Talipabad estate in Dacca, containing an area of 94 square miles; the Dakhin Shabazpur estate in Backergunge containing 149 square miles; the Serail estate in Dacca containing nearly 277 square miles; the Kanika estate in Cuttack containing 441 square miles; and a small estate named Atmi in Shahabad.

The Manager of the Burdwan Raj Estate reported that he had been enabled to recover possession of some missing villages by the help of the survey work of previous seasons; and by his request further survey operations were undertaken in the Bankura district under Government Notifications under the Tenancy and Survey Acts, dated November and December 1891. The work allotted for professional survey during the year was the traverse survey of 650 square miles in Bankura, and the cadastral survey of 62½ square miles scattered over Burdwan and Bankura districts. The records of the Burdwan Raj regarding lands in Bankura were found to be very incomplete and misleading, and out of 62½ square miles claimed, the Raj officials could only point out an aggregate area of 13 square miles as actually held by the Raj. The outturn of work in these two districts was 621 miles of traverse survey and 13 square miles of cadastral work, while the cost, owing partly to the defective state of the Raj records, and partly to obstruction on the part of the tenants, was nearly double of what it would have been under more favourable circumstances. The settlement of the Sujamutha estate in Midnapore, appertaining to the Raj, was completed during the year by Mr. Dejen Lala Roy, except with regard to the records of one village. The cost of work was ten annas for survey and fifteen annas for settlement. The report is awaited. The survey of the Kujang Estate in Cuttack, belonging to the Burdwan Raj, which began in 1889, had been completed by professional agency before the beginning of the year under review. The settlement work ended in April 1892.

Much progress does not appear to have been made in the survey and settlement of the Talipabad Estate in Dacca; the process of framing the records has been slow and expensive, and the best efforts of the Settlement Officer are required to bring the operations to a satisfactory conclusion within reasonable limits of expenditure. The survey of the Dakhin Shabazpur Ward's Estate was completed during the year; fair progress was also made in the settlement of this and of the Serail Ward's Estate. The completion report for the latter settlement is awaited.

Private Estates.

21. The most important survey of a private estate undertaken under the Tenancy Act during the year was that of Chakla Roshnabad in Tippera belonging to the Maharaja of Hill Tippera. The area of the Maharaja's estates in British territory is 572 square miles, of which about 16 square miles are in the Sylhet district of Assam. The survey and settlement have been undertaken on the application of the Maharaja and at his cost. He has deposited one lakh of rupees to meet the cost. A small section of the Chittagong survey party was despatched to Tippera for this work towards the middle of April, and completed the traverse survey of 150 square miles. The Maharaja had expressed a wish that the operations should be spread over at least two seasons in order to give him time to protect his own interests. The attitude of the tenants was obstructive at the outset, but matters mended when the Collector, Mr. Greer, visited the Survey camp in May and explained to the talukdars the objects of the survey. Owing to the complicated nature of the tenures, the minute sub-infeudation, the litigious character of the tenants, and the number of long-standing disputes between them and their landlord, it seems probable that the settlement of these estates will be attended with special difficulties and a rapid rate of progress cannot be looked for.

22. The Lieutenant-Governor desires to acknowledge the admirable work done during the year by Colonel Sandeman and Mr. Macpherson in connexion with the introduction of a more uniform system of Survey and Settlement into Bengal. Both of these officers have had great difficulties to contend with, and their duties, which have been exceptionally heavy, have been performed with the highest zeal and ability. The thanks of the Lieutenant-Governor are also due to Messrs. Slack and Allen for the progress made in the Chittagong Settlement, and Mr. D. Sunder for that in the Western Duars. Lieutenant Crichton also deserves credit for the ability with which he has conducted the extensive and difficult survey operations in Orissa. Mr. H. R. Reily, the Settlement Officer of Orissa, died of an accident shortly after the close of the year under report. Munshi Nandji has already been commended for his excellent report on the settlement of the Dubalhati Estate.

By order of the Lieutenant-Governor of Bengal,

H. H. RISLEY,

Secretary to the Government of Bengal.

REPORT ON THE STATE OF THE SALT MARKET FOR THE FOURTH QUARTER OF 1892-93.

No. 440B., dated Calcutta, the 23rd May 1893.

From—L. P. SHIRRES, Esq., Offg. Secretary to the Board of Revenue, L.P.,
To—The Secretary to the Government of Bengal, Financial Department.

SALT.

D. R. LYALL, Esq., C.S.I.

I AM directed by the Board of Revenue to submit the following report on the state of the salt market for the 4th quarter of 1892-93, comprising the months of January, February, and March 1893.

2. The quantity of salt of every description cleared during the quarter under report amounted to 24,22,398 maunds, against 26,48,867 maunds in the previous quarter, and 22,12,559 maunds in the corresponding quarter of the previous year; and the net amount of duty levied thereon was Rs. 56,82,664, against Rs. 62,46,890 in the previous quarter, and Rs. 51,96,684 in the corresponding quarter of the previous year. In all cases fractions are omitted.

3. The quantity of excise salt removed from the golas in Orissa during the quarter under review, and the quantity which remained in store at the close of the quarter, are shown in table I:—

TABLE I.

	Cuttack.	Puri.		Balasore.	
		MDS.	S.	MDS.	S.
Balance at close of the last quarter	......	23,949	10	284	0
Manufactured or added during the quarter	......	......		......	
Total ...	......	23,949	10	284	0
Sales during the quarter	......	2,375	0	33	0
Wastage	......	1,666	0	1	0
Total ...	......	4,041	0	34	0
Balance at close of the quarter	......	19,908	10	250	0

4. The total sale of excise salt during the quarter under review amounted to 2,408 maunds, against 33,621 maunds in the previous quarter, and 4,073 maunds in the corresponding quarter of the previous year. The total amount of excise salt on which duty was paid during the quarter was 2,408 maunds.

5. The subjoined table shows in detail the importations into the port of Calcutta and the total clearances of sea-imported salt during the quarter under review compared with the figures of the corresponding quarters of the previous two years:—

TABLE II.

	1890-91.		1891-92.		1892-93.	
	Fourth quarter.		Fourth quarter.		Fourth quarter.	
	Imported.	Cleared.	Imported.	Cleared.	Imported.	Cleared.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Liverpool	14,64,137	14,64,207	12,60,892	13,69,769	14,05,080	15,90,322
Hamburg	......	64,742	3,24,306	2,10,037	......	72,826
Ceylon	......	500	......	......	......	2
Aden	1,73,264	2,18,418	3,02,711	2,44,541	2,35,062	2,38,264
Arabian and Persian Gulfs ...	138	2,50,899	......	1,37,706	1,59,930	2,60,714
Fougies	......	......	57,167	6,580	......	......
Bombay	1,83,045	1,31,780	57,953	1,10,928	1,44,784	1,30,222
Tuticorin	......	......	......	8,840	......	26,920
Coconada	5,708	5,798	......	......	......	......
Total ...	18,26,332	21,36,344	20,03,029	20,88,401	19,45,756	23,19,270

6. Table III shows the quantity of sea-imported salt remaining in the warehouses at the close of the quarter as compared with the results of the previous four quarters:—

TABLE III.

Where stored.	Fourth quarter of 1891-92.	First quarter of 1892-93.	Second quarter of 1892-93.	Third quarter of 1892-93.	Fourth quarter of 1892-93.
	Mds.	Mds.	Mds.	Mds.	Mds.
Sulkea Government golas	13,73,050	8,89,875	8,13,492	8,40,647	6,12,084
Chittagong ditto do.	94,230	29,451	1,03,167	1,56,714	1,16,380
Ditto private do.	5,257	2,176	......	......	......
Narayanganj ditto do.	......	......	......	......	......
Total ...	14,72,537	9,21,502	9,16,659	9,97,361	7,28,464

7. The despatches of salt from Calcutta by water and the three railways passing the several salt-pass stations into the interior of the country, both east and west of the river Hooghly, as well as the despatches by steamers and flats, during the quarter under review and the corresponding quarters of the previous two years, are shown in the table below:—

TABLE IV.

Period.	By water.					By rail.			By steamers and flats.	
	Viâ Balikhal.	*Viâ* Sankrail.	*Viâ* Gewakhally.	*Viâ* Kidderpore.	*Viâ* Balliaghata.	*Viâ* Ruthtollah Ghat.	By the East Indian Railway.	By the Eastern Bengal and South-Eastern Railways or *viâ* Chitpur.	Quantity despatched to the interior (excluding Orissa).	Quantity despatche to Orissa.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Fourth quarter of 1890-91	1,80,345	1,18,564	95,082	70,236	4,37,801	793	7,52,705	2,58,611	1,38,337	53,780
Ditto of 1891-92	1,64,453	1,19,684	81,127	58,794	3,88,313	360	8,66,777	2,40,035	1,06,517	54,250
Ditto of 1892-93	1,66,688	1,27,774	87,990	63,458	5,05,614	62	8,49,135	2,23 391	1,54,771	55,810

8. The quantity of salt despatched by the East Indian Railway to stations beyond Buxar during the quarter under review amounted to 1,721 maunds 10 seers, as noted in the margin, against 5,508 maunds in the previous quarter, and 3,098 maunds 10 seers in the corresponding quarter of the previous year.

		Mds.	s.
January	...	688	20
February	...	......	
March	...	1,032	30
Total	...	1,721	10

9. The quantity of saltpetre-salt removed from the refineries on payment of duty amounted to 11,853 maunds against 7,017 maunds in the previous quarter.

10. The shipments of Liverpool salt for the port of Calcutta, according to published market reports, were as follow:—

			Tons.
January	...	...	14,100
February	...	...	11,950
March	...	...	26,430
	Total	...	52,480

It is reported that 3,000 tons of salt were shipped from Hamburg for the port of Calcutta.

11. Table V shows the average wholesale price per 100 maunds of Liverpool and other descriptions of salt during each fortnight of the quarter:—

TABLE V.

Description of Salt.	Fortnight ending 15th January 1893.	Fortnight ending 31st January 1893.	Fortnight ending 14th February 1893.	Fortnight ending 28th February 1893.	Fortnight ending 15th March 1893.	Fortnight ending 31st March 1893.
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Liverpool	59 2 5	56 13 6	57 4 8	58 0 4	58 2 0	57 12 1
Hamburg karkach	54 3 6	56 3 2	54 8 0	56 5 4	55 12 0	56 12 0
Muscat ditto	45 4 7	45 11 7	45 15 0	44 9 7	44 2 3	45 6 4
Jedda ditto	47 12 10	48 3 2	50 0 0	49 12 0	50 12 5	51 0 0
Bombay ditto	51 10 2	51 12 0	51 10 8	51 2 8	51 6 0	50 3 2
Rock ditto	80 0 0	90 0 0	......	......	75 0 0	75 0 0

12. The following table shows the quantity of sea-imported salt admitted into bond and cleared from bond and shipboard at Chittagong and Narayanganj during the quarter under review and the corresponding quarter of 1891-92:—

TABLE VI.

Port.	Description of Salt.	Admitted into Bond.		Cleared.	
		Fourth quarter of 1891-92.	Fourth quarter of 1892-93.	Fourth quarter of 1891-92.	Fourth quarter of 1892-93.
		Mds. s.	Mds. s.	Mds. s. c.	Mds. s. c.
Chittagong ...	Liverpool	44,770 0	16,996 0	1,02,404 18 0	78,888 34 0
	Hamburg	......	26,440 0	......	11,336 0 0
	Maldivo	......	......	......	0 15 0
	Cochin	......	......	......	0 6 0
Narayanganj	Liverpool and Hamburg	......	......	16,050 11 0	10,494 0 0
	Total ...	44,770 0	43,436 0	1,18,454 29 0	1,00,719 15 0

No transactions in sea-imported salt have been reported for the quarter from the ports of Cuttack, Puri, and Balasore.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 3rd June 1893.

No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.				
BURDWAN DIVN.				
1	Burdwan	June 3, '93	2·84	Weather—hot and cloudy. Cultivation actively going on. Fodder and water sufficient. Prices of common rice:— Srs. Burdwan ... ... 10 to 13 } Kalna ... ... 10 to 13 } Katwa ... ... 13 } per rupee. Raniganj ... ... 13 }
2	Bankura	„ 3, '93	1·40	Weather—hot and generally cloudy. Sowing of *noan dhan* going on. Fodder and water sufficient. Prices of common rice:— Srs. Sadar ... ... 11 } Vishnupur ... ... 11½ } per rupee.
3	Birbhum	„ 3, '93	3·04	Weather—occasionally cloudy with heavy rain in the subdivision. Transplantation of sugarcane in progress. Lands are being prepared for the sowing of paddy. Fields look green and pasturage is sufficient. Price of rice 12 to 14½ seers per rupee.
4	Midnapore	„ 3, '93	1·10	Heavy rain in all three subdivisions. Prospects over most of the district good, but some damage has been caused by recent cyclone to *til* and young paddy. Prices of common rice:— Srs. Sadar ... ... 11 } Contai ... ... 13 } Tamluk ... ... 10 } per rupee. Ghatal ... ... 10 to 11 }
5	Hooghly	„ 3, '93	1·73	Weather—showery since the cyclone passed; now growing warmer. Injury has been done to sowings of winter rice on the lowest lands, and ploughing has been temporarily stopped until the ground becomes dry enough to work, otherwise the heavy rain will do good and facilitate cultivation hereafter. Prices of common rice:— Srs. Sadar ... ... 10 to 11 } Serampore ... ... 10 to 11½ } per rupee. Jahanabad ... ... 10 to 12½ }
6	Howrah	„ 3, '93	2·78	Weather—variable. The late cyclone has damaged the jute and early paddy crops. Some damage has also been caused to the young sugarcane. Condition of cattle good. Fodder and water-supply sufficient. Rice 9 to 11 seers per rupee.
PRESIDENCY DIVN.				
7	24-Parganas	„ 3, '93	2·52	Weather—hot and cloudy. Cultivation is retarded to some extent in consequence of excessive rain. *Aus* and jute seedlings in some places are still under water. Supply of fodder and water sufficient. No cattle-disease prevalent. Prices of common rice:— Srs. Ch. Sadar ... ... 10 to 12 12 } Barasat ... ... 10 8 } Basirhat ... ... 11 7 } per rupee. Diamond Harbour ... ... 12 4 }
8	Nadia	„ 3, '93	1·09	Weather—seasonable. The heavy rain of the preceding week has done good to the sowing of the *aman* crop and to the standing early paddy plants and sugarcane. Prices stationary. Fodder and water sufficient.
9	Khulna	„ 3, '93	3·36	Weather—bright and hot with occasional showers. The late heavy rain has done some damage to *boro* paddy in Bagerhat and to cultivation of *aus* and *aman* paddy elsewhere. Agricultural work again in progress. Coarse rice selling at from 10 to 13 seers per rupee. Fodder and water for cattle sufficient. Cattle-disease in two thanas.
10	Jessore	„ 3, '93	2·99	Weather—rainy and windy in the beginning, seasonable afterwards. The rainfall of the week has delayed the sowing of paddy and submerged the young plants on low lands. Some injury has also been done to *til* and jute. If the weather continues fair the loss will not be great. Prices have risen. Fodder and water for cattle sufficient.
11	Murshidabad	„ 3, '93	3·72	Weather—very hot and cloudy with occasional showers. Sowing of jute commenced. Sowing of *bhadoi* finished and that of *aman* continues. Indigo, sugarcane and mulberry promising. Harvesting of *til* and *boro* paddy continues. Fodder and water sufficient for cattle. Coarse rice sells at 11 seers per rupee.

	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL—*concld.*					
CHITTAGONG DIVN.	12	Chittagong	June 3, '93	14·83	Weather—cloudy and hot. Prospects of crops good. Prices stationary. Condition of cattle generally good. Supply of fodder sufficient.
	13	Noakhali	" 3, '93	3·92	Weather—cloudy with occasional rain. About 8 annas of young *aus* plants damaged by heavy rain. Resowing commenced. Sowing of *aman* also begun, but progress slow. No lack of fodder and water. No cattle-disease. Prices stationary.
	14	Tippera	" 3, '93	6·73	Weather—cyclonic; heavy storms of wind and rain with intervals of warm weather. Crops on low lands damaged by heavy flood. *Aman* doing well. Jute much improved by rain.
	15	Chittagong Hill Tracts.	" 2, '23	19·24	Weather—rainy throughout the week; unusually heavy rain on the 28th and 29th May. Sowing in *jums* still continues. Ploughing in low lands for winter rice commenced. No cattle-disease reported. Common rice being sold at 8 seers per rupee.
DACCA DIVN.	16	Dacca	" 3, '93	4·54	Weather—cloudy and rainy. Recent rain has done good to the standing crops, but ploughing and sowing in some places were stopped by the incessant showers. Fodder available. No cattle-disease. Common rice selling at from 9 to 12 seers per rupee.
	17	Faridpur	" 3, '93	7·24	Weather—unsettled. Damage done to late sowings by recent heavy rain. Sowing continues where possible, but must be generally short throughout the district. The *boro* harvest has been generally 16 annas, and the standing crops are doing well. Common rice sells at from 11 to 12 seers per rupee. Condition of cattle good except for disease in two thanas.
	18	Backergunge	" 3, '93	4·59	Weather—cyclonic with heavy rain till 28th May throughout the district. Since then showery. Prospects of crops fair. The heavy rain with high tides has done much damage to the standing crops. Common rice selling at from 9 to 13 seers per rupee. Fodder and water sufficient.
	19	Mymensingh	" 3, '93	7·37	Weather—cloudy and hot. Prospects of crops good. Common rice selling at from 10 to 13 seers per rupee. *Boro* rice is selling at 16 seers per rupee. Health of cattle good. Supply of fodder and water sufficient.
RAJSHAHI DIVN.	20	Dinajpur	" 3, '93	5·30	Weather—cloudy and rainy during the whole week with occasional breaks. The rain has done good to jute and *bhadoi*. Sowing continues. Price of rice stationary. Condition of cattle good. Supply of fodder and drinking water sufficient.
	21	Rajshahi	" 3, '93	4·39	Weather—very rainy and disagreeably steamy. The rain, which seems to fall somewhere or other every day, is very injurious to the crops; sunshine for several days is necessary. No cattle-disease has been reported from anywhere. Supply of water and fodder ample. Price of rice varies from 11 to 14 seers per rupee.
	22	Rangpur	" 3, '93	4·92	Weather—cloudy, rainy and seasonable. The showers of the week have done much benefit to the standing crops. Price of common rice stationary at from 11 to 13 seers per rupee.
	23	Bogra	" 3, '93	9·85	Weather—unsettled. Some damage has been done to standing crops by the heavy rain in the early part of the week. Prospects of crops are still favourable. Common rice sells at 12 seers per rupee. Fodder and water sufficient.
	24	Pabna	" 3, '93	6·30	Weather—cyclonic in the beginning of the week; partially cloudy and rainy the rest of the week. The heavy rain and storm have spoiled some *til* and jute and the *aus* crop on low land. Transplantation of *aman* retarded owing to incessant rain. Price of common rice at Pabna is 11 seers per rupee and at Sirajganj Rs. 4 to Rs. 5-4 per maund. Fodder and water-supply sufficient.
	25	Darjeeling	" 3, '93	0·89	Weather—warm but foggy and rainy. *In the hills.—Bhutta, marua, kangni, bhadoi dhan* progressing well. *Phaphar* coming to perfection. *In the terai:*—Jute doing well. *Bhadoi* sown. Prices of coarse rice:— Srs. Hills ... ... 10 } per rupee. Terai ... ... 11 to 12 } per rupee.
	26	Jalpaiguri	" 3, '93	11·22	Weather—wet. The rain during the week has done good to *bhadoi* and jute crops. Weeding retarded. Price of rice 12 seers per rupee. Fodder and water sufficient.

	No.	District and date of return.	Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
BHAGALPUR DIVN.	27	Monghyr June 3, '93	1·46	Weather—moist and cloudy with variable winds. *Bhadoi* and paddy sowings being vigorously pushed on. Indian-corn has germinated well. *Cheena* harvesting complete. Indigo and sugarcane in flourishing condition. Cattle-disease in Kharakpur and Nawadih. Fodder and water sufficient. Prices of coarse rice:— Srs. Sadar ... ... 13 to 14½ } per rupee. Begusarai ... ... 14 Jamui 12½
	28	Bhagalpur „ 3, '93	1·46	Weather—warm and close. Sowings in progress. The late rain in the two northern subdivisions has done good. Spring sowings of indigo are doing well. Price of common rice 14½ seers per rupee.
	29	Purnea „ 3, '93	0·45	Weather—sultry, cloudy. Local storms frequent. Sowing of jute, *bhadoi* and *aghani* complete; doing well where rain has fallen, but elsewhere rain is badly wanted. *Kauni* harvest in progress. Fodder and water plentiful. Prices slightly rising. Rice at— Srs. Sadar ... ... 12 } per rupee. Araria ... ... 16 Kishanganj 11
	30	Malda „ 3, '93	4·16	Weather—hot and cloudy with occasional heavy showers. *Boro* rice being reaped; estimated outturn 16 annas. The rain has much improved the prospect of *bhadoi* crops. Price of coarse rice varies from 11 to 14½ seers per rupee. Fodder and water ample.
	31	Sonthal Parganas „ 3, 93	2·52	Cyclonic weather with wind and rain at the beginning of the week; now settling to fair and warm. *Boro dhan* being reaped. Ploughing going on actively. Early rice and Indian-corn promise well, and sugarcane flourishing. Fodder and water abundant. Price of rice from 11 to 13 seers per rupee—slightly easier than last year.
PATNA DIVISION.	32	Patna „ 3, '93	0·82	Weather—cloudy. Harvesting of *cheena* commenced. The rain has been beneficial to the sugarcane crop and to the preparation of land for *bhadoi* and paddy sowings. Broadcast paddy is being sown. Prices of common rice:— Srs. Patna ... ... 15 } per rupee. Barh ... ... 13¼ Bihar ... ... 16¾ Dinapore 13
	33	Gaya „ 3, 93	2·31	Weather—for the most part of the week cloudy and cool. Ploughing and sowing of *marua* and paddy seeds in progress. The rain during the week has been highly favourable to ploughing. Mango a total failure. Water and fodder sufficient. Price of rice 14 to 15 seers per rupee.
	34	Shahabad „ 3, '93	2·50	Heavy showers fell during first part of week. Since yesterday (2nd) afternoon sky has cleared and light west wind blowing. The rainfall has been most opportune for paddy and *bhadoi* sowings. Sugarcane doing well. *Cheena* being harvested. Prices stationary. Fodder and water abundant.
	35	Darbhanga „ 3, '93	1·17	Weather—hot and occasionally cloudy. Paddy, *mung* and indigo doing well. *Bhadoi* sowings commenced. Price of common rice varies from 14 to 16 seers per rupee. Fodder for cattle sufficient.
	36	Muzaffarpur „ 3, '93	0·29	Weather—fair but occasionally cloudy. Paddy crops in low lands which have been sown are doing well. Preparation of land for *bhadoi* sowing is in progress. *Makai* being sown in places. No disease among cattle. Fodder and water-supply sufficient.

No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR—*concld.*				
Patna Division—concld.				
37	Saran	June 3, '93	1·12	Weather—unsettled and showery. Prospects of crops good. Fodder and water sufficient. Prices of common rice:— Srs. c. Chapra ... ... 13 0 per rupee. Siwan ... ... 12 0 per rupee. Gopalganj ... . 13 5 per rupee.
38	Champaran	„ 3, '93	2·65	Weather—warm. Paddy is being sown somewhere, and at other places where it has already been sown grass is being weeded out. *Cheena* looks well. Prospects of indigo fair. Prices stationary. Fodder and water sufficient.
ORISSA.				
Orissa Divn.				
39	Cuttack	„ 3, '93	0·01	Weather—cloudy and warm. The late storm has done some damage to the paddy seedlings. The water on the fields delays sowing. Fodder and water ample. Prices of common rice:— Srs. c. Srs. c. Sadar ... ... 10 0 to 13 0 per rupee. Jajpur ... ... 13 2 to 18 6 per rupee. Kendrapara ... ... 9 0 to 17 0 per rupee. Banki ... ... 15 12 per rupee.
40	Puri	„ 1, '93	2·90	Weather—cloudy. Much damage has been done to *dalua* paddy by late rain, which has also retarded sowing of *sarad*. Prices of rice stationary.
41	Balasore	„ 3, '93	2·86	Weather—very cool for time of year. Ploughing stopped by heavy rain of last week. Prices stationary.
CHOTA NAGPUR.				
South-West Frontier Agency.				
Chota Nagpur Divn.				
42	Hazaribagh	June 3, '93	4·86	Weather—very unsettled: stormy with much rain since 30th May. Sugarcane doing well. Mango poor. Ploughing and sowing in vigorous progress all over the district. Fodder and water sufficient. Prices of common rice:— Srs. Head-quarters ... ... 10 to 14 per rupee. Giridi ... ... 8 to 12 per rupee.
43	Lohardaga	„ 3, '93	3·06	Weather—cloudy. Ploughing and sowing of *gora* and *done* paddy continue. Common rice selling at 13 seers per rupee. Fodder and water sufficient.
44	Palamau	„ 2, '93	1·10	Weather—cooler. Showers in almost all parts of the district. Fields are being prepared. Prices stationary. No cattle-disease. Fodder and water sufficient.
45	Singhbhum	„ 3, '93	2·10	The rains have apparently set in. Crops doing well. Sowings going on everywhere. Common rice selling at 12 seers per rupee except at Ghatsilla, where the price is 10 seers. Cattle-disease reported from some thanas.
46	Manbhum	„ 3, '93	0·99	Weather—warmer and much more pacific. Ploughing has been resumed. Prospects so far fair. Rice 10 to 13 seers per rupee. Fodder and water-supply ample.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 6th June, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

STATEMENT SHOWING THE STOCKS OF RICE IN AND AROUND CALCUTTA.

Names of Marts.	Stock in hand as compiled on—												
	1st week of June 1892.	1st week of July 1892.	1st week of August 1892	1st week of Sept. 1892	1st week of Oct. 1892.	1st week of Nov. 1892.	1st week of Dec. 1892	1st week of Jan. 1893.	1st week of Feb. 1893.	1st week of March 1893.	1st week of April 1893.	1st week of May 1893.	1st week of June 1893.
	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.	Mds.
Baliaghata	12,28,000	9,62 000	8,39,000	6,74,000	4,96,500	4,30,000	3,16,000	3 34,000	4,05,000	6,19,000	9 04 000	13,39,000	11,73,000
Ultadanga	73,900	65,800	65,900	70,900	65 100	57,300	57,800	65,200	78,700	99,500	1,06,500	1,15,000	1,17,500
Chitpur, Golabaree, Kumartooly, Hatkhola, and Cuipi Ghat.	7,61,300	7,20,400	6,56,300	6,41,400	5,63,300	5,64,800	5,40,700	5,64,700	7,01,900	6,54,500	6,46,600	6,43,000	6,66,000
Pathuriaghatta, Posta, and Jorabagan.	4,000	3,000	4,000	3,700	3,000	2,300	2,000	3,000	8,000	3,500	3,000	2,000	2,500
Tollygunge, Chetla, Kidderpore, and Munshiganj.	1,37,200	1,12,100	1,43,400	96,500	93,600	51,100	40,600	87,900	1,14,200	1,46,400	1,56,700	1,55,300	1,70,200
21 Minor bazars (estimated) ...	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2,40,000	2 40,000	2,40,000	2,40,000	2,40,000	2,40,000
Other retail shops, 3,129 in number (estimated).	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000
Baidyabati, Nowabganj, Bhadreshwar, and Chandernagore.	32,325	26,062	61,125	51,250	33,908	31,125	40,037	63,961	69,800	76,380	6,662	5,319	42,577
Total ...	27,26,725	23,79,362	22,59,725	20,27,750	17,45,408	16,35,825	14,57,137	16,08,761	18,67,600	20,89,280	23,13,462	27,42,619	26,61,777
On Railway premises on both sides of the river.	12 011 (on 3rd June 1892.)	5,239 (on 3rd July 1892.)	1,322 (on 3rd August 1892.)	11,336 (on 3rd Sept. 1892.)	17,216 (on 8th Oct. 1892.)	9,774 (on 3rd Nov. 1892.)	24,357 (on 3rd Dec. 1892.)	35,589 (on 3rd Jan. 1893.)	32,791 (on 3rd Feb. 1893.)	22,643 (on 3rd March 1893.)	23,773 (on 3rd April 1893.)	10,934 (on 3rd May 1893.)	11,512 (on 3rd June 1893.)
On boats unloaded ... By Port Commissioners' returns.	25 598 (1st to 3rd June 1892.)	27,288 (1st to 3rd July 1892.)	25,989 (1st to 3rd August 1892.)	18,308 (1st to 3rd Sept. 1892.)	27,678 (6th to 8th Oct. 1892.)	13,606 (1st to 3rd Nov. 1892.)	38,882 (1st to 3rd Dec. 1892.)	47,638 (3rd to 5th Jan. 1893.)	40,930 (1st to 3rd Feb. 1893.)	41,293 (1st to 3rd March 1893.)	25,720 (1st to 3rd April 1893.)	21,378 (1st to 3rd May 1893.)	19,601 (1st to 3rd June 1893.)
On boats unloaded ... By Canal returns	37,916 (1st to 3rd June 1892.)	21,650 (1st to 3rd July 1892.)	17,415 (1st to 3rd August 1892.)	27,069 (1st to 3rd Sept. 1892.)	24,097 (6th to 8th Oct. 1892.)	15,777 (1st to 3rd Nov. 1892.)	16,296 (1st to 3rd Dec. 1892.)	1,30,459 (3rd to 5th Jan. 1893.)	1,20,600 (1st to 3rd Feb. 1893.)	1,99,575 (1st to 3rd March 1893.)	76,791 (1st to 3rd April 1893.)	34,169 (1st to 3rd May 1893.)	7,615 (1st to 3rd June 1893.)
Grand total of Stocks ...	28,02,250	24,33,539	23,04,351	20,84,163	18,14,399	16,74,952	15,66,872	18,22,447	20,61,921	23,52,796	24,39,746	28,09,100	27,00,505
Probable stock available for exportation by sea.	17½ lakhs	13¾ lakhs	12½ lakhs	10½ lakhs	7½ lakhs	6½ lakhs	5 lakhs	7½ lakhs	10 lakhs	13 lakhs	13¾ lakhs	17½ lakhs	16½ lakhs

STATISTICAL DEPARTMENT,
The 5th June, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the

QUANTITIES PER RUPEE IN

Division	Number.	DISTRICTS.	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum. (*Sorghum Vulgare.*) Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
BENGAL.			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Burdwan Division.	1	Burdwan ..	11 1½	13 8	11 4	...	...	...	10 0	10 8	10 14	12 0	12 0	12 5	...	...	...
	2	Bankura .	13 5	12 0	11 10	18 0	18 0	...	10 0	10 0	11 4	10 14	11 8	13 12	.	...	...
	3	Birbhum ...	12 0	11 0	10 8	...	9 8	10 3	10 8	10 8	10 3	12 12	12 12	12 0	...	...	...
	4	Midnapore ...	11 0	11 0	11 0	...	...	...	10 0	10 0	11 0	11 5	11 14	13 0	...	...	...
	5	Hooghly ...	11 13	11 4	13 0	...	11 0	..	8 0	8 0	8 0	10 0	10 0	10 0	...	...	...
	6	Howrah ...	...	...	...	...	...	...	9 5	9 0	8 0	11 8	12 0	11 13	..	...	...
Presidency Division.		Calcutta	13 4	12 8	11 5	17 12	18 13	16 1	8 3	7 6	7 10	10 10	10 0	10 6	20 0	20 0	16 1
	7	24-Parganas ...	12 0	18 8	11 4	18 0	18 0	16 0	8 0	8 0	8 0	12 0	12 0	12 0	16 0	16 0	16 0
	8	Nadia .	13 14	14 6	11 13½	22 12	21 6	17 12½	9 0	9 15	10 0	11 0	12 4	11 10	...	...	...
	9	Khulna ...	...	...	...	...	...	...	10 10	10 12	11 0	12 14	13 0	13 0	...	...	...
	10	Jessore .	11 4	11 8	13 0	...	...	...	10 0	10 0	9 8	12 0	12 8	13 0	...	...	...
	11	Murshidabad ...	13 0	13 0	12 0	12 0	...	...	10 0	10 0	9 0	11 8	11 8	12 0	...	...	...
Chittagong Division.	12	Chittagong ...	10 0	10 0	10 8	...	...	..	10 8	11 0	8 8	12 4	13 0	11 8	...	...	...
	13	Noakhali ..	...	...	...	...	...	...	10 0	9 13	11 0	11 0	11 8	12 8	...	...	...
	14	Tippera ...	11 0	11 0	12 4	...	...	...	8 4	8 0	9 0	10 12	10 4	12 4	...	...	...
	15	Chittagong Hill Tracts.	...	...	...	...	...	...	...	...	...	8 14	10 0	10 0	...	...	...
Dacca Division.	16	Dacca ...	12 0	11 0	11 8	...	26 0	...	11 0	10 0	10 0	10 8	11 0	12 8	...	...	...
	17	Faridpur ...	17 0	16 0	14 0	20 0	20 0	..	7 0	7 0	10 0	10 0	10 8	13 0	...	...	...
	18	Backergunge ...	...	...	...	...	...	...	9 9	10 0	7 4	10 0	10 10	11 0	...	...	...
	19	Mymensingh .	9 8	9 8	9 8	...	...	...	10 0	10 0	11 0	11 0	11 0	13 8	...	...	...
Rajshahi Division.	20	Dinajpur ...	14 3	12 0	10 13	20 0	16 0	16 0	9 14	9 9	9 8	10 12	12 0	12 0	...	...	...
	21	Rajshahi ...	14 4	15 0	12 12	24 0	24 0	19 8	9 12	10 2	9 12	10 14	11 4	11 4	...	...	...
	22	Rangour .	12 0	10 0	10 0	...	...	...	8 14	8 14	10 10	11 0	11 0	11 10	...	...	...

A In the subdivisions the retail prices of salt per rupee are :—Kalna 10 seers, Katwa 11 seers, and Raniganj 10½ seers.
B At Vishnupur the retail price of salt is 11 seers per rupee.
C At Rampur Hát the retail price of salt is 11 seers per rupee.
D In the subdivisions the retail prices of salt per rupee are :—Ghatal 10 seers 11 chitaks, Contai 8 seers, and Tamluk 11½ seers.
E At Bhaddreswar the retail price of salt is 11½ seers per rupee.
F At Ulubaria the retail price of salt is 11 seers per rupee.
G In the mufassal marts the retail prices of salt per rupee are :—Chetla Hát 11 seers 7 chitaks, Barasat 10 seers 10 chittaks, Magrahát 10 seers 10 chitaks, and Baduria 11 seers 7 chitaks.
H In the subdivisions the retail prices of salt per rupee are :—Bahadurkhali 10½ seers, Chuadanga 10 seers, Meherpur 10½ seers and Ranaghat 10½ seers.
I In the subdivisions the retail prices of salt per rupee are :—Bagerhat 8 seers and Satkhira 11 seers.
J In the subdivisions the retail prices of salt per rupee are :—Jhenida 9 seers 9 chitaks, Magura 10 seers, Narail 9 seers 10 chitaks, and Bangaon 10 seers 11 chitaks.

Head-quarters Station Bazars of the Districts of Bengal on the 31st May, 1893.

Indian-corn or Maize. (*Zea Mays.*) Present return.	Indian-corn Next preceding return.	Indian-corn Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus Indicus.*) Present return.	Arhar Next preceding return.	Arhar Corresponding return of last year.	Firewood. Present return.	Firewood Next preceding return.	Firewood Corresponding return of last year.	Salt. Present return.	Salt Next preceding return.	Salt Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt. Present return.	Wholesale Salt Next preceding return.	Wholesale Salt Corresponding return of last year.	Districts.	Number.	Division
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.	BENGAL.		
...	...	...	19 8	22 0	16 8	106 9	106 0	100 0	(A) 11 13	11 2½	11 10	3 5 4	3 6 8	3 4 8	Burdwan	1	Burdwan Division.
17 0	17 0	...	12 0	12 0	18 4	320 0	320 0	320 0	(B) 11 0	11 0	11 0	3 10 0	3 10 0	3 10 0	Bankura.	2	Burdwan Division.
...	...	...	20 0	14 0	10 3	210 0	240 0	180 0	(C) 11 0	10 12	10 4	3 10 6	3 12 6	3 14 0	Birbhum.	3	Burdwan Division.
...	...	...	19 0	19 0	10 8	210 0	240 0	120 0	(D) 11 7	11 7	10 8	3 7 0	3 7 0	3 12 0	Midnapore.	4	Burdwan Division.
...	...	...	13 5	11 0	11 0	120 0	140 0	120 0	(E) 10 0	11 0	10 0	3 6 0	3 6 0	3 12 0	Hooghly.	5	Burdwan Division.
...	...	...	12 10	10 10	10 10	105 0	105 0	100 0	(F) 10 10	10 10	10 10½	3 8 0	3 8 0	3 8 0	Howrah.	6	Burdwan Division.
20 0	20 0	...	20 0	20 0	15 4	85 0	85 0	86 0	10 7	10 7	11 4	3 13 0	3 13 0	3 4 2	Calcutta.		Presidency Division.
17 0	18 0	16 0	21 0	21 0	18 0	100 0	100 0	100 0	(G) 11 0	11 0	11 0	3 4 6	3 4 6	3 5 0	24-Parganas.	7	Presidency Division.
...	...	...	22 3	23 3	17 8½	128 0	128 0	128 0	(H) 10 10	10 14	10 10½	3 8 0	3 7 0	3 8 0	Nadia.	8	Presidency Division.
...	...	...	11 0	10 12	10 8	160 0	160 0	140 0	(I) 10 8	10 8	10 0	3 12 0	3 12 0	4 0 0	Khulna.	9	Presidency Division.
...	...	...	20 0	16 0	18 0	120 0	120 0	130 0	(J) 9 14	9 14	9 2	3 10 0	3 10 0	3 10 0	Jessore.	10	Presidency Division.
...	...	...	20 0	20 0	17 0	200 0	200 0	200 0	(K) 10 8	10 8	10 8	3 7 0	3 7 0	3 7 0	Murshidabad.	11	Presidency Division.
...	...	...	...	...	...	106 0	106 0	110 0	(L) 9 0	9 0	9 0	3 14 0	3 14 0	4 4 0	Chittagong.	12	Chittagong Division.
...	...	...	...	...	...	...	...	...	(M) 10 0	10 0	8 0	3 14 0	3 13 0	4 12 0	Noakhali.	13	Chittagong Division.
...	...	...	12 0	12 0	8 0	...	...	...	(N) 10 13½	10 13½	9 0	3 12 0	3 12 0	4 0 0	Tippera.	14	Chittagong Division.
...	...	...	...	...	...	240 0	240 0	240 0	8 0	8 0	8 0	4 8 0	4 8 0	4 12 0	Chittagong Hill Tracts.	15	Chittagong Division.
...	...	...	19 0	16 0	14 0	120 0	120 0	120 0	(O) 10 0	10 0	10 0	3 9 0	3 9 0	3 8 0	Dacca.	16	Dacca Division.
...	...	..	...	...	11 0	...	...	...	(P) 10 12	10 12	10 12	3 12 0	3 12 0	3 12 0	Faridpur.	17	Dacca Division.
Musuri. 8 0	Musuri. 8 8	...	Mug. 10 10	Mug. 11 2	...	80 0	80 0	80 0	(Q) 10 10	11 4	11 0	3 12 0	3 10 0	3 10 0	Backergunge.	18	Dacca Division.
...	...	...	13 0	13 0	...	120 0	120 0	110 0	(R) 10 0	10 0	9 12	4 0 0	4 0 0	4 0 0	Mymensingh.	19	Dacca Division.
...	...	...	24 0	18 6	16 0	160 0	160 0	160 0	10 8	10 8	10 4	3 12 0	4 0 0	3 12 0	Dinajpur.	20	Rajshahi Division.
...	...	...	20 0	20 2	19 8	240 0	240 0	240 0	9 9	9 9	9 9	3 10 8	3 10 8	3 10 8	Rajshahi.	21	Rajshahi Division.
...	...	...	8 0	8 0	9 0	160 0	160 0	100 0	(T) 8 8	9 0	10 0	4 0 0	4 0 0	4 0 0	Rangpur.	22	Rajshahi Division.

K At Kandi the retail price of salt is 11 seers per rupee.
L At Cox's Bazar the retail price of salt is 8 seers per rupee.
M At Fenny the retail price of salt is 9 seers per rupee.
N In the subdivisions the retail prices of salt per rupee are :—Chandpur 9 seers and Brahmanbaria 9 seers 2 chitaks.
O In the mufassal marts the retail prices of salt per rupee are :—Manikganj 9 seers 13 chitaks, Munshirhât 10 seers, Mirkalim 10 seers.
P In the Goalundo and Madaripur subdivisions the retail price of salt is 10 seers per rupee.
Q In the subdivisions the retail prices of salt per rupee are :—Pirojpur 10½ seers, Patuakhali 9 seers, and Bhola 9½ seers.
R In the Netrakona, Kishorganj, Kagmari, and Jamalpur marts the retail price of salt is 10 seers per rupee.
S In the subdivisions the retail prices of salt per rupee are :—Nator 9 seers and Naugaon 9 seers 9 chitaks.
T In the subdivisions the retail prices of salt per rupee are :—Gaibanda 10 seers, Kurigram 8 seers, and Nilphamari 10 seers.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the Head-quarters

QUANTITIES PER RUPEE IN

Division	Number.	DISTRICTS.	Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum. (Sorghum Vulgare.) Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
BENGAL—*continued.*			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Rajshahi Division—*concld.*	23	Bogra ...	12 0	12 0	12 0	...	...	...	9 0	8 4	9 12	12 0	12 0	13 2	...	...	...
	24	Pabna	18 0	17 10	13 8	24 0	22 8	...	6 0	6 0	6 12	11 4	12 0	12 12		..	...
	25	Darjeeling	9 0	9 0	7 0	10 0	10 0	8 0	5 0	5 0	5 0	10 0	10 0	9 0	...	...	...
	26	Jalpaiguri	11 0	11 0	11 0	13 0	16 0	16 0	9 8	10 0	7 0	12 0	12 0	10 8	.	..	...
BIHAR.																	
Bhagalpur Division.	27	Monghyr ...	14 0 to 16 0	14 8 to 16 12	13 10 to 14 7	21 0 to 23 0	21 0 to 23 0	...	8 0 to 10 0	8 0 to 10 8	9 7	12 0 to 13 0	12 0 to 13 8	11 0 to 11 4	17 8	17 12	...
	28	Bhagalpur ...	15 2	15 2	13 14	18 15	18 15	17 10	12 10	12 10	10 1	14 8	14 8	11 6		...	...
	29	Purnea (Kasba)*	13 0	...	12 0	...	...	16 0	11 0	...	10 0	13 0	...	11 8		..	...
	30	Malda (English Bazar).	14 0	14 8	13 4	...	...	...	10 0	10 0	10 0	12 8	13 0	12 0	...	...	...
	31	Sonthal Parganas.	11 8	11 0	11 0	...	...	...	11 8	11 0	9 0	14 8	14 0	11 8	...	...	...
Patna Division.	32	Patna ...	Red. 15 8; White. 13 4	Red. 16 0; White. 15 0	14 0; 13 8	21 0	22 0	18 0	10 0	10 0	9 0	15 8	15 0	12 8	23 8	24 0	20 0
	33	Gaya ...	15 0	14 0	13 0	20 0	20 0	18 0	9 8	9 8	9 0	13 4	13 4	12 0	19 0	19 0	...
	34	Shahabad ...	13 0	14 0	13 8	18 0	18 0	18 0	8 0	8 0	8 0	13 4	14 0	11 8	...	...	...
	35	Darbhanga ...	13 3	13 3	13 3	20 6	13 0	18 2	11 0	11 0	10 0	14 0	14 5	12 0	...	...	...
	36	Muzaffarpur ...	11 0	14 0	13 8	20 0	20 0	17 0	8 0	8 0	9 0	14 0	14 0	11 8	...	...	...
	37	Saran ...	14 8	11 4	13 8	20 8	20 8	19 0	10 0	10 0	8 8	13 0	13 3	11 8	...	...	...
	38	Champaran ...	13 0	11 4	12 4	22 8	...	17 8	8 8	8 8	8 8	14 8 to 15 0	15 0	12 8	...	...	...
ORISSA.																	
Orissa Division.	39	Cuttack ...	13 2	13 2	10 8	...	...	...	10 8	10 8	8 3	13 13	14 7	10 8	...	...	...
	40	Puri ...	10 8	9 3	10 8	...	...	...	9 3	9 3	10 8	15 0	15 12	13 0	...	...	...
	41	Balasore ...	11 0	11 0	10 12	10 0	10 0	10 0	10 0	10 0	10 0	14 0	15 0	13 0	...	...	...
CHOTA NAGPUR.																	
Chota Nagpur Division.	42	Hazaribagh ...	12 0	11 8	12 4	16 0	15 0	14 0	7 0	7 0	8 0	12 0	11 8	12 8	...	...	...
	43	Lohardaga ...	10 0; 7 0 to 8 0	Red. 10 0 to 12 0; White. 7 0 to 8 0	12 0; 8 8 to 10 0	14 0 to 16 0	15 0	11 0	10 0 to 11 0	10 0 to 11 0	12 0	12 0 to 13 0	12 8 to 13 8	14 8	...	...	...
	44	Palamau ...	11 1	14 1	13 8	23 1	23 10	16 14	11 4	11 4	13 8	13 8	14 10	14 1	.	...	...
	45	Singhbhum ...	10 0	11 0	14 0	...	10 0	...	8 0	8 0	12 0	10 0	10 0	16 0	...	...	...
	46	Manbhum	13 0	13 8	11 0	16 0	16 0	...	8 8 nad 9 0	9 0 and 8	11 8	11 0 to 13 8	11 0 and 14 0	15 0	...	...	...

U At Sirajganj the retail price of salt is 11¼ seers per rupee.
V At Alipur the retail price of salt is 8 seers per rupee.
W In the Begusarai and Jamui subdivisions the retail price of salt is 10 seers per rupee.
X In the Banka, Madhipura, and Supaul subdivisions the retail price of salt is 10 seers per rupee.
Y In the subdivisions the retail prices of salt per rupee are—Kishanganj 10½ seers and Araria 10 seers.
Z In the subdivisions the retail prices of salt per rupee are:—Rajmahal 10 seers, Godda 9 seers, Pakur 10½ seers, Jamatra 9 seers.
a In the subdivisions the retail prices of salt per rupee are:—Barh 11 seers, Bihar 10¼ seers, and Dinapur 10 seers.
b In the subdivisions the retail prices of salt per rupee are:—Jahanabad 10 seers, Aurangabad 10 seers, and Nawada 9 seers.
c In the subdivisions the retail prices of salt per rupee are:—Buxar 10½ seers, Sasaram 10¼ seers, and Bhabhua 9¾ seers.

CALCUTTA,

Station Bazars of the Districts of Bengal on the 31st May, 1893—(concluded).

Indian-corn or Maize (*Zea Mays.*) Present return.	Next preceding return.	Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus indicus.*) Present return.	Next preceding return.	Corresponding return of last year.	Firewood. Present return.	Next preceding return.	Corresponding return of last year.	Salt. Present return.	Next preceding return.	Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt. Present return.	Next preceding return.	Corresponding return of last year.	Districts.	Number.
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.	**BENGAL**—*continued.*	
...	...	...	...	...	...	90 0	90 0	90 0	9 4	9 10	9 12	4 2 8	3 14 8	3 14 8	Bogra.	23
...	...	...	22 8	22 8	16 8	200 0	200 0	200 0	10 8 [U]	10 8	9 12	3 9 6	3 10 0	3 12 0	Pabna.	24
11 0	11 0	11 0	8 0	8 0	8 0	120 0	120 0	120 0	8 0	8 0	8 0	4 10 0	4 10 0	5 0 0	Darjeeling.	25
...	...	...	10 0	10 0	8 0	200 0	120 0	160 0	10 0 [V]	10 0	10 0	4 0 0	4 0 0	4 0 0	Jalpaiguri.	26
															Rajshahi Division—concld.	
															BIHAR.	
21 0 to 23 0	21 0 to 23 0	15 12	19 0 to 21 0	19 0 to 21 0	16 12 to 17 13	160 0	160 0	147 0 to 178 8	10 8 to 11 0 [W]	10 8 to 11 0	10 8	3 7 6	3 7 6	3 7 6	Monghyr.	27
22 11	21 7	16 6	20 3	20 3	17 10	126 4	126 4	164 8	10 11 [X]	10 11	10 11	3 12 0	3 12 0	3 12 0	Bhagalpur.	28
...	...	15 0	14 0	...	15 0	320 0	...	160 0	10 0 [Y]	...	10 0	3 10 0	...	4 0 0	Purnea.	29
...	...	20 0	11 0	11 0	...	160 0	160 0	120 0	9 8	10 0	10 0	...	4 0 0	3 12 0	Malda	30
20 0	19 0	13 0	23 8	22 8	15 0	200 0	200 0	200 0	10 8 [Z]	10 8	10 0	3 10 3	3 10 3	3 10 3	Sonthal Parganas.	31
															Bhagalpur Division.	
21 0	20 8	18 8	23 0	22 8	20 0	130 0	130 0	130 0	11 0 [a]	11 0	10 8	3 10 0	3 11 0	3 12 0	Patna.	32
...	19 8	16 8	19 0	19 0	19 0	120 0	120 0	160 0	9 12 [b]	10 0	10 0	3 13 0	3 12 0	3 13 0	Gaya.	33
20 0	20 0	16 0	20 0	20 0	18 0	160 0	160 0	140 0	10 8 [c]	11 0	10 12	3 13 0	3 10 0	3 9 0	Shahabad.	34
20 4	21 0	17 0	21 8	21 0	18 11	176 0	176 0	168 0	10 4 [d]	10 4	10 4	3 14 0	3 12 0	3 8 0	Darbhanga.	35
19 0	19 0	17 0	20 0	20 0	19 0	160 0	160 0	160 0	11 0 [e]	11 0	10 8	3 10 0	3 10 0	3 11 6	Muzaffarpur.	36
19 12	20 4	18 0	22 0	21 8	20 0	210 0	210 0	160 0	10 4 [f]	10 8	10 4	3 12 3	3 11 0	3 14 0	Saran.	37
20 8	22 4	17 0	20 8	19 0	19 0	160 0	160 0	160 0	10 8 [g]	10 4	10 8	3 13 0	3 13 0	3 12 0	Champaran.	38
															Patna Division.	
															ORISSA.	
...	...	...	18 6	18 6	11 8	80 0	80 0	80 0	10 12 [h]	9 4	9 0	3 8 0	3 10 0	4 6 0	Cuttack.	39
...	...	...	15 12	15 12	13 3	80 0	80 0	80 0	10 10	9 3	11 0	3 10 0	3 12 0	3 10 3	Puri.	40
...	...	...	10 12	10 12	10 12	160 0	160 0	160 0	11 0 [i]	11 0	11 0	3 6 0	3 6 0	3 10 0	Balasore.	41
															Orissa Division.	
															CHOTA NAGPUR.	
15 8	17 0	17 0	17 0	17 0	15 8	240 0	240 0	240 0	9 0 [j]	9 0	9 0	4 2 0	3 13 6	4 0 0	Hazaribagh.	42
18 0	20 0	18 0	Big. 13 0 Small. 16 0	Big. 13 0 Small. 16 0	Big. 12 0 Small. 15 0	140 0	140 0	160 0	9 0	9 8	8 8	4 3 0	4 1 0	4 8 0	Lohardaga.	43
23 10	23 10	20 14	30 6	30 6	20 4	...	...	200 0	8 7	9 0	7 14	...	...	...	Palamau.	44
...	...	...	13 0	13 0	16 0	100 0	100 0	160 0	9 0	9 0	9 0	4 6 0	4 6 0	4 6 0	Singhbhum.	45
18 0	18 0	...	18 0	17 0	15 0	...	...	...	10 10 [k]	10 10	10 10	3 11 0	3 11 0	3 12 0	Manbhum.	46
															Chota Nagpur Division.	

d In the subdivisions the retail prices of salt per rupee are :—Madhubani 11 seers and Samastipur 10 seers.
e In the subdivisions the retail prices of salt per rupee are :—Sitamarhi 11 seers and Hajipur 10½ seers.
f In the subdivisions the retail prices of salt per rupee are :—Siwan 11 seers 5 chitaks and Gopalganj 11 seers 13 chitaks.
g At Bettia the retail price of salt is 10 seers per rupee.
h In the subdivisions the retail prices of salt per rupee are :—Jajpur 8 seers, Kendrapara 9 seers, and Banki 11½ seers.
i At Bhadrak the retail price of salt is 9 seers per rupee.
j At Giridih the retail price of salt is 11 seers per rupee.
k At Gobindpur the retail price of salt is 11 seers per rupee.

Published for general information.

H. H. RISLEY,

PRICES-CURRENT (wholesale) of Food-grains, Firewood, and Salt

Number.	MARTS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE COMMON.		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
1	Calcutta ...	3 0 0	3 3 0	3 3 11	2 4 0	2 3 0	2 3 11	1 11 0	5 6 0	5 0 3	3 12 0	4 0 0	3 8 4
2	Sirajganj ...	2 10 0	2 10 0	3 4 0	...	...	...	6 0 0	6 0 0	5 1 6	3 12 0	3 12 0	3 4 0
3	Dacca ...	3 4 0	3 10 0	3 8 0	...	1 8 0	...	4 0 0	4 0 0	4 0 0	3 12 0	3 8 0	3 2 0
4	Narayanganj*	...	...	...	...	...	...		3 12 0	...		3 8 0	...
5	Chittagong	4 0 0	4 0 0	3 12 0	...	...	...	3 8 0	3 6 0	4 8 0	3 1 0	3 0 0	3 7 6
6	Patna ...	2 9 3 3 0 0	Red. 2 8 0 White. 2 10 0	2 13 3 2 15 6	1 14 6	1 13 0	2 3 0	4 0 0	4 0 0	4 7 3	2 9 9	2 10 0	3 3 0
7	Balasore ...	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	2 13 0	2 10 0	3 0 0
8	Puri ...	3 12 0	4 4 0	3 12 9	...	...	...	4 4 0	4 4 0	3 12 9	2 10 0	2 8 0	3 1 3
9	Cuttack ...	3 0 0	3 0 0	3 12 0	...	...	...	3 10 0	3 10 0	4 14 0	2 14 0	2 12 0	3 12 0

* Present return not received.

CALCUTTA,
The 6th June, 1893.

in the undermentioned Marts of Bengal on the 31st May, 1893.

Gram, Chana, Chhola, Kadalay or Sunaga. (*Cicer Arietinum.*)			Indian-corn or Maize. (*Zea Mays.*)			Arhar or Thur, Cadjan Pea. (*Cajanus indicus.*)			Firewood.			Salt.			Marts.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
2 8 0	2 8 0	2 7 3	2 0 0	2 0 0	...	0 0	2 0 0	2 5 6	0 7 0	0 7 0	0 6 0	3 13 0	3 13 0	3 4 2	Calcutta.
3 0 0	3 0 0	2 4 0	...	.	...	...	...	...	0 6 6	0 6 6	0 6 6	3 8 0	3 9 0	3 7 0	Sirajganj
2 12 0	3 0 0	2 10 0	...	...	...	1 0	2 8 0	2 13 0	0 5 0	0 5 0	0 5 0	3 9 0	3 9 0	3 8 0	Dacca.
	3 8 0	...	...	...	...		3 0 0	...		0 6 0	...		3 10 0	...	Narayanganj.
3 8 0	3 8 0	3 6 0	...	...	...	...	...	...	0 6 0	0 6 0	0 5 0	3 14 0	3 14 0	4 4 0	Chittagong.
1 13 0	1 13 0	2 1 6	1 14 6	1 15 0	2 2 0	1 11 9	1 12 0	2 0 0	0 5 0	0 5 0	0 5 0	3 10 0	3 10 0	3 12 0	Patna.
2 14 0	2 14 0	3 0 0	...	...	...	3 10 0	3 10 0	...	...	...	...	3 6 0	3 6 0	3 10 0	Balasore.
2 5 0	2 8 0	2 15 0	...	...	...	2 8 0	2 8 0	2 15 4	0 8 0	0 8 0	0 8 0	3 10 0	3 12 0	3 10 3	Puri.
2 0 0	(Kalai.) 2 0 0	2 10 0	...	...	...	2 2 0	2 2 0	2 10 0	0 8 0	0 8 0	0 8 0	3 8 0	3 10 0	4 6 0	Cuttack.

Published for general information.

H. H. RISLEY,
Secretary to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS. Air pressure. Mean barometric height, 8 A.M., reduced to 32°.	Air pressure. Mean reduced to sea-level and constant gravity, lat. 45°.	Air pressure. Variation from mean.	Wind. Prevailing direction.	Wind. Mean wind velocity.	Temperature. Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa	Puri	Puri	29·703	29 630	—	SW	407	89·7	1, 2 June	80·1	3rd June	88·6	81·4	85·0
		Gopalpore	29·698	29·659	+·060	SSW	514	92 2	28, 29 May	77·8	3rd ,,	89 0	80·1	84·6
		False Point	29·702	29·665	+·058	SWly	331	92·5	29th ,,	74·1	29th May	88·5	79·5	84·0
	Cuttack	Cuttack	29·623	29·645	+·052	SW	121	98·6	29th ,,	76 8	2nd June	92 5	79·7	86·1
	Balasore	Balasore	29·638	29 640	+·048	SSW	176	92·4	3rd June	71·2	29th May	89·0	76 6	82·8
South-West Bengal	Midnapore	Midnapore	29·542	29·636	+·044	SWly	?	92·3	3rd ,,	75·1	28, 29 ,,	89 3	76 9	83·1
	24 Parganas	Calcutta	29·662	29·629	+·027	SSW	175	89·6	3rd ,,	75·2	28th ,, & 1st June.	86·4	78·1	82·3
		Saugor Island	29·675	29 644	+·036	SSW	490	89 2	31st May to 3rd June.	76·5	29th May	87 0	79 7	83·4
	Howrah													
	Hooghly													
	Nadia	Krishnagar	29·610	29 611	+·017	SWly	205	91·8	31st May 1st June	74·7	28, 29 ,,	87·7	77·8	82·8
	Khulna													
	Jessore	Jessore	29·639	29 619	—·001	SEly	122	92·0	3rd ,,	74·4	28th ,,	86·8	77·1	82·0
	Burdwan	Burdwan	29 581	29 627	+·030	SW	136	91·6	1st ,,	75 7	28th ,,	87 8	78·8	83·3
		Raniganj	29 332	29·616	+·023	SW	81	94·7	31st May	67·9	1st June	91·2	†71 7	†81·4
	Bankura	Bankura	29·350	29·598	+·026	SWly	82	94 1	30, 31 ,, 1st June	74·1	28th May	89·5	76 6	83·1
	Birbhum													
	Murshidabad	Berhampore	29·600	29·615	+·008	SW	143	92·7	31st May	74·3	28th ,,	88·1	77·9	83·1
North Bengal	Pabna	Sirajganj	29·594	29·590	—·038	Sly	128	90·1	3rd June	72·7	29th ,, 3rd June.	85 8	74 6	80·2
	Bogra	Bogra	29 565	29 578	—·028	SE	103	90·7	1, 3 ,,	72·2	28, 29 May	86·5	74·9	80·7
	Rajshahi	Rampur Boalia.	29·582	29·601	—·003	SW	215	91·1	31st May	72·7	28, 29 ,,	86 7	75·8	81·3
	Malda	Malda	29·574	29·606	—	SW	123	93·6	31st ,,	72 5	29th ,,	88·2	76·1	82·2
	Dinajpur	Dinajpur	29·532	29 603	—·036	NEly	117	91·1	2nd June	73·7	28th ,,	87·0	76·3	81·6
	Rangpur	Rangpur	29·529	29·606	—·057	Variable	149	90·3	3rd ,,	73·7	28th ,, 1st June	84 4	75·1	79·8
	Jalpaiguri	Jalpaiguri	29 388	29·626	—·039	Calm	82	88·9	31st May	73·1	28, 29 May	85·0	74 6	79·8
	Kuch Bihar*													
	Darjeeling	Darjeeling	22·886	—	—·041	SWly	207	67·6	30th ,,	54 6	28th ,,	64 8	55·5	60·2
	Sikkim	Gnatong	19·179	—	—	NWly	55	55·9	1st June	34·1	3rd June	52·3	35·8	44·0
East Bengal	Chittagong	Chittagong	29·657	29·691	+·010	SSE	195	85·2	30th May & 3rd June.	73·1	1st ,,	83 2	75·9	79·6
	Chittagong Hill Tracts	Demagiri						Observations not received.						
	…ackergunge	Barisal	29·675	29·632	+·012	SWly	177	90·3	30, 31 May 1st June	74·9	28th May 1st June.	86·9	77·1	82·0
	Noakhali	Noakhali	29·680	29 640	—·002	SW	206	86·5	30, 31 May	74·3	1st ,,	84·8	76·6	80·7
	…aridpur	…aridpur	29·626	29·621	—·018	SW	168	89·5	30, 31 ,, 1 & 3 June	74 4	29th May	85·9	76·2	81·1
	Dacca	Dacca	29·610	29·580	—·056	S	230	90·6	1st ,,	75·2	28, 29 ,,	86·3	76·8	81·6
	…ippera	…milla	29·645	29·628	—·019	Sly	214	87·9	30, 31 May 1st June.	74·3	28th ,, 1st June.	84·8	76·1	80·3
	Mymensingh	Mymensingh	29 591	29·602	—·053	SSW	186	88·7	3rd ,,	74·1	28th May	84·1	75·9	80·0
North Bihar	Purnea	Purnea	29·525	29·603	—·007	Ely	60	95·2	31st May	74·2	29th ,,	91·6	77·1	84·3
	Bhagalpur	Bhagalpur	29·486	29·597	+·016	Variable	47	95·2	1st June	75·0	29 & 30 ,,	90 3	76·7	83·6
	Darbhanga	Darbhanga	29·479	29 597	—·009	ESE	102	94·5	1st ,,	76·2	30th ,,	92 2	77 8	85·0
	Muzaffarpur	Muzaffarpur	29·464	29·594	+·007	SEly	71	98·7	1st ,,	76·2	28, 30 ,, & 1 June.	95·4	76 6	86·5
	Champaran	Motihari	29·410	29·589	—·002	NEly	133	95·2	29th May	70·8	30th May	92 5	75·9	84·2
	Saran	Chapra	29·457	29·589	+·010	SE	128	99·3	1st June	75·6	1st June	92 9	78·0	85·5
South Bihar	Shahabad	Dehri	29·275	29·574	+·004	Sly	132	102·4	30th May	74 5	1st ,,	95·7	78·5	87·1
		Buxar	29·398	29·589	+·011	Variable	143	99·5	29th ,,	75·3	1 & 2 ,,	95·0	78·9	87·0
		Arrah	29 442	29·582	+·015	SEly	99	97·9	1st June	74·5	1st ,,	92·8	77·7	85·3
	Gaya	Gaya	29·263	29·589	+·010	S & SE	211	101·0	30th May	73 8	1, 2 ,,	95·0	76·7	85·9
	Patna	Bankipore	29·460	29·593	+·002	SE	130	100·0	1st June	75·7	1st ,,	93 8	78·2	86·0
	Monghyr													
	Sonthal Parganas	Naya Dumka	29·160	29·601	+·023	SWly	138	93 1	31st May 1st June	73·8	28, 20 May	88 3	76·7	82·6
Chota Nagpur	Hazaribagh	Hazaribagh	27·671	29·607	+·013	SSW	218	91·7	30th May	68·8	1st June	85·5	71·2	78·9
	Lohardaga	Ranchi	27 564	29·618	+·022	SW	185	92·5	29th ,,	69·4	28th May	87·0	71·0	79·1
	Palamau	Daltonganj	28·852	—	—	SWly	152	106·3	29th ,,	75·0	1 & 2 June.	96·3	79·8	88·1
	Singhbhum	Chaibassa	28·923	29 628	+·055	WSW	42	94·9	29th ,, & 1 June	73·2	2 29th May	91·2	75 3	83·3
	Manbhum													
Assam	Sibsagar	Sibsagar	29·346	29·633	—·067	NE		90·6	2, 3 ,,	74·5	31st ,,	84·7	75·6	80·2
	Goalpara	Dhubri	29·546	29·615	—·035	Variable	256	87·2	2nd ,,	71·8	28th ,,	82·0	74·4	78·2
	Cachar	Silchar	29·594	29·650	—·037	Calm		84·9	3rd ,,	70·3	28th ,,	82·0	73·9	78·0

* Means of 5 days. | † Mean of 6 days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same peroid
Th *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 10
rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station
district, *i.e.*, from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one o

for the week ending Saturday, the 3rd of June 1893.

Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	DISTRICT OBSERVATIONS. Of week. Mean for district.	Of week. Normal mean.	Of week. Average number of rainy days.	Of week. Normal number of rainy days.	Rainfall. Since 1st of month. Mean for district.	Since 1st of month. Normal mean.	Since 1st of month. Variation.	Since 16th May 1893. Mean for district.	Since 16th May 1893. Normal mean.	Since 16th May 1893. Variation.	District.
—	83·4	88	5·1	Nil		0·67		1·10		0·22			1 91		Puri.
—0·2	83·4	86	1·9	0·04											
—2·0	84·2	84	7·1	0·04											
—4 0	84·4	75	5·9	Nil		1·15		1·20		0·53			2·44		Cuttack.
—4·7	82·2	90	4·6	2·50		1·17		1·71		0·47			2 97		Balasore.
—6 0	82·4	82	5·3	1·09	1·31	1·11	2·25	1·64	0·37	0·45	—0·08	13·06	2·39	+10·67	Midnapore.
—3·6	81·9	85	8·0	2·52	1·99†	1·73	2·67	2·14	0·75	0 87	—0·12	10·27	3·37	+6·90	24-Parganas.
—3·6	82·4	88	7·9	0·98											
					2·59	1·67	3·00	1·83	0·59	0·75	—0·16	10·08	3·05	+7·03	Howrah.
					2·19	1·54	2 33	1·81	0·57	0·70	—0·13	10·35	3 07	+7·28	Hooghly.
—3·5	82·0	82	7·6	1·09	3 32	1·88	3·80	2·05	1·10	0·84	+0·26	8·50	4 17	+4·33	Nadia.
—3·9	81·5	90	8·6	2·99	3·39	1·41	4·00	2·20	1·83	0·79	+1·04	11·96	3·47	+8 49	Khulna.
—4·4	81·8	81	8·7	2·84	3·07	1·57	3·60	2·15	0·79	0·78	+0 01	9·0[illegible]	3·96	+5 13	Jessore.
+8·0†	80·6	80	2·4	3·23	2·47	1·34	2·50	1·47	0·88	0·43	+0·45	10·56	2·88	+7·68	Burdwan.
—3·9	81·3	85	7·3	1·40	2·10	1·34	2·50	1·84	1·05	0·66	+0·39	9·06	2·45	+6·61	Bankura.
					2·28	1·18	2 33	1·69	1 63	0·50	+1 12	6·59	2·33*	+4·26	Birbhum.
—3·1	80·5	92	9·0	3·72	4·68	1·95	3 67	2 12	3·26	0·75	+2·51	8·45	3·67	+4·78	Murshidabad.
—2·1	79·3	94	10·0	11·57	8·94	1·92	5·00	2·15	1·73	1·12	+0·61	13·82	4 77	+9·05	Pabna.
—1·6	79·8	91	6·4	6·74	5·12	3·05	6 25	2·71	0·81	1·65	+1·16	7·93	5 84	+2 09	Bogra.
—3·0	80·9	88	7·3	4·41	3·88	1·94	3 67	1·98	1·26	0·76	+0·50	8·73	3·98	+4·75	Rajshahi.
—	81·9	85	6·6	4·16	2·85	1·40	4·00	1 57	0·69	0·60	+0·09	4·67	3·02	+1·65	Malda.
—0 8	79·0	90	9·0	6·49	3·38	2·82	4·00	2·44	0·64	1·23	—0·59	4·61	4·84	—0·23	Dinajpur.
—2·3	78 8	90	3 6	4·36	5·53	3 75	6·00	2·65	1·77	1·65	+0·12	6·23	8·52	—2 29	Rangpur.
+0·1	77·7	92	8·9	10·64	11·22	3·89	5·00	2·94	7·08	1·92	+5·16	11·36	8·97	+2·39	Jalpaiguri.
					7 49	4·00	6·50	3·58	3·55	1·57	+1·98	7·82	10 03	—2 21	Kuch Bihar.
+2·0	60·1	93	8·4	1·88	6·98	3·43	5·25	3·44	3·56	1·31	+2·25	8·91	7·71	+1·20	Darjeeling.
—	47·0	83	6·9	6·2[illegible]											Sikkim.
—2·5	79·5	95	8·0	10·78	15·09	2·77	6·50	2·73	2·02	1·72	+0·30	27·29	6·53	+20 76	Chittagong.
					17·64	2·64	7·00	3·05	1·13	1·47	—0·34	22·02	5 63	+16 39	Chittagong Hill Tracts.
—0·3	81·7	88	9·7	3·47	2·61	1·95	4·25	2·52	1·98	1·15	+0·83	16·10	4 79	+11·31	Backergunge.
—1·6	80·7	88	6·6	3·92	5·48	2·91	5·50	2·69	1·99	2·03	—0·04	12·20	6·32	+5·88	Noakhali.
—1·9	80·2	90	7·3	7·44	5·20	2·02	4·67	2 10	1·66	1·12	+0·54	13·33	5 19	+8·64	Faridpur.
—2·2	80·4	91	9·4	5·13	4·63	2 05	4·50	2·79	1·38	1·33	+0·05	9·34	4 74	+4·60	Dacca.
—2·0	80·0	95	8·1	7·07	7·04	2·69	6·00	3·09	3·11	1·49	+1·62	12·15	5·34	+6·81	Tippera.
—1·2	79·3	92	9·0	7·37	8·20	2·72	4·80	3·09	2 49	1·59	+0·90	11·87	6·19	+5·68	Mymensingh.
—0·5	81·7	84	3·0	0·48		2·07		1·54		0·79			3 85		Purnea.
—1·4	82·8	85	7·7	1·46	1·77	1·07	3·25	1·20	0·87	0·34	+0·53	2·46	1·95	+0·51	Bhagalpur.
—1·2	83·1	79	4·6	1·17	0·81	0·87	1·67	1·00	0·38	0·28	+0·10	1·09	1·55	—0·46	Darbhanga.
—	83·0	79	4·1	0·33		0·79		0·97		0·16			1·52		Muzaffarpur.
—1·1	82·4	80	4·9	1·44	1·11	0·80	2·50	1·31	0·31	0·39	—0·08	1·95	1·75	+0·20	Champaran.
—2·0	81·8	84	5·9	1·12	0·84	0·68	3·00	0·99	0·19	0·18	+0·01	1·07	1 24	— 0·17	Saran.
—2·0	84·7	70	4·0	2·91											
—2·1	83·9	75	6·1	1·09	2·08	0 64	3 49	0·60	1·32	0·08	+1·24	2·29	0·92	+1·28	Shahabad.
—2·9	83·6	80	4·1	2·79											
—5·1	81·5	80	6·0	2·31	2·44	0·65	4·50	0·73	1·33	0·20	+1·13	2·64	1·54	+1·10	Gaya.
—3·2	84·8	71	6·6	0·86	1·74	0·78	2·25	0·86	1·58	0·13	+1·45	2·03	1·53	+0·50	Patna.
					1·45	0·78	1·67	0 85	1·41	0·23	+1·18	1·51	1·61	—0·10	Monghyr.
—4·3	81·6	81	2·7	2·52		1·39		1·38		0·52			2·62		Sonthal Parganas.
—7·5	77·6	82	7·4	6·00		0·81		1 12		0·25			2·12		Hazaribagh.
—7·1	76·6	79	5·7	3·06		1·30		1·45		0·14			2·13		Lohardaga.
—	87·0	61	0·0	1 23	1·23	0·67	2·00	0 83	1·23	0·16	+1·06	1·59	1 22	—0·28	Palamau.
—7·8	79·6	83	7·3	2·10	2·10	1·02	3·00	1·63	0·16	0·30	—0·14	7·08	2 77	+4·31	Singhbhum.
					1·55	0 74	3·00	1·33	0·36	0·25	+0·11	6 34	1·73	+4·61	Manbhum.
—1·0	78·9	93	9 1	3·81											Assam.
—2·5	76·3	94	10·0	5·50											
—4·0	76·2	97	9·9	22·05											

for the last ten years.† The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 3rd of June 1893.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 28th May.	Monday, 29th May.	Tuesday, 30th May.	Wednesday, 31st May.	Thursday, 1st.	Friday, 2nd.	Saturday, 3rd.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th May 1893.	Average rainfall from 16th May to date.
ORISSA	Puri	Puri ...	...	...	...	...	...	...	...	Nil	Nil	0·52	Nil	0·10	18·17	1·56
		Khurda ...										0·88		0·27		2·37
		Banpur ..										0·40		0·16		0·99
		False Point ...	...	0·04	...	...	...	...	...	Nil	0·04	0·78	Nil	0·35	40·43	2·70
		Gop ..										?		?		?
		Satpara .	...	...	1·20	1·95	1·65	1·37	0·10	5	6·27	?	3·12	?		?
		Pipli ...										?		?		?
	Cuttack ...	Jagatsingpore										0·66		0·19		1·58
		Banki .	...	...	...	...	...	0·23				1·29		1·15		2·10
		Cuttack ...	..	..	0·01							1·73		0·54		3·18
		Kendrapara ...	..	...	...	..	...	...	0·16	1	0·16	0·91	0·16	0·41	35·78	2·41
		Jajpur ..	...	0·75	...	...	...	0·36	...	2	1·11	1·14	0·38	0·38	28·20	2·88
		Dharmsala ...	...	...	...	...	0·50	0·22				?		?		?
		Salipore ...										?		?		
		Pal Lahara .										?		?		?
	Balasore ...	*Akhyapada* ...	...	0·30	...	...	...	0·73	...	2	1·03	?	0·73	?	12·88	
		Chandbali .	.	0·59	...	...	...	0·35	...	2	1·05	1·01	0·55	0·55		2·97
		Bhadrak ...	...	0·68	...	...	...	0·55	...	2	1·23	1·57	0·55	0·79	23·36	3·82
		Soro ...	2·00	...	...	...	0·11	...	...	2	2·11	1·09	0·11	0·17		3·33
		Balasore ..	0·21	2·64	0·01	...	...	...	...	2	2·86	1·22	Nil	0·40	18·46	3·09
		Jellasore ...										0·86		0·55		2·12
		Baripodah	1·39	..	.	...	1·12	...	...	2	2·51	1·26	1·12	0·34	11·51	2·44
SOUTH-WEST BENGAL.	Midnapore	Contai .	0·78	0·43	..	0·04	..	...	0·21	3	1·46	1·13	0·21	0·37	17·56	2·44
		Tamluk ..	0·94	...	...	...	0·40	...	...	2	1·34	1·24	0·40	0·52	11·83	2·79
		Midnapore ...	0·52	...	...	...	0·06	0·32	...	2	1·10	0·88	0·58	0·39	8·07	2·23
		Ghatal .	1·06	...	...	...	0·05	0·22	...	2	1·33	1·21	0·27	0·51	14·74	2·13
		Kukrahaty .	0·91	...	...	..	0·88	...	...	2	1·79	?	0·88	?	10·40	?
		Garhbeta ..	1·12	...	...	0·30	0·52	...	...	3	1·94	?	0·52	?	10·52	?
		Panskura ...	..	...	...	0·31	0·05	...	0·18	3	0·54	?	0·23	?	9·67	?
		Dantoon ...	0·75	1·70	...	...	1·33	0·15	0·14	5	4·07	?	1·62	?	12·59	?
	24-Parganas .	Saugor Island	0·72	0·21	...	..	...	...	0·05	2	0·98	1·18	0·05	0·44	13·35	2·97
		Diamond Harbour ...	0·30	0·15	..	...	0·97	...	...	3	1·62	1·30	0·97	0·51	10·05	2·65
		Canning Town	1·32	...	...	...	1·30	...	...	2	2·62	?	1·30	?	14·23	?
		Alipore (Observatory.)	2·28	...	...	...	0·14	0·10	...	3	2·52	1·94	0·24	1·71	12·20	3·49
		Barrackpore ...	0·99	.	...	...	0·12	0·13	...	3	2·24	2·06	1·25	1·15	9·64	3·26
		Dum-Dum ..										1·86		0·83		3·54
		Barasat .	1·33	..	...	...	.	1·03	...	2	2·33	1·87	1·03	0·87	8·01	3·54
		Basirhat ...	1·24	...	...	...	0·64	0·32	...	3	2·20	1·92	0·96	0·56	9·00	4·21
	Howrah ..	Howrah	2·25	...	...	...	0·24	0·29	...	3	2·78	1·68	0·53	0·91	10·37	3·06
		Mohesreka ...	1·77	...	...	...	0·45	0·19	...	3	2·41	1·66	0·64	0·58	9·79	3·02
		Uluberia ...	2·08	...	..	...	0·18	0·15	...	3	2·41	?	0·33		10·51	?
	Hooghly ...	Serampore ...	2·31	...	...	...	0·25	0·98	...	3	3·54	1·84	1·23	1·07	10·91	3·03
		Hooghly ...	1·25	...	..	...	0·16	0·32	...	3	1·73	1·61	0·48	0·82	7·05	3·28
		Jahanabad	1·31	..	..	...	...	...	...	1	1·31	1·18	Nil	0·22	13·11	2·89
	Nadia ...	Ranaghat	1·11	0·02	.	...	0·25	0·22	0·66	4	2·26	1·87	0·47	0·87	8·81	3·58
		Krishnagar ..	0·93	...	...	...	..	0·16	...	2	1·09	1·52	0·16	0·75	7·74	3·36
		Chuadanga .	1·81	0·03	...	.	1·46	0·23	...	3	3·56	2·05	1·69	0·99	7·94	5·19
		Meherpore ...	2·08	0·11	...	0·24	2·35	0·11	0·35	6	5·24	1·86	2·81	0·74	8·25	3·77
		Kushtia	3·50	0·43	...	0·15	0·05	0·08	0·25	4	4·46	2·10	0·38	0·85	9·76	4·81
	Khulna ...	Satkhira	1·13	...	...	...	0·56	0·58	...	3	2·27	1·69	1·14	1·37	7·75	3·49
		Bagerhat	1·25	0·21	...	...	2·11	0·98	...	4	4·55	1·33	3·09	0·44	15·82	3·00
		Khulna ..	1·92	0·20	...	...	0·30	0·41	0·33	5	3·36	1·21	1·24	0·57	12·33	3·33
		Nakipur ...	0·37	...	...	.	0·70					?		?		
		Rampal ...	0·70	...	...	...	0·65	0·30	...	3	1·65	?	0·95	?	10·37	?
	Jessore ...	Narail .	1·21	0·22	...	...	0·64	0·02	...	3	2·09	1·09	0·66	0·61	7·08	3·46
		Jessore ...	1·66	0·15	...	...	0·43	0·75	...	4	2·99	1·61	1·18	0·75	10·37	4·19
		Jhenidah ...	2·66	0·25	...	...	0·24	0·10	..	4	3·25	1·64	0·34	0·85	9·26	4·22
		Magura ...	2·52	0·96	...	...	0·47	0·02	0·87	4	4·84	1·86	1·36	0·95	12·56	4·88
		Bangaon ...	1·72	0·04	...	...	0·10	0·30	...	3	2·16	1·67	0·40	0·72	6·13	3·09
	Burdwan ..	Kalna ..	1·05	...	...	...	...	...	0·10	2	1·15	1·11	0·10	0·45	8·87	2·67
		Burdwan ...	2·19	...	...	0·40	0·25	...	...	3	2·84	1·42	0·25	0·24	14·65	3·02
		Katwa .	1·92	...	...	0·07	0·61	...	...	2	2·60	1·92	0·61	0·71	7·33	3·37
		Raniganj ...	0·71	...	...	...	1·92	0·63	...	3	3·28	0·83	2·57	0·30	7·68	2·11
		Mankur ...	0·42	...	...	...	...	0·46	...	2	0·88	?	0·46	?	9·25	?
	Bankura .	Bankura .	0·35	...	...	0·97	0·08	...	...	2	1·40	1·39	0·08	0·65	7·04	2·70
		Vishnupur ...	1·40	...	...	...	1·25	...	...	2	2·65	1·48	1·25	1·03	11·64	2·71
		Maliara ..	0·65	...	...	0·15	2·25	0·36	...	4	3·41	1·23	2·61	0·59	7·15	2·14
		Khatra ...	0·69	...	...	...	0·24	...	...	2	0·93	1·23	0·24	0·38	10·38	2·21
		Indas ..	0·95	...	...	...	1·93	...	...	2	2·88	?	1·93	?	14·45	?
		Kotalpur .	...	...	...	...	1·38	...	...	1	1·38	?	1·38	?	9·78	?
		Onda .	0·49	0·15	0·20	0·30	0·19	..	...	5	1·24	?	0·19	?	8·14	?
		Gangajalghati	0·86	..	...	0·35	3·83	0·22		4	5·26	?	4·05	?	10·83	?
		Raipur ..	0·49	...	...	...	0·39	...	...	2	0·88	?	0·39	?	11·83	?
		Sonamukhi ...	0·52	...	...	...	0·86	...	...	2	1·38	?	0·86	?	10·23	?
	Birbhum ...	Suri	0·56	...	...	...	2·24	0·04	...	2	3·04	1·26	2·48	0·62	6·91	2·46
		Hetampore .	0·94	..	...	...	1·03	...	0·03	2	1·97	0·81	1·06	0·11	7·06	1·79
		Rampur Hat ...	0·52	...	...	...	1·03	...	0·29	3	1·84	1·48	1·32	0·77	6·33	2·68
		Bolpur	1·00	..	...	...	...	...	...	1	1·00	?	Nil	?	7·11	?
		Murarai ..	...	...	...	1·75	2·60	0·78	...	3	5·13	?	3·38	?	8·08	?
	Murshidabad	Kandi ..	0·98	0·05	...	0·08	1·37	...	...	2	2·48	1·57	1·37	0·83	6·23	3·28
		Berhampore ...	1·29	0·11	...	...	2·32	...	...	3	3·72	1·91	2·32	0·76	8·53	3·68
		Lalbagh ..	1·36	0·31	...	...	2·80	...	0·56	4	5·03	2·27	3·36	0·88	9·47	4·00
		Azimganj ...	2·04	0·36	...	0·10	3·10	0·25	0·32	6	6·17	2·19	3·67	0·82	9·80	3·72
		Jangipur .	1·14	0·03	...	0·63	4·21	0·48	0·02	4	6·51	1·97	4·71	0·57	9·18	3·41
		Lalgola ...	...	..	0·09	...	2·06	1·00	1·03	3	4·18	1·78	4·09	0·61	7·48	3·90
		Akhriganj .	0·47	0·47	...	0·63	1·16	0·08	0·13	5	1·94	?	1·37	?	5·38	?
		Patkabari	1·35	..	...	0·49	3·20	...	0·80	4	5·75	?	4·00	?	8·85	?
NORTH BENGAL.	Pabna .	Pabna .	5·08	0·37	...	0·65	0·14	...	0·06	4	6·30	1·59	0·20	0·87	11·40	4·32
		Sirajganj ...	4·09	0·55	...	3·67	1·03	0·13	2·10	6	11·57	2·24	3·26	1·37	16·22	5·20
	Bogra ..	Sherpore .	3·17	0·13	...	0·70	0·69	0·05	0·11	5	4·85	3·06	0·85	1·61	8·32	6·35
		Nowkhila .	3·28	0·23	...	0·12	1·29	...	0·42	5	5·34	3·39	1·71	1·27	7·83	5·23
		Bogra	4·50	1·10	...	0·74	0·40	...	...	4	6·74	2·79	0·40	1·66	9·86	6·22
		Panchbibi ...	2·55	...	...	0·71	...	0·28	...	3	3·54	2·97	0·28	1·38	5·09	5·58
	Rajshahi ..	Boalia ...	0·54	0·42	...	0·25	2·95	...	0·23	5	4·39	1·37	3·18	0·56	8·44	3·40
		Natore ...	3·10	0·10	...	1·44	0·20	0·06	0·04	4	4·94	1·39	0·30	0·43	10·95	3·84
		Naugaon ...	2·00	...	..	...	..	...	0·30	2	2·30	3·06	0·30	1·29	6·50	4·72
		Lalpore .	...	0·10	..	0·11	0·30	...	...	3	0·51	?	0·30	?		?
		Manda ...	...	...	...	...	0·12	0·38	...	2	0·50	?	0·50	?		?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 3rd of June 1893—contd.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 28th May.	Monday, 29th May.	Tuesday, 30th May.	Wednesday, 31st May.	Thursday, 1st.	Friday, 2nd.	Saturday, 3rd.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th May 1893.	Average rainfall from 16th May.
NORTH BENGAL—concld.	Malda ...	Malda ...	1·20	0·17	...	2·03	0·62	0·13	0·03	5	4·16	1·61	0·77	0·70	6·87	2·91
		Chanchal ...	0·83	0·04	...	0·04	0·05	0·15	0·42	3	1·53	1·20	0·62	0·49	2·46	3·13
		Gaio ..	1·37	0·31	...	0·60		0·04				?		?		?
		Si ganj ...	1·50	0·05	0·03	0·09	0·91	...	0·58	3	3·16	?	1·49	?	6·10	?
	Dinajpur ...	Mohadebpore	1·80	...	...	0·72	...	0·76	...	3	3·28	3·49	0·76	1·66	6·54	4·67
		Churaman ...	0·94	0·06	...	1·76	...	0·02	0·41	3	3·19	2·45	0·43	1·24	4·13	3·63
		Raiganj ...	0·58	0·40	...		0·23	...	0·73	4	1·94	1·86	0·96	0·80	2·29	4·21
		Dinajpur ...	0·98	0·11	3·33	0·27	0·11	...	0·50	6	5·31	2·51	0·81	1·00	5·74	5·51
		Balurghat ...	1·17	0·22	...	1·38	0·12	...	0·71	5	3·60	3·79	0·83	1·46	4·93	6·16
		Thakurgaon ...	...	0·32	0·28	...	...	...	0·39	3	0·99	?	0·39	?	1·12	?
	Rangpur ...	Bhawanigunge (*Gyabanda*)	3·25	0·10	...	0·65	0·15	0·50	0·13	6	4·78	3·01	0·78	1·64	6·54	6·55
		Rangpur ...	1·11	0·61	1·35	0·11	0·57	0·21	0·96	7	4·92	3·12	1·74	1·35	5·21	8·03
		Peerganj ...	1·96	0·43	...	0·83	1·76	0·37	0·50	6	5·85		2·63	?	?	?
		Kurigaon ...	1·12	0·40	1·84	2·70	0·25	1·15	1·64	7	9·10	4·63	3·04	1·90	9·81	9·78
		Gobindgunge	3·83	...	...	0·70	2·13	0·10	0·30	5	7·06	?	2·53	?	9·26	?
		Baguria (*Nilphamari*)	0·45	0·06	1·22	0·07	1·20	...	0·30	4	3·30	4·23	1·50	1·69	3·34	9·70
		Ulipore ...	1·46	...	...	0·72	0·93	0·50	[illegible]	5	4·29	?	2·11	?	[illegible]	?
		Sundergunge...	0·47	...		0·92	...	0·34	0·30	4	2·03	?	0·64	?		?
	Jalpaiguri ...	Jalpaiguri ...	0·09	0·01	3·46	0·58	1·08	4·85	1·15	5	11·22	3·89	7·08	1·92	11·36	8·97
		Alipore Dooar	0·28	...	0·66	3·95	0·30	2·28	...	5	7·47	?	2·58	?	8·12	?
		Fallacotta .	0·18	..	1·11	1·99	[illegible]	2·40	0·34	6	7·04	?	3·76	?	7·89	?
		Dehiganj ...	0·30	0·22	0·12	0·93	0·10	0·80	0·25	7	2·72	?	1·15	?	3·04	?
		Bhagatpore							0·43	6	23·79				29·89	
		(*Nagrakatta*)	0·04	1·72	1·70	10·15	8·10	1·65	0·43	6	23·77	?	10·18	?	29·89	?
	Kuch Bihar...	Dinhatta ...	0·45	0·68	0·16	5·71	3·03	0·38	2·34	7	12·75	4·07	5·75	1·49	13·09	10·57
		Kuch Bihar ...	0·62	0·13	0·46	3·24	0·27	0·95	1·03	7	6·70	4·17	2·25	2·07	7·06	10·53
		Mekliganj ...	0·12	...	0·92	0·43	0·29	1·99	0·48	6	4·23	3·88	2·76	1·26	4·23	9·32
		Mathabhanga	0·56	0·04	0·60	1·62	0·76	1·56	1·12	6	6·26	3·89	3·44	1·45	6·87	9·71
	Darjeeling ...	Buxa ...	0·11	0·12	0·62	2·32	4·37	3·72	0·13	7	11·49	5·19	8·22	1·72	15·83	15·09
		Siliguri ...	0·03	0·04	6·25	3·31	1·63	0·97	0·67	5	12·93	4·40	3·27	1·68	13·20	7·30
		Darjeeling ...	0·03	0·17	0·23	0·13	1·06	[illegible]	0·17	5	1·88	2·46	1·32	1·12	2·81	5·26
		Kalimpong ...	..	0·04	.	0·24	0·60	0·53	0·29	4	1·70	1·64	1·42	0·73	3·79	3·20
		Kurseong ...	0·02	0·46	0·88	0·31	1·49	0·80	0·38	6	4·24	?	2·58	?	12·18	?
		Pedong ...	0·05	0·19	0·37	0·42	0·88	0·53	0·04	5	2·48	?	1·45	?	4·06	?
EAST BENGAL	Chittagong ...	Cox's Bazar ...	3·52	3·28	0·02	6·53	1·30	0·21	0·50	6	15·34	2·68	2·01	1·66	31·92	6·80
		Chittagong ...	8·03	3·71	0·31	0·75	1·55	0·29	0·19	7	14·83	2·86	2·03	1·77	22·67	6·25
		Kutubdia ...	6·04	0·30	0·18	1·60						?		?		?
		Satkanya ...	7·25	0·46	0·40	0·98	...	0·20	0·18	6	9·47	?	0·36	?	20·38	?
		Kodala ...										?		?		?
		Fenoa ...	8·60	1·29	0·35			0·48	0·42			?		?		?
		Mirsarai ...	4·98	1·20	0·24	0·12	0·90	0·82	0·59	7	8·85	?	2·31	?		?
		Chaydpur ...	7·51	1·75	0·45	2·08	0·15	0·90	0·50	7	13·33	?		?		?
	Chittagong Hill Tracts.	Rangamatti ...	7·95	6·81	0·30	1·45	0·20	0·35	0·49	7	17·64	2·64	1·13	1·47	22·02	5·63
		Bundarban ...	0·76	0·43	...	...	0·60	0·71	3·79	5	6·20	?	5·10	?	[illegible]	?
	Backergunge	Patuakhali ...	0·21	...	...	...	...	0·15	0·82	3	1·18	2·43	0·96	1·56	17·88	5·58
		Pirojpur ...	0·86	0·07	...	...	0·73	0·41	0·19	4	2·35	1·43	1·32	0·82	16·47	4·09
		Barisal ...	0·56	0·22	...	...	1·29	1·80	0·81	5	4·59	1·91	3·81	0·96	16·98	4·80
		Gournaddi .	0·95	0·34	...	...	1·18					?		?		?
		Bhola ...	0·28	0·05	...	0·27	0·72	0·10	0·98	5	2·40	2·02	1·80	1·28	13·04	4·66
		Daulatkhan ...	0·36	...	...	...	1·06	...	0·41	3	1·83	?	1·47	?	16·06	?
		Bauphal ...	0·83									?		?		?
	Noakhali ...	Noakhali ..	1·44	0·17	0·20	0·31	0·99	0·12	0·63	7	3·92	2·73	1·80	1·68	12·60	6·04
		Fenny ..	4·20	0·58	0·08	...	1·00	0·02	1·15	4	7·03	3·09	2·17	2·38	11·79	6·59
		Harishpore ...	4·29	0·03	...	...	2·66	...	0·52			?		?		?
		Ramganj ..	0·85	0·34	0·08	...	2·11	0·19				?		?		?
	Faridpur ...	Madaripur ..	1·45	0·41	...	...	0·39	0·59	0·04	4	2·88	1·72	1·02	0·88	11·77	5·05
		Faridpur ..	3·22	1·70	...	0·06	1·27	0·93	0·16	5	7·44	2·70	2·36	1·48	16·33	6·02
		Goalundo ..	2·76	0·92	...	...	0·45	0·30	0·85	5	5·28	1·64	1·60	0·99	14·68	4·50
	Dacca .	Munshiganj ..	1·31	1·31	...	0·09	0·99	0·10	.	4	3·80	2·39	1·09	1·16	7·92	5·11
		Dacca ...	1·52	2·32	...	0·33	0·34	...	0·03	4	4·54	1·90	0·37	1·02	9·28	4·93
		Narayanganj...	1·38	1·24	...	0·31	1·61	0·26	0·03	5	4·88	2·18	1·30	0·73	9·28	4·14
		Manikganj ...	2·10	0·79	...	0·25	1·67	0·02	0·48	5	5·31	1·75	2·70	1·07	10·90	4·79
		Joydebpore ...	2·49	1·00	0·02	[illegible]	0·30	0·05	0·06	4	5·79	?	0·41	?	10·34	?
	Hill Tippera Tippera	Agartola ...	2·04	2·10	0·44	1·33	2·02	0·10	0·86	7	9·49	2·97	3·58	1·79	12·74	5·72
		Comilla ...	1·40	0·55	...	1·93	2·41	0·15	0·29	6	6·73	3·08	2·85	1·57	13·52	5·64
		Chandpore ...	0·83	0·34	...	0·70	2·37	1·71	0·63	6	6·58	2·47	4·71	1·44	11·34	4·38
		Brahmanbaria	1·36	1·43	...	1·25	0·93	0·03	0·35	5	5·34	2·23	1·31	1·14	10·05	5·62
		Ramchandrapore ...	1·00	...	...	1·20	1·30	...	...	3	3·50	?	1·30	?	6·59	?
		Nasirnagar ..	2·10	2·75	...	0·75	0·60					?		?		?
		Daudkandi ...	1·50	1·49	...	0·55	1·25	...	...	4	4·70	?	1·26	?	7·10	?
		Kasba ...	0·45	0·60	...	1·99	3·20	0·12	0·74	6	7·01	?	4·06	?	10·51	?
		Laksham ...	2·50	0·25	0·42	0·36	2·80	0·77				?		?		?
	Mymensingh..	Kishorganj ...	2·50	1·91	...	2·05	0·45	...	1·95	5	8·86	3·03	2·40	1·91	14·69	6·42
		Atia (*Tangail*)	6·55	0·58	...	2·89	0·35	...	0·84	5	11·21	1·63	1·19	0·96	15·99	4·42
		Mymensingh ...	3·41	0·92	...	0·14	0·13	0·12	2·65	6	7·37	2·77	2·90	1·03	10·25	7·18
		Jamalpur	2·55	0·12	...	...		...	0·50	4	5·93	2·17	3·16	1·25	7·61	5·21
		Netrakona ...	0·98	2·59	...	1·24	2·66	...	2·80	4	7·61	3·99	2·80	2·21	10·81	7·71
		Subornakhally	3·87	0·52	...	1·05	1·66	0·12	1·22	6	8·44	?	3·00	?	13·60	?
		Durgapore ...	2·20	0·70	1·50	0·15	...	1·80	2·30	6	8·65	?	4·10	?	10·45	?
		Sherepore Town	2·47	0·30	...	0·48	0·45	...	1·20	5	4·90	?	1·65	?	7·36	?
		Dewanganj ...	4·35							.		?		?		?
NORTH BIHAR	Purnea ...	Kishanganj ...	0·06	...	...	...	...	...	1·90	1	4·96	2·39	1·90	0·86	1·96	4·51
		Araria ..	..	0·05	...	...	1·80	0·30	0·65	3	3·00	2·04	2·95	0·79	[illegible]	3·84
		Purnea ...	0·03	...	0·02	...	0·16	0·18	0·09	2	0·48	1·79	0·43	0·71	0·56	3·19
		Gondwara (*Korah*) ..	...	...	0·44	1·04	0·07	...	...	2	1·55	?	0·07	?	1·68	?
		Barsoe ...	...	0·05	...	0·30	...	0·90	...	2	1·25	?	0·90	?	1·65	?
		Forbesganj .	...	...	...	...	0·35	0·28	1·55	3	2·16	?	2·16	?	2·39	?
		Kaliaganj .	...	...	1·00	...	0·90					?		?		?
	Bhagalpur ...	Madhipura ...	...	...	0·12	1·50	0·35	...	...	3	1·97	1·15	0·35	0·20	2·01	2·55
		Bongaon (*Sujabad*). ...	...	0·27	...	0·28						?		?		?
		Supaul ...	...	...	0·16	...	0·97	...	0·76	3	1·89	1·50	1·73	0·52	2·37	2·61
		Protabganj ..	...	...	...	...	...	...	0·70	1	0·70	?	0·70	?	0·70	?
		Bhagalpur .	0·36	...	0·60	...	0·40	...	0·10	4	1·46	0·68	0·50	0·17	1·98	1·71
		Banka ...	0·25	...	0·53	0·08	0·90	...	...	3	1·76	0·96	0·90	0·40	3·48	1·02
		Colgong ...	0·06	...	...	...	0·95	0·05	0·13	2	1·19	?	1·13	?	1·68	?
	Darbhanga ...	Tajpur ..	...	...	...	...	0·60	...	...	1	0·60	0·72	0·60	0·14	1·15	1·14
		Darbhanga ...	...	...	...	0·94	...	...	0·23	2	1·17	0·89	0·23	0·34	1·17	1·58
		Madhubani ...	...	0·33	...	...	...	0·32	...	2	0·65	1·00	0·32	0·36	0·95	1·94
		Bahera ..	...	0·47	...	...	...	...	...	1	0·47		...	?	1·30	?
		Roshera ...	...	...	...	...	0·40	...	0·10	2	0·50	?	0·50	?	0·50	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 3rd of June 1893—concld.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 28th May.	Monday, 29th May.	Tuesday, 30th May.	Wednesday, 31st May.	Thursday, 1st.	Friday, 2nd.	Saturday, 3rd.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th May 1893.	Average rainfall from 16th May.
NORTH BIHAR—concluded.	Muzaffarpur...	Sitamarhi ...	...	0·04	0·73	...	...	...	0·52	2	1·29	0·78	0·52	0·22	1·29	1·57
		Muzaffarpur	0·31	...	0·21							0·83		0·20		1·72
		Hajipur ...	...	0·15	0·12	0·02	0·25	0·45	0·13	5	1·12	0·75	0·83	0·06	1·12	1·26
		Paru ...			0·52							?		?		?
		Mahwa (Chitwarra.)										?		?		?
		Siuhar ...					0·60					?		?		?
		Pupri ...										?		?		?
	Champaran ...	Motihari ...	0·28	...	1·07	..	0·09	...	...	2	1·44	0·90	0·09	0·44	1·90	1·89
		Bettiah ...	...	...	...	0·25	...	0·33	0·20	3	0·78	0·60	0·53	0·31	1·99	1·58
		Bagaha ...	0·05	0·30	0·83	...	0·63	1·57	...	4	3·58	?	2·40	?	4·35	?
		Burhurwa ...	...	...	0·58	...	...	...	0·24	2	0·82	?	0·24	?	0·93	?
	Saran ...	Gopalganj ...	...	...	0·78	...	...	...	0·11	2	0·89	0·69	0·11	0·16	0·93	1·32
		Siwan ...	...	0·35	...	0·18	...		..	2	0·53	0·57	Nil	0·21	0·98	1·25
		Chapra ...	0·06	0·31	0·18	0·10	0·19	0·25	0·03	5	1·12	0·77	0·47	0·16	1·33	1·13
		Sreepore ...										?		?		?
SOUTH BIHAR	Shahabad ...	Buxar ...	...	...	...	0·30	0·56	...	...	2	0·86	0·52	0·56	0·02	0·86	0·68
		Dehri ...	...	0·13	0·02	0·13	1·15	1·48	...	4	2·91	1·05	2·63	0·02	2·91	1·19
		Bhabhua ...	...	...	0·62		0·49	0·59	...	3	1·70	0·36	1·08	0·14	1·97	0·73
		Sasaram ...	...	...	...	0·20	0·38	1·57	...	3	2·13	0·48	1·93	0·14	2·39	0·82
		Arrah ...	0·83	0·18	0·11	1·27	0·37	0·01	...	5	2·77	0·81	0·38	0·10	2·82	1·23
		Mohanea ...	...	...	...	0·40	0·25					?		?		?
		Khiri ...	...	...	.	0·14	...	...	...	1	0·14	?	Nil	?	0·14	?
		Ageaon ...	0·15	0·20	0·60	0·61	...	..	...	4	1·56	?	...	?	1·66	?
		Ramagar ...	...	...	...	...	1·50	0·38	...	2	1·88	?	1·88	?	1·88	?
		Koath ...	...	...	...	...	1·45	...	...	1	1·45	?	1·45	?	1·45	?
		Sikroul ...	...	...	...	0·30	0·56	...	...	2	0·86	?	0·56	?	0·86	?
		Bassowan ...	...	...	...	...	0·38	...	...	1	0·38	?	0·38	?	0·38	?
		Monoharpur										?		?		?
	Gaya ...	Aurangabad ...	...	...	0·21	0·21	0·95	1·19	...	4	2·56	0·70	2·14	0·12	2·66	1·42
		Gaya ...	...	0·58	0·34	0·11	0·22	1·06	...	5	2·31	0·43	1·23	0·16	2·31	1·53
		Nawadah ...	...	0·12	1·86	...	0·63	0·37	...	4	2·98	0·54	1·00	0·19	3·15	1·63
		Jahanabad ...	...	0·66	0·23	0·12	0·50	0·38	...	5	1·89	0·94	0·88	0·33	2·41	1·57
		Arwal ...	0·11	0·36	2·21	...	...	...	...	3	2·68	?	Nil	?	2·68	?
		Daudnagar ...	...	...	...	...	0·45	0·90	...	2	1·35	?	1·35	?	1·35	?
		Sherghati ...	...	...	...	...	0·15	0·50	...	2	0·65	?	0·65	?	0·65	?
		Rajauli ...										?		?		?
		Pakri Barawan	...	...	...	...	0·31					?		?		?
	Patna ...	Patna ..	...	0·06	...	...	0·72	0·04	...	1	0·82	0·97	0·76	0·07	0·82	1·67
		Dinapore ...	...	0·42	...	0·14	1·95	0·19	0·04	4	2·74	0·76	2·18	0·07	2·84	1·27
		Bihar ...	...	...	...	...	0·60	0·27	...	2	0·87	0·77	0·87	0·23	1·27	1·65
		Barh ...	...	...	...	...	2·36	...	0·15	2	2·51	0·61	2·51	0·15	3·17	1·51
		Bickram ...	...	0·70	...	0·47	1·50	0·07	0·22	4	2·96	?	1·79	?	2·96	?
		Hilsa ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
	Monghyr ...	Begusarai ...	...	...	...	...	1·98	...	0·11	2	2·09	0·72	1·98	0·27	2·09	1·50
		Monghyr ...	...	...	...	...	1·46	...	...	1	1·46	0·87	1·46	0·19	1·46	1·86
		Jamui ...	...	...	...	...	0·60	0·11	0·08	2	0·79	0·75	0·79	0·24	0·98	1·48
		Goari ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Shaikpura ...	...	...	...	...	1·10	...	...	1	1·10	?	1·10	?	1·10	?
		Chahai Bamda	0·18	...	0·07	...	1·08	0·45	...	3	1·78	?	1·53	?	3·39	?
		Chupreon ...	...	...	...	0·40	...	...	...	1	0·40	?	Nil	?	0·40	?
	Sonthal Parganas.	Rajmahal ...	0·74	...	0·25	1·26	0·05	0·17	0·07	4	2·54	1·69	0·29	0·59	4·18	3·17
		Godda ...	0·63	...	...	...	1·40	0·92				1·48		0·82		2·53
		Pakour ...	0·82	...	0·11	...	0·74	...	0·15	4	1·82	2·02	0·89	0·54	4·60	3·35
		Naya Dumka	1·32	...	...	...	1·20	...	...	2	2·52	1·14	1·20	0·31	5·86	2·31
		Deoghur .	1·37	...	...	...	2·20	0·07	0·02	2	3·66	0·94	2·29	0·36	7·06	2·05
		Jamtara ...	0·32	...	...	...	1·25	0·18	...	3	1·75	1·09	1·43	0·51	5·95	2·27
		Belbodda ...	0·40	0·50	...	0·86	1·18	...	...	4	2·94	?	1·18	?	2·94	?
		Nanihat ...	0·71	...	...	...	2·50					?		?		?
CHOTA NAGPUR.	Hazaribagh ...	Pachamba (Giridih). ...	0·05	0·11	0·47	...	0·47	0·18	...	4	1·28	0·79	0·65	0·37	3·90	1·79
		Hazaribagh ...	...	0·14	1·41	0·39	1·76	2·30	...	5	6·00	0·84	4·06	0·20		1·68
		Semtaguran .										0·56		0·47		2·68
		Mahudi Hills										0·82		0·19		2·77
		Jhumra Hill	...	...	0·72	...	3·60	0·76	...	3	5·08	1·03	4·36	0·02	5·68	1·67
		Barhi ...	...	...	2·23	0·15	1·15	1·78	...	4	5·37	?	2·93	?	6·16	?
		Chatra ...	...	...	0·49	...	1·50	1·21	...	3	3·20	?	2·71	?	3·72	?
		Karagdeha ...	0·08	0·11	0·39	...	1·45	...	...	3	2·03	?	1·45	?	1·68	?
		Ramgar ...										?		?		?
	Lohardaga ...	Lohardaga ...	...	...	...	...	0·22	0·12	...	2	0·34	0·99	0·34	0·12		[illegible]
		Ranchi ...	...	0·39	...	...	1·85	0·20	...	3	2·44	1·01	2·05	0·17		[illegible]
		Silli ...	1·00		0·60							?		?		?
	Palamau ...	Palamau (Daltanganj). ...	...	...	0·01	...	0·30	0·93	...	2	1·23	0·67	1·22	0·16	1·53	[illegible]
		Balumath ...	...	...	...	0·95	0·80	0·60				?		?		?
		Husainabad	...	...	0·72	...	3·60	0·76				?		?		?
		Garhwa ...	...	...	...	...	0·45	1·40	...	2	1·85	?	1·85	?	1·85	?
	Singhbhum ...	Chaibassa ...	0·14	1·80	...	...	0·02	0·14	...	3	2·10	1·02	0·16	0·30	7·08	[illegible]
		Chakardharpur.	0·70	...	...	0·29	0·03	...	0·01	2	1·03	?	0·04	?	4·29	?
		Ghatsila ...	0·27	0·50	...	...	0·58	...	...	3	1·35	?	0·58	?	8·70	?
		Baharagura	...	1·78	...	...	0·45					?		?		?
		Gailkeira ...	1·36	...	...	0·85	0·40	0·20	...	4	2·81	?	0·60	?	5·84	?
		Kalikapur ...	0·16	1·40	...	...	0·26	0·14	0·02	2	1·98	?	0·42	?	8·98	
	Manbhum ...	Purulia ...	0·25	0·24	...	...	0·50	...	...	3	0·99	0·84	0·50	0·24	6·84	[illegible]
		Gobindpur ...	0·89	...	...	1·11	...	0·22	...	3	2·12	0·64	0·22	0·26	5·84	[illegible]
		Raghunathpore.	0·32	...	...	0·32	0·35	0·30	...	4	1·29	?	0·65	?	5·11	
		Barahabhum	...	...	...	0·35	...	0·30	...	2	0·65	?	0·30	?	7·45	
		Jhalda ...	0·11	...	0·17	0·33	0·63	...	0·50	5	1·74	?	1·13	?	5·26	
		Chas ...	0·17	1·00	...	...	...	...	...	2	1·17	?	Nil	?	4·07	
		Pandra ...	0·15	0·02	...	...	2·73	0·42	...	3	3·32	?	3·15	?	9·69	

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns a[re] wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at le[ast] 0·1 inches of rain has fallen.

CALCUTTA, *the 6th June* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 3RD JUNE 1893.

At the end of the previous week the depression, though of much less importance, was over the central districts moving in a north-easterly direction, and was causing heavy rain and strong winds within the area of lowest pressure. It continued its slow motion to the north-east, and the centre of the disturbance on the first day of the present week was between Dacca and Sirajganj. By this time the influence of the depression did not extend to Bihar, where pressure was falling slightly and winds had become easterly, but in all the central districts cyclonic winds of north-westerly direction were still blowing. On the 29th a very shallow depression remained, extending over the eastern districts of Bengal and the greater part of Assam, with lowest pressure between Mymensingh and Silchar. General rain was falling in the parts affected by the depression, though not very heavily, as the largest fall reported was under 3 inches, but with its final disappearance on the following day very heavy rain fell in Cachar, and weather in Bengal began to be more generally unsettled.

While the depression was over the eastern districts of Bengal, westerly or north-westerly winds prevailed over the greater part of the province. These westerly winds were comparatively dry, and there was very little rain until after the depression had filled up. On 30th May gradients and wind directions had become more normal, and cloudy rainy weather prevailed till nearly the end of the week except in Orissa, where rainfall was very partial. The rise of pressure which followed the depression continued till there was considerable excess, and on the 31st of May there was an area of relatively high readings over the north of the Bay and Lower Bengal. Within this area excess was more than a tenth of an inch, and as readings were almost normal in the south of the Bay and also along the foot of the Himalayas, gradients were less steep than usual in the north of the Bay and steeper in Bengal. This high pressure area in the north of the Bay has had an important influence in preventing rainfall in the east of the Bay and afterwards in Bengal; but it was not till the last day of the week that the effect became generally apparent at inland stations. From 31st May till 2nd June general rain fell in all districts, and on the 3rd, the last day of the week, numerous falls were received in the northern districts, but they were lighter in amount. Owing to the cloudy weather which prevailed during the greater part of the week, very low day temperatures were general, but minimum readings were not usually much below the normal. The means were at times more than 10° in defect, and even at the end of the week, when skies were clearing, there was defect of more than 5° in the western districts.

Pressure rose very rapidly in Lower and Eastern Bengal after the passage of the depression, and readings were soon above the normal in all districts. The distribution was very nearly normal on the 30th May, when the largest difference was ·06 inch in Orissa; but on the following day excess varied from ·05 inch in the extreme north to ·15 inch in Orissa. Changes were slight on the 1st of June, but a brisk fall prevailed on the 2nd and 3rd, after which readings were again very nearly normal. The means for the week show little sign of the large variations which occurred at the beginning, and the greatest difference from the normal is very little over a twentieth of an inch.

Temperature, as stated above, has been much below the normal by day, but not to any great extent at night, the difference in maximum readings being largely due to the cloudy weather which prevailed throughout the week. The means for the large divisions are all below the normal, the largest defect being in the western districts. For Chota Nagpur it is 7·5°, South-West Bengal 4·9°, South Bihar 4·1°, Orissa and Assam about 2·5°, and the other districts between 1° and 2°.

Rainfall.—General and in some cases heavy rain has fallen in all districts except Orissa and the adjacent parts of South-West Bengal and Chota Nagpur, which received very scattered showers between the 29th and 31st. General rain began to fall in Behar on the 31st; but in North Bihar, though the rainfall was fairly well distributed, the amount was generally light, and the mean for the week is only slightly above the normal. For Orissa the mean fall is very little over half the normal fall, but in all the other districts there has been a rather large excess. In North Bengal excess is 2·1 inches, in East Bengal 4·48 inches, and in South-West Bengal, Chota Nagpur, and South Behar between 1 and 2 inches.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 3rd of June 1893:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.						RAINFALL.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th May 1893.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	98·6	71·2	89 5	79·5	84 5	—2·7	1·02	1·03	—0·01	1·18	1·52	—0·31	0·28	0·42	15·13	2·52
South-West Bengal ...	94·7	67·9	88·2	77·2	82·7	—4·4	2·75	1·57	+1·18	3·02	1·94	+1·08	1·24	0 70	9·68	3·25
North Bengal	93 6	72 2	86·2	75·3	80·8	—1·7	5·05	2·95	+2·10	4·68	2·57	+2 31	1·75	1·33	7·04	6·33
East Bengal	90·6	73·1	85·1	76·4	80·8	—1·7	6·90	2·42	+4·48	5·12	2·77	+2·35	2·10	1 39	14·09	5· 49
North Bihar ...	99·3	70·8	92·5	77·2	84·9	—1·2	1·26	1·08	+0·18	2·75	1·16	+1·59	0·66	0·35	1·65	2·00
South Bihar	102·4	73·8	93 4	77·8	85 7	—3·3	2·12	0·89	+1·23	3·05	0·93	+2·12	1·40	0·25	3·00	1·7 0
Chota Nagpur	94·9	68 8	88·2	72·5	80·4	—7·5	2·49	0 84	+1·65	3·11	1·25	+1 86	1·50	0·23	5·15	2·03
Assam	89·6	70·3	82·9	74·6	78·8	—2·5										

METEOROLOGICAL OFFICE, BENGAL,
The 6th June 1893.

C. LITTLE,
Offg. Meteorological Reporter to the Govt. of Bengal.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 28th May to 3rd June 1893.

MONTH.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	TEMPERATURE.						HYGROMETRY.			Rainfall, past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vavour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
May ...	28th ...	29·544	80·4	85·9	11·1	74·8	80·1	77·0	·888	75·6	87	1·50
" ...	29th ...	·613	83·2	89·5	12·7	76·8	84·6	80·5	·987	78·9	83	......
" ...	30th ...	·732	85·9	91·0	10·2	80·8	86·1	81·5	1·014	79·7	82	......
" ...	31st ...	·772	85·2	90·0	9·7	80·3	88·4	83·3	1·073	81·4	80	......
June ...	1st ...	·771	82·3	89·0	13·4	75·6	86·1	81·3	7·005	79·4	80	0·19
" ...	2nd ...	·704	83·7	91·0	14·7	76·3	84·6	80·5	·987	78·8	83	0·13
" ...	3rd ...	·678	84·8	90·5	11·5	79·0	88·6	82·0	1·005	79·4	75	......

	Inches.
The mean 10 A.M. pressure of the seven days	29·688
	°
The mean temperature of the seven days	83·6
The extreme variation of temperature	16·2
The maximum temperature	91 0
	%
The mean 10 A.M. relative humidity of the seven days	81
	Inches.
The total fall of rain from 28th May to 3rd June 1893	1 82

The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 25th June 1893.

Results of the Meteorological Observations taken at the Alipore Observatory from 28th May to 3rd June 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Maximum.	Range.	Minimum.	Hygrometry. Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Wind. Prevailing direction.	Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
May	28th	133·8	1·3	29·494	79·5	84·4	8·9	75·5	76·5	0·874	75·2	87	W, WNW and calm,	173	0·02	Chiefly cloudy, o, d.
,,	29th	149·1	2·8	·579	82·2	87·6	10·0	77·6	78·6	·932	77·1	85	WSW and SSW	117	Nil	Chiefly cloudy, o, g.
,,	30th	147·8	6·5	·683	84·4	88·8	7·8	81·0	80·6	·997	79·1	84	SSW ...	161	,,	Partially cloudy, o.
,,	31st	145·5	7·8	729	84·5	88·3	7·6	80·7	80·7	·997	79·1	84	SSW ...	178	Not measurable.	Partially cloudy, o, d, t, <.
June	1st	148·2	2·0	·694	82·4	87·1	11·7	75·4	79·1	·953	77·8	86	SW and SW by S	116	0·14	Chiefly cloudy, o, p.
,,	2nd	149·4	7·6	·628	84·2	89·4	12·9	76·5	79·4	·941	77·4	60	SW and SW by S	164	0·10	Partially cloudy, o, p.
,,	3rd	143·5	10·2	·613	85·9	91·9	12·2	79·7	80·3	·960	78·0	78	SW and SSW ..	139	Nil	Chiefly clear, lr.

	Inches.
The mean pressure of the seven days	29·631
The average pressure of the corresponding period for 24 years, Surveyor-General's Office	29·584
	Hours.
The total number of hours of bright sunshine	38·2
The maximum possible number of hours of sunshine	93·5
	°
The mean temperature of the seven days	83·3
The average temperature of the corresponding period for 24 years, Surveyor-General's Office	86·5
The extreme variation of temperature	16·5
The maximum temperature	91·9
	Miles.
The highest velocity of the wind in one hour	28
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	83
The average relative humidity of the corresponding period for 24 years, Surveyor-General's Office	76
	Inches.
The total fall of rain from 28th May to 3rd June 1893	0·26
The average fall of the corresponding period for 24 years, Surveyor-General's Office	1·68
The total fall from 1st January to 3rd June 1893	24·37
The average fall of the corresponding period for 24 years, Surveyor-General's Office	10·28

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h, and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast; g, gloomy; d, drizzling rain; t, thunder; <, lightning; p, passing temporary showers; lr, lightning reflection.

Meteorological Office, Govt. of India;
Calcutta, the 5th June 1893.

J. H. Gilliland,
For Meteorological Reporter to the Govt. of India.

Vital statistics of the Districts of Bengal for the month of April 1893.

Divisions.	Districts.	Population under registration.	Births. Number registered.	Births. Ratio per 1,000 of population per annum.	Deaths. Cholera. Number registered.	Deaths. Cholera. Ratio per 1,000 of population per annum.	Deaths. Small-pox. Number registered.	Deaths. Small-pox. Ratio per 1,000 of population per annum.	Deaths. Fever. Number registered.	Deaths. Fever. Ratio per 1,000 of population per annum.	Deaths. Dysentery and Diarrhœa. Number registered.	Deaths. Dysentery and Diarrhœa. Ratio per 1,000 of population per annum.	Deaths. Injury. Number registered.	Deaths. Injury. Ratio per 1,000 of population per annum.	Deaths. Other causes. Number registered.	Deaths. Other causes. Ratio per 1,000 of population per annum.	Deaths. Total of all causes. Number registered.	Deaths. Total of all causes. Ratio per 1,000 of population per annum.	Average of corresponding month of previous five years. Number registered.	Average of corresponding month of previous five years. Ratio per 1,000 of population per annum.	Remarks.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Burdwan ...	Burdwan	1,391,880	4,446	38·28	32	·24	50	·36	1,721	14·76	59	·48	22	·12	792	6·84	2,676	23·04	3,527	30·36	
	Bankura	1,060,668	3,310	37·08	21	·12	6	·06	998	11·16	20	·12	17	·12	430	4·80	1,492	16·68	2,207	24·72	
	Birbhum	797,833	2,978	44·76	37	·48	...	...	1,197	18·00	9	·12	21	·24	595	8·88	1,859	27·96	2,225	33·36	
	Midnapore	2,631,516	7,686	35·04	193	·84	59	·24	3,252	14·76	120	·48	36	·12	770	3·48	4,430	20·16	5,772	26·28	
	Hooghly including Serampore	1,076,710	3,598	40·08	30	·24	5	·04	1,314	14·64	96	·96	32	·24	433	4·80	1,910	21·24	2,560	28·44	
	Howrah	721,211	2,385	39·60	187	3·00	2	·02	629	10·44	204	3·36	36	·48	331	5·40	1,339	23·04	1,352	22·44	
Presidency ...	24-Parganas																				*Return not received up to date.*
	Nadia	1,644,108	6,268	45·72	14	·09	7	·04	2,227	16·20	40	·24	56	·36	595	4·32	2,939	21·36	4,897	35·64	
	Jessore	1,888,827	6,809	43·20	37	·12	1	·006	2,998	18·96	6	·03	54	·24	408	2·52	3,504	22·20	5,730	36·36	
	Murshidabad	1,250,946	4,463	42·72	6	·04	...	...	3,169	30·36	9	·08	25	·12	366	3·48	3,575	34·20	3,454	33·12	
	Khulna	1,177,652	3,059	31·08	54	·48	...	...	1,242	12·60	3	·02	39	·36	297	3·00	1,635	16·56	2,723	27·72	
Rajshahi ...	Dinajpur	1,555,835	6,610	50·88	...	...	...	...	3,444	26·52	5	·03	27	·12	185	1·32	3,661	28·20	4,700	36·24	
	Rajshahi	1,313,336	5,044	46·08	6	·04	20	·12	3,110	28·32	4	·03	25	·12	269	2·40	3,437	31·32	3,967	35·88	
	Rangpur	2,065,464	6,093	35·28	2	·01	3	·01	3,444	19·92	1	·004	33	·12	232	1·32	3,715	21·48	7,176	41·64	
	Bogra	817,494	2,689	39·36	2	·02	4	·04	1,075	15·72	3	·03	24	·24	335	4·80	1,448	21·12	1,859	27·24	
	Pabna	1,362,392	4,929	43·32	1	·008	56	·48	2,499	21·96	9	·07	27	·12	172	1·44	2,764	24·24	3,301	29·04	
	Darjeeling	223,314	328	17·52	...	...	1	·04	357	19·08	53	2·76	8	·36	98	5·16	517	27·72	637	34·20	
	Jalpaiguri	681,352	1,581	27·84	...		...		1,076	18·84	0	·09	9	·12	7	·12	1,098	19·32	2,782	48·96	
Dacca ...	Dacca	2,420,656	6,773	33·48	906	4·44	178	·84	2,690	13·20	123	·60	60	·24	931	4·56	4,878	24·12	4,315	21·36	
	Faridpur	1,797,320	6,043	40·32	360	2·40	16	·09	2,415	16·08	20	·12	40	·24	617	4·08	3,468	23·04	4,311	28·68	
	Backergunge	2,153,965	6,526	36·24	614	3·36	3	·01	3,182	17·64	87	·12	115	·60	1,193	6·60	5,144	28·56	6,235	34·68	
	Mymensingh																				*Return not received up to date.*
Chittagong ...	Chittagong	1,290,167	3,970	36·84	38	·24	9	·07	2,197	20·40	18	·12	61	·48	173	1·56	2,494	23·16	2,618	24·24	
	Noakhali	1,009,693	3,822	45·36	77	·84	2	·01	1,590	18·84	20	·12	55	·60	231	2·64	1,975	23·40	2,491	29·52	
	Tippera	1,782,935	5,310	35·64	335	2·16	7	·03	1,826	12·24	25	·12	72	·48	459	3·00	2,724	18·24	2,927	19·68	
Patna ...	Patna	1,769,004	3,433	23·50	15	·09	91	·60	1,905	12·84	103	·60	53	·24	553	3·72	2,720	18·24	3,160	21·36	
	Gaya	2,138,331	4,018	22·44	19	·09	259	1·44	3,111	17·40	24	·12	86	·48	360	1·92	3,858	21·60	3,924	21·96	
	Shahabad																				*Complete statistics of the district have not yet been furnished.*
	Muzaffarpur	2,711,445	6,382	28·20	5	·01	5	·01	4,720	20·88	79	·24	88	·36	577	2·52	5,469	24·12	4,224	18·60	
	Darbhanga	2,801,955	5,704	24·36	1	·003	2	·008	4,488	19·20	157	·60	55	·12	460	1·92	5,163	22·08	4,945	21·12	
	Saran	2,467,477	5,937	28·80	13	·04	6	·02	2,257	10·92	203	·96	82	·36	1,842	8·88	4,403	21·36	3,585	17·40	
	Champaran	1,859,465	3,510	22·56	...	...	5	·02	2,304	14·76	6	·03	50	·24	607	3·84	2,972	19·08	2,958	19·08	
Bhagalpur ...	Monghyr	2,036,021	4,018	23·64	11	·06	65	·36	3,005	17·64	24	·12	52	·24	368	2·16	3,525	20·76	4,593	27·00	
	Bhagalpur	2,032,696	3,819	22·44	32	·12	153	·84	3,445	20·28	44	·24	35	·12	375	2·16	4,084	24·00	5,687	33·48	
	Purnea	1,944,058	4,560	28·08	...	...	16	·09	3,510	21·60	7	·03	14	·08	62	·36	3,609	22·20	8,632	53·16	
	Malda	814,919	2,828	41·64	2	·02	1	·01	1,920	28·20	2	·02	7	·09	109	1·56	2,041	30·00	2,033	29·88	
	Sonthal Parganas																				*Ditto ditto.*
Orissa ...	Cuttack	1,937,671	4,937	30·48	174	·96	349	2·04	1,983	12·24	253	1·56	88	·48	944	5·76	3,790	23·40	4,040	24·96	
	Puri	944,998	2,327	29·52	58	·72	317	3·96	462	5·76	128	1·56	33	·36	851	10·80	1,849	23·40	2,309	29·28	
	Balasore	994,625	3,491	42·00	76	·84	6	·07	728	8·76	230	2·76	43	·48	559	6·72	1,642	19·80	2,815	33·96	
Chota Nagpur.	Hazaribagh	1,164,321	3,159	32·52	2	·01	65	·60	1,770	18·24	46	·36	36	·36	311	3·12	2,230	22·92	2,784	28·68	
	Lohardaga	1,128,885	3,284	34·80	...	...	17	·12	949	10·08	118	1·20	13	·12	663	6·96	1,760	18·60	2,232	23·64	
	Palamau	596,770	1,399	28·08	1	·01	79	1·56	1,697	34·08	14	·24	8	·12	136	2·64	1,935	38·88	1,262	25·32	
	Singhbhum	545,488	1,618	35·52	...	...	16	·24	459	10·08	29	·36	21	·36	149	3·24	665	14·52	801	17·52	
	Manbhum	1,193,328	2,925	29·40	10	·09	87	·84	1,140	11·40	30	·24	19	·12	345	3·36	1,631	16·32	2,660	26·64	
	Total ...	61,206,831	172,069	33·72	3,368	·60	1,969	·36	87,495	17·04	2,378	·36	1,672	·24	19,190	3·72	116,072	22·68	144,380	28·20	
Average of the corresponding month of previous five years			Not available, as birth registration in rural areas was only introduced from 1892.		28,193	5·52	1,851	·36	91,861	18·00	3,552	·60	1,623	·24	17,300	3·36	144,380	28·80	...	...	
Difference + or −			......		−24,825	−4·92	+118	Equal	−4,366	−·96	−1,174	−·24	+49	Equal	+1,890	+·36	−28,308	−5·52	...	...	

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,
The 3rd June 1893.

H. J. DYSON, *Surgeon-Capt.*, F.R.C.S.,
Offg. Sanitary Commissioner for Bengal.

Vital Statistics of Towns in Bengal with a population of 20,000 and over during the month of April 1893.

DISTRICTS.		TOWNS.	Population under registration.	BIRTHS. Number registered.	BIRTHS. Ratio per 1,000 of population per annum.	DEATHS. Cholera. Number registered.	Cholera. Ratio per 1,000 of population per annum.	Small-pox. Number registered.	Small-pox. Ratio per 1,000 of population per annum.	Fever. Number registered.	Fever. Ratio per 1,000 of population per annum.	Dysentery and Diarrhœa. Number registered.	Dysentery and Diarrhœa. Ratio per 1,000 of population per annum.	Injury. Number registered.	Injury. Ratio per 1,000 of population per annum.	Other causes. Number registered.	Other causes. Ratio per 1,000 of population per annum.	Total of all causes. Number registered.	Total of all causes. Ratio per 1,000 of population per annum.	Average of corresponding month of previous five years. Number registered.	Average. Ratio per 1,000 of population per annum.	REMARKS.
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Burdwan ...	1	Burdwan	34,477	96	33·36	3	·96	...	...	49	17·04	8	2·76	4	1·32	15	5·16	79	27·36	94	32·64	
Midnapore ...	2	Midnapore	32,264	88	32·64	1	·36	...	...	34	12·60	3	1·08	1	·36	15	5·52	54	20·04	90	33·36	
Hooghly ...	3	Hooghly and Chinsura	33,060	79	28·56	4	1·44	...	...	31	11·16	8	2·88	3	1·08	11	3·96	57	20·64	120	43·44	
	4	Serampore	35,952	63	21·00	18	4·32	...	...	40	13·32	8	2·64	4	1·32	6	1·99	71	23·64	105	35·04	
Howrah ...	5	Howrah	116,606	181	18·60	84	8·64	2	·12	70	7·20	24	2·40	2	·12	28	2·88	210	21·60	181	18·60	
24-Parganas ...	6	Cossipore-Chitpur ...	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Return not received up to date.
	7	Maniktala	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	8	Barnagore	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	9	South Suburban ...	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	10	Khorda or South Barrackpore.	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	11	Naihati	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	12	Nawabganj or North Barrackpore.	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Nadia ...	13	Krishnagar	25,500	71	33·36	...	...	...	...	36	16·92	4	1·80	1	·36	5	2·28	46	21·60	34	15·96	
	14	Santipur	30,437	88	34·68	...	...	...	...	34	13·32	...	...	2	·72	13	5·04	49	19·20	28	10·92	
Murshidabad	15	Murshidabad City ...	35,576	78	26·28	1	·24	...	...	81	27·24	2	·60	...	...	6	1·92	90	30·24	119	40·08	
	16	Berhampore	23,515	29	14·76	3	1·44	...	...	33	16·80	...	...	1	·48	...	...	37	18·84	80	40·80	
Rajshahi ...	17	Rampur Boalia ...	21,407	60	33·60	...	...	...	...	49	27·36	1	·48	...	...	1	·48	51	28·56	83	46·44	
Pabna ...	18	Sirajganj	23,267	72	37·08	...	...	...	...	30	15·36	2	·96	...	...	3	1·44	35	18·00	32	16·44	
Dacca ...	19	Dacca	83,633	183	26·16	21	3·00	1	·12	52	7·44	9	1·20	5	·72	67	9·60	155	22·20	174	24·96	
Chittagong ...	20	Chittagong	24,069	45	22·32	...	...	...	...	23	11·40	3	1·44	1	·48	1	·48	28	13·92	53	26·40	
Patna	21	Patna City	165,192	268	19·44	9	·60	1	·07	137	9·84	44	3·19	10	·72	79	5·64	280	20·28	284	20·88	
	22	Bihar	47,723	106	26·64	...	...	4	·96	49	12·24	11	2·76	3	·72	20	4·99	87	21·84	77	19·20	
	23	Dinapore	44,419	76	20·52	...	...	...	...	46	12·36	9	2·40	1	·24	18	4·80	74	19·92	61	13·68	
Gaya ...	24	Gaya	80,383	138	20·52	3	·36	4	·48	193	28·80	7	·96	...	...	26	3·84	233	34·68	281	41·88	
Shahabad ...	25	Arrah	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Complete information has not been received up to date.
	26	Sasaram	......	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Muzaffarpur	27	Muzaffarpur	49,192	97	23·64	1	·24	...	...	76	18·48	13	3·12	1	·24	30	7·20	121	29·40	81	19·68	
	28	Hajipur	21,487	71	39·60	...	...	...	...	56	31·20	7	3·84	...	...	18	9·96	81	45·12	47	26·16	
Darbhanga ...	29	Darbhanga	73,561	192	31·32	...	...	1	·12	68	11·04	51	8·28	...	...	63	10·20	183	29·76	186	30·24	
Saran	30	Chapra	57,852	91	18·96	...	...	...	...	28	5·76	20	4·08	4	·72	21	4·32	73	15·24	65	13·56	
Champaran ...	31	Bettiah	22,780	59	30·96	...	...	...	...	26	13·68	2	·96	...	...	7	3·60	35	18·36	59	30·96	
Monghyr ...	32	Monghyr	57,077	179	37·56	7	1·44	2	·36	39	8·16	6	1·20	...	...	70	14·64	124	26·04	134	28·08	
Bhagalpur ...	33	Bhagalpur	69,106	158	27·36	1	·12	49	8·40	107	18·48	15	2·52	1	·12	34	5·88	207	35·88	148	25·68	
Cuttack ...	34	Cuttack	47,186	74	18·72	...	...	1	·24	24	6·00	14	3·48	...	...	18	4·56	57	14·40	56	14·16	
Puri ...	35	Puri	28,794	49	20·40	1	·36	4	1·56	13	5·40	7	2·88	2	·72	38	15·72	65	27·00	77	32·04	
Balasore ...	36	Balasore	20,775	50	28·80	...	...	...	...	13	7·44	4	2·28	...	...	6	3·36	23	13·20	63	36·36	
Lohardaga ...	37	Ranchi	20,308	45	26·52	...	...	1	·48	16	9·36	...	...	...	...	14	8·16	31	18·24	38	22·44	
		Total ...	1,325,096	2,786	25·20	152	1·32	70	·69	1,453	13·08	282	2·52	46	·36	633	5·64	2,636	23·76	2,844	25·68	
		Average of the corresponding month of previous five years.	...	Complete average figures of past five years cannot be available.		526	4·68	122	1·08	1,244	11·16	246	2·16	43	·36	663	6·00	2,844	25·68	...	...	
		Difference + or − ...	...	...	...	−374	−3·36	−52	−·48	+209	+1·99	+36	+·36	+3	Equal	−30	−·36	−208	−1·92	...	...	

OFFICE OF SANITARY COMMISSIONER FOR BENGAL,
The 3rd June 1893.

H. J. DYSON, *Surgeon-Capt.*, F.R.C.S.,
Offg. Sanitary Commissioner for Bengal.

IRRIGATION DEPARTMENT,—BENGAL.

Statement showing heights over mean sea-level and low-water in the Rivers Ganges, Bhagirathi, Jalangi, and Brahmaputra, for the month of April 1893.

Date.	River Ganges.									
	Mirzapur.		Benares.		Buxar.		Dinapore.		Monghyr.	
Distance. Miles.	96 From Allahabad		134 From Allahabad	48 From Mirzapur	90 From Benares		177 From Benares	87 From Buxar ...	287 From Benares	110 From Dinapore
	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.
									Below zero.	
1st	3·83	210·05	1·42	198·22	2·08	171·18	7·40	141·63	0·29	101·56
2nd	3·75	209·97	1·50	198·30	1·92	170·97	7·35	141·58	0·25	101·61
3rd	3·75	209·97	1·83	198·63	1·92	170·97	7·20	141·43	0·21	101·64
4th	3·75	209·97	1·96	198·76	1·92	170·97	7·10	141·33	0·17	101·68
5th	3·75	209·97	1·92	198·72	1·92	170·97	7·00	141·23	0·12	101·73
6th	3·75	209·97	1·92	198·72	2·17	171·22	7·00	141·23	0·08	101·77
7th	3·75	209·97	1·92	198·72	2·17	171·22	7·00	141·23	0·04	101·81
8th	3·75	209·97	1·83	198·63	2·17	171·22	7·00	141·23	0·08	101·77
9th	3·75	209·97	1·67	198·47	2·08	171·13	7·00	141·23	0·17	101·68
10th	3·75	209·97	1·58	198·38	2·08	171·13	7·00	141·23	0·21	101·64
11th	3·75	209·97	1·42	198·22	2·08	171·13	7·00	141·23	0·21	101·64
12th	3·42	209·64	1·33	198·13	2·08	171·13	7·00	141·23	0·25	101·60
13th	3·17	209·39	1·17	197·97	1·75	170·80	7·10	141·33	0·27	101·58
14th	3·08	209·30	1·00	197·80	1·58	170·63	7·20	141·43	0·29	101·56
15th	3·00	209·22	0·92	197·72	1·58	170·63	7·30	141·53	0·25	101·60
16th	2·92	209·14	0·83	197·63	1·42	170·47	7·20	141·43	0·17	101·68
17th	2·83	209·05	0·75	197·55	1·25	170·30	7·00	141·23	0·08	101·77
18th	2·75	208·97	0·67	197·47	1·08	170·13	7·00	141·23	0·08	101·77
19th	2·67	208·89	0·62	197·42	1·00	170·05	6·90	141·13	0·04	101·81
20th	2·58	208·80	0·58	197·38	0·92	169·97	6·80	141·03	0·17	101·68
21st	2·50	208·72	0·54	197·34	0·83	169·88	6·70	140·93	0·21	101·64
22nd	2·50	208·72	0·54	197·34	0·83	169·88	6·50	140·73	0·33	101·52
23rd	2·42	208·64	0·50	197·30	0·83	169·88	6·50	140·73	0·42	101·43
24th	2·33	208·55	0·46	197·26	0·83	169·88	6·50	140·73	0·46	101·39
25th	2·17	208·39	0·42	197·22	0·75	169·80	6·50	140·73	0·46	101·39
26th	2·17	208·39	0·37	197·17	0·75	169·80	6·70	140·93	0·33	101·52
27th	2·08	208·30	0·25	197·05	0·67	169·72	7·00	141·23	0·29	101·56
28th	2·00	208·22	0·21	197·01	0·58	169·63	7·00	141·23	0·25	101·60
29th	2·00	208·22	0·17	196·97	0·58	169·63	7·00	141·23	0·21	101·64
30th	2·00	208·22	0·08	196·88	0·50	169·55	7·00	141·23	0·21	101·64

Date.	River Ganges.						River Bhagirathi.		River Jalangi.		River Brahmaputra.	
	Sahibganj.		Rampur Boalia.		Goalundo.		Berhampore.		Sarupganj.		Gowhatty.	
Distance. Miles.	381 From Benares	94 From Monghyr	471 From Benares	90 From Sahibganj ...	591 From Benares	120 From Rampur Boalia ...						
	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.
	Below zero.		Below zero.								Below zero.	
1st	4·17	63·83	0·46	41·54	1·92	10·86	2·96	36·70	3·21	7·51	0·05	148·71
2nd	4·17	63·83	0·50	41·50	2·17	11·11	2·96	36·70	2·67	6·97	0·20	148·56
3rd	4·25	63·75	0·56	41·14	2·08	11·02	2·96	36·70	2·58	6·88	0·20	148·56
4th	4·33	63·67	0·60	41·40	2·08	11·02	2·87	36·61	2·67	6·97	0·10	148·66
5th	4·33	63·67	0·60	41·40	2·00	10·94	2·83	36·57	2·67	6·97	0·10	148·66
6th	4·33	63·67	0·60	41·40	1·92	10·86	2·79	36·53	2·58	6·88	0·10	148·66
7th	4·42	63·58	0·62	41·38	1·83	10·77	2·75	36·49	2·58	6·88	0·05	148·71
											Above zero.	
8th	4·50	63·50	0·64	41·36	1·75	10·69	2·71	36·45	2·58	6·88	0·30	149·06
9th	4·50	63·50	0·67	41·33	1·75	10·69	2·67	36·41	2·58	6·88	0·70	149·46
10th	4·58	63·42	0·67	41·33	1·75	10·69	2·62	36·36	2·58	6·88	1·10	149·86
11th	4·67	63·33	0·69	41·31	1·58	10·52	2·58	36·32	2·50	6·80	1·50	150·26
12th	4·67	63·33	0·71	41·29	1·33	10·27	2·50	36·24	2·50	6·80	1·80	150·56
13th	4·58	63·42	0·73	41·27	1·25	10·19	2·42	36·16	2·50	6·80	2·40	151·16
14th	4·58	63·42	0·69	41·31	1·25	10·19	2·37	36·11	2·50	6·80	3·30	152·06
15th	4·67	63·33	0·64	41·36	1·92	10·86	2·33	36·07	2·50	6·80	3·40	152·16
16th	4·75	63·25	0·62	41·38	2·25	11·19	2·29	36·03	2·50	6·80	4·10	153·66
17th	4·75	63·25	0·60	41·40	2·75	11·69	2·25	35·99	2·50	6·80	4·30	153·06
18th	4·67	63·33	0·58	41·42	3·50	12·44	2·21	35·95	4·25	8·55	2·20	150·96
19th	4·67	63·33	0·56	41·44	4·00	12·94	2·17	35·91	4·00	8·30	2·30	151·06
20th	4·75	63·25	0·52	41·48	4·17	13·11	2·12	35·86	4·00	8·30	2·60	151·36
21st	4·83	63·17	0·46	41·54	4·17	13·11	2·08	35·82	3·46	7·76	3·02	151·78
22nd	4·83	63·17	0·42	41·58	4·00	12·94	2·08	35·82	3·00	7·30	3·80	152·56
23rd	4·92	63·08	0·42	41·58	3·75	12·69	2·17	35·91	3·00	7·30	6·70	155·46
24th	4·75	63·25	0·46	41·54	3·42	12·36	2·33	36·07	2·92	7·22	9·40	158·16
25th	4·67	63·33	0·42	41·58	3·25	12·19	2·33	36·07	2·83	7·13	10·80	159·56
26th	4·67	63·33	0·42	41·58	3·33	12·27	2·29	36·03	2·46	6·76	10·30	159·06
27th	4·50	63·50	0·33	41·67	3·83	12·77	2·29	36·03	2·50	6·80	9·40	158·16
28th	4·50	63·50	0·39	41·61	4·83	13·77	2·25	35·99	2·50	6·80	5·50	154·26
29th	4·33	63·67	0·46	41·54	6·00	14·94	2·33	36·07	2·67	6·97	7·60	156·36
30th	4·33	63·67	0·44	41·56	6·83	15·77	2·37	36·11	2·83	7·13	7·22	155·98

CALCUTTA,
The 5th June 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 3rd June 1893, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 3rd June 1893.			Week ending Saturday, the 4th June 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	168	25,625	379	239	95,250	1,533
Jute	3	1,150	19	3	750	27
Firewood	48	17,950	274	108	55,225	820
Other articles	690	1,59,675	2,349	893	2,00,945	3,059
Total ...	909	2,04,400	3,021	1,243	3,52,170	5,419

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 27th May 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	276,527	2,65,635 8 0	29,47,268 30	7,09,492 7 0	23,875 12 0	9,99,003 11 0	74,721½	129,366½	204,088½
Or per mile of railway	......	164 15 1	......	440 8 8	14 13 2	620 4 11	......	......	......
For previous 20 weeks of half-year	5,870,165	64,29,308 0 0	6,18,30,882 30	1,40,40,794 2 0	3,99,953 9 0	2,08,70,055 11 0	1,551,595½	2,350,545½	3,902,140½
Total for 21 weeks ...	6,146,692	66,94,943 8 0	6,47,78,151 20	1,47,50,286 9 0	4,23,829 5 0	2,18,69,059 6 0	1,626,317	2,479,911½	4,106,228½
Comparison.									
Total for corresponding week of previous year	269,369	2,59,269 11 6	35,10,631 0	8,71,838 13 11	27,428 1 9	11,58,536 11 2	73,204	160,129	233,333
Per mile of railway corresponding week of previous year ...	......	160 15 9	......	541 5 7	17 0 6	719 5 10	......	......	......
Total for corresponding 21⅞ weeks of previous year	6,243,504½	66,62,504 14 11	6,30,53,486 20	1,55,79,529 1 7	4,24,751 8 8	2,26,66,785 9 2	1,647,385	2,560,894	4,208,279

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 27th May 1893 on 22¼ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	18,706	4,922 3 0	5,117 0	213 3 0	12 0 0	5,147 6 0	852	116	968
Or per mile of railway	......	221 3 7	......	9 9 4	0 8 7	231 5 6	......	......	.....
For previous 20 weeks of half-year	*464,798	*1,21,479 2 0	†2,42,368 30	†8,286 14 0	‡244 0 0	1,30,010 0 0	17,904	2,100	20,004
Total for 21 weeks ...	483,504	1,26,401 5 0	2,47,485 30	8,500 1 0	256 0 0	1,35,157 6 0	18,756	2,216	20,972
Comparison.									
Total for corresponding week of previous year	18,011	4,349 4 9	29,835 20	508 6 0	6 6 0	4,864 0 9	856	120	
Per mile of railway corresponding week of previous year ...	......	195 7 7	......	22 13 7	0 4 7	218 9 9	......	......	
Total for corresponding 21⅞ weeks of previous year ...	482,516	1,24,360 14 10	4,00,685 30	13,009 2 3	249 3 6	1,37,619 4 7	18,877	2,458	

* Added number of passengers 929 and Rs. 209 }
† Deducted Mds. 55 and added " 2 } on account of difference between the approximate and audited figures for the week ended 22nd Apr[illegible]
‡ Ditto " 3 }

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 27th May 1893, on 161⅞ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	*20,439	*13,009 8 0	61,608 20	8,245 6 0	56 0 0	21,310 14 0	6,236½	3,228½	9,465
Or per mile of railway	......	80 9 8	......	51 1 5	0 5 6	132 0 7	......	......	......
For previous 20 weeks of half-year	†377,514	†2,83,431 12 0	‡13,70,906 0	‡1,80,197 0 0	§1,020 0 0	4,64,648 12 0	112,708½	66,078½	178,786½
Total for 21 weeks ...	397,953	2,96,441 4 0	14,32,514 20	1,88,442 6 0	1,076 0 0	4,85,959 10 0	118,944½	69,307	188,251½
Comparison.									
Total for corresponding week of previous year	15,753½	10,788 9 2	50,555 0	9,504 4 11	72 1 6	20,364 15 7	6,625	2,014	8,639
Per mile of railway corresponding week of previous year ...	......	66 13 6	......	58 14 2	0 7 2	126 2 10	......	......	......
Total for corresponding 21? weeks of previous year	358,820½	2,81,589 12 3	9,33,495 0	1,74,565 5 2	1,542 12 0	4,57,697 13 5	134,211	46,740	180,951

* The increase occurred chiefly at Delhi, Karnal and Panipat.
† Added number of passengers 877 and Rs. 4,251 }
‡ Do. Mds. 3,822 and deducted ,, 176 } on account of difference between the approximate and audited figures for the week ended 22nd April 1893.
§ Do. ,, 12 }

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for the week ended 20th May 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	166,933	77,420 0 0	6,80,642 0	86,790 0 0	10,850 0 0	1,75,060 0 0	27,000	26,397	53,397
Or per mile of railway	215	100 0 0	876 0	112 0 0	†1 0 0	213 0 0	......	......	......
For previous 19 weeks of half-year*	3,452,446	16,53,305 0 0	1,39,68,123 0	17,93,410 0 0	3,04,866 0 0	37,51,581 0 0	542,280	545,423	1,087,703
Total for 20 weeks ...	3,619,379	17,30,725 0 0	1,46,48,765 0	18,80,200 0 0	3,15,716 0 0	39,26,641 0 0	569,280	571,820	1,141,100
Comparison.									
Total for corresponding week of previous year	157,053	76,204 0 0	6,27,021 0	78,517 0 0	12,485 0 0	1,67,206 0 0	26,860	28,692	55,552
Per mile of railway corresponding period of previous year ...	202	98 0 0	807 0	101 0 0	†1 0 0	200 0 0	......	......	......
Total to corresponding date of previous year	3,386,350	16,54,442 0 0	1,21,32,362 0	16,01,260 0 0	2,89,535 0 0	35,45,537 0 0	550,520	588,080	1,138,600

* Audited up to week ending 1st April 1893.
† Excluding steamer earnings.

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for week ended 27th May 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	150,671	79,710 0 0	7,16,630 0	82,280 0 0	21,910 0 0	1,83,900 0 0	27,046	25,730	52,776
Or per mile of railway	194	103 0 0	922 0	106 0 0	†18 0 0	227 0 0	......	......	......
For previous 20 weeks of half-year *	3,619,379	17,30,725 0 0	14,648,765 0	18,80,200 0 0	3,15,716 0 0	39,26,641 0 0	569,820	571,820	1,141,100
Total for 21 weeks ...	3,770,050	18,10,435 0 0	15,365,395 0	19,62,480 0 0	3,37,626 0 0	41,10,541 0 0	596,326	597,550	1,193,876
Comparison.									
Total for corresponding week of previous year ...	156,282	81,825 0 0	6,94,880 0	79,148 0 0	17,473 0 0	1,78,446 0 0	26,507	28,315	54,822
Per mile of railway corresponding week of previous year ...	201	105 0 0	894 0	102 0 0	†16 0 0	223 0 0	......	......	......
Total to corresponding date of previous year	3,542,032	17,36,267 0 0	12,827,242 0	16,30,408 0 0	3,07,308 0 0	37,23,983 0 0	577,027	616,395	1,193,422

* Audited up to week ending 1st April 1893.
† Excluding steamer earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 20th May 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ..	30,831	10,720 0 0	53,651 0	3,620 0 0	50 0 0	14,390 0 0	3,088	1,984	5,672
Or per mile of railway	247	86 0 0	429 0	29 0 0	......	115 0 0	......	......	......
For previous 19 weeks of half-year*	595,705	2,08,590 0 0	13,33,333 0	81,210 0 0	2,445 0 0	2,92,245 0 0	69,979	37,901	107,880
Total for 20 weeks ...	626,536	1,19,310 0 0	13,86,984 0	84,830 0 0	2,495 0 0	3,06,(35 0 0	73,667	39,885	113,552
Comparison.									
Total for corresponding week of previous year	28,898	10,390 0 0	71,473 0	3,713 0 0	61 0 0	14,164 0 0	3,688	1,988	5,676
Per mile of railway corresponding week of previous year ...	231	83 0 0	572 0	30 0 0	......	113 0 0	.....	......	......
Total to corresponding date of previous year	605,015	2,13,439 0 0	12,33,078 0	75,113 0 0	2,010 0 0	2,90,562 0 0	74,168	40,911	115,079

* Audited up to week ending 1st April.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 27th May 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	36,890	13,570 0 0	31,441 0	2,400 0 0	60 0 0	16,030 0 0	3,632	2,040	5,672
Or per mile of railway ...	295	109 0 0	251 0	19 0 0	......	128 0 0	......	......	......
For previous 20 weeks of half-year	626,536	2,19,310 0 0	1,386,984 0	84,830 0 0	2,495 0 0	3,06,635 0 0	73,667	39,885	113,552
Total for 21 weeks ...	663,426	2,32,880 0 0	1,418,425 0	87,230 0 0	2,555 0 0	3,22,665 0 0	77,299	41,925	119,224
Comparison.									
Total for corresponding week of previous year	28,425	10,384 0 0	77,383 0	3,558 0 0	—55 0 0	13,887 0 0	3,632	2,044	5,676
Per mile of railway corresponding week of previous year ...	227	83 0 0	619 0	28 0 0	......	111 0 0	......	......	......
Total to corresponding date of previous year	633,440	2,23,823 0 0	1,310,461 0	78,671 0 0	1,955 0 0	3,04,449 0 0	77,800	42,953	120,753

* Audited up to week ending 1st April 1893.

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 20th May 1893, on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	16,235	4,610 0 0	10,410 0	1,040 0 0	220 0 0	5,870 0 0	2,481	743	3,224
Or per mile of railway	189	54 0 0	121 0	12 0 0	2 0 0	68 0 0	......	......	......
For previous 19 weeks of half-year*	348,638	1,08,155 0 0	2,92,809 0	27,880 0 0	2,946 0 0	1,38,981 0 0	47,268	14,235	61,503
Total for 20 weeks ...	364,873	1,12,765 0 0	3,03,219 0	28,920 0 0	3,166 0 0	1,44,851 0 0	49,749	14,978	64,727
Comparison.									
Total for corresponding week of previous year	15,850	4,619 0 0	9,025 0	791 0 0	50 0 0	5,460 0 0	2,481	743	3,[illegible]
Per mile of railway corresponding week of previous year ...	184	54 0 0	105 0	9 0 0	......	63 0 0	......	.....	......
Total to corresponding date of previous year	339,453	1,09,520 0 0	3,30,550 0	20,669 0 0	3,156 0 0	1,33,345 0 0	50,638	14,742	65,380

* Audited up to week ending 18th March 1893.

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 27th May 1892 on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	13,559	4,120 0 0	8,991 0	870 0 0	120 0 0	5,110 0 0	2,487	737	3,224
Or per mile of railway	158	48 0 0	105 0	10 0 0	1 0 0	59 0 0	......	......	......
For previous 20 weeks of half-year*	365,961	1,12,759 0 0	310,227 0	28,622 0 0	3,719 0 0	1,45,100 0 0	49,749	14,078	64,727
Total for 21 weeks ...	379,520	1,16,879 0 0	3,19,218 0	29,492 0 0	3,839 0 0	1,50,210 0 0	52,236	15,715	67,951
COMPARISON.									
Total for corresponding week of previous year	15,726	5,048 0 0	7,282 0	699 0 0	348 0 0	6,095 0 0	2,461	787	3,198
Per mile of railway corresponding week of previous year	183	59 0 0	85 0	8 0 0	4 0 0	71 0 0	......	......	......
Total to corresponding date of previous year	355,179	1,14,568 0 0	3,37,832 0	21,368 0 0	3,504 0 0	1,39,440 0 0	53,099	15,479	68,578

* Audited up to week ending 1st April 1893.

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 20th May 1893	16,210	0	0
Corresponding period of 1892	16,808	0	0
Decrease	598	0	0
Receipts per mile for the week ending 20th May 1893	317	13	6
Corresponding period of 1892	329	9	4
Decrease	11	11	10
Receipts from 1st January to 20th May 1893	2,34,509	0	0
Corresponding period of 1892	2,36,120	0	0
Decrease	1,611	0	0

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 27th May 1893...	15,348	0	0
Corresponding period of 1892	17,225	0	0
Decrease	1,877	0	0
Receipts per mile for the week ending 27th May 1893	300	15	1
Corresponding period of 1892	337	11	11
Decrease	36	12	10
Receipts from 1st January to 27th May 1893	2,49,857	0	0
Corresponding period of 1892	2,53,345	0	0
Decrease	3,488	0	0

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No. 24 of 1893.



SUPPLEMENT TO

The Calcutta Gazette.

WEDNESDAY, JUNE 14, 1893.

OFFICIAL PAPERS.

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CONTENTS.

EMIGRATION TO BRITISH AND FOREIGN COLONIES FROM THE PORT OF CALCUTTA, DURING THE YEAR 1892.

GENERAL DEPARTMENT—EMIGRATION No. 1690.

Calcutta, the 8th June 1893.

RESOLUTION.

READ—

The Annual Report on Emigration from the Port of Calcutta to the British and Foreign Colonies for the year 1892.

THE report for the past year, the body of which was submitted at the prescribed time, is sufficiently full and fairly concise, and is accompanied by two maps showing the native districts of emigrants to the Colonies and the districts in which they were registered, and illustrating by different shades of colour the proportion which the number of emigrants bears to the resident population. The maps were received some days after the receipt of the report. It is necessary that the report should reach the Government in a complete form by the prescribed date, and steps should be taken to ensure this in future.

Administrative measures.

2. Some amendments were made during the year in the rules in force under the Colonial Emigration Act XXI of 1383, and full-powered steamers engaged as emigrant vessels to the colonies, and using either the Cape or Canal route, were exempted conditionally from the rules relating to artificial ventilation.

Requisitions. Recruiting and despatch of emigrants.

3. The demand for adult Indian emigrants fell from 13,867 in 1891 to 10,558 in 1892, owing to requisitions having been made by only five out of the eight colonies to which emigration from India is at present permitted. Demerara indented for 4,555, Trinidad for 2,500, Natal for 900, Fiji for 1,370, and Surinam for 1,233 adults. The indents of the first three colonies were smaller than those of the previous year, while those of Fiji and Surinam were appreciably larger. In the cases of Natal and Fiji, the requisitions were more than met, 123 adults being supplied in excess, but in the cases of the other three colonies, the supply fell short by 264 adults. The deficiency of 83 in the case of Surinam was made up in January of the present year. On the whole 10,416½ adult coolies were supplied during the year as against 10,558 indented for.

Owing to the reduced requisitions the number of licensed recruiters decreased from 1,003 to 857, and the number of registrations from 25,613 to 17,225. Of the 17,225 emigrants, including children, registered in the districts, 14,196 reached the Calcutta depôts, and of these 11,133 were despatched to the respective colonies in seventeen sailing ships and three steamers. The number despatched in 1891 was 15,668. It is satisfactory to find that the prescribed proportion of 40 women to every 100 men embarked was more than complied with, and that in the case of Surinam the percentage of married to single women rose from 52·5 to 64·3.

Areas of recruitment and registration.

4. The North-Western Provinces and Oudh still continue to be the largest recruiting grounds for the colonies, but there is a tendency to have recourse more largely to the districts of Bengal and Bihar. Thus the proportion of emigrants drawn from the North-Western Provinces fell from 67 per cent. to 59½; Oudh contributed 22 per cent. against nearly 24 per cent. in the previous year; while the proportion of natives of Bengal and Bihar rose from 7 per cent. in 1891 to nearly 16 per cent. in 1892. The following table compares the province of registration with that of birth as declared by the emigrants:—

		Bengal.	Bihar.	North-Western Provinces.	Oudh.
Number registered in	1892	2,126	3,012	9,212	2,875
	1891	2,047	3,347	15,208	5,011
Number who declared themselves to be natives of	1892	2,743		14,028	
	1891	3,400		13,983	5,173

Besides the four provinces indicated above, 454 emigrants declared themselves to be natives of other provinces and places, and a relatively large number is shown to have come from native States. Azamgarh, Ghazipur, Basti, in the North-Western Provinces, and Shahabad in Bihar, which stands fourth on the list with a supply of 1,177 emigrants as against 2,229 from Azamgarh, maintained their places as the chief recruiting districts. A larger number of emigrants was registered than in the previous year in the districts of the 24-Parganas, Bhagalpur, Monghyr, Patna, and Shahabad. The district of the 24-Parganas, which shows 1,407 registrations, cannot, however, be compared with the others, owing to the fact that a large proportion of the recruiting in that district is carried on among coolies brought to Calcutta by unlicensed recruiters as free emigrants—a practice which, though not free from objections, cannot be checked.

Disappearance and rejection of emigrants.

5. A very marked advance has been made in the process of accounting for emigrants who, after being registered in the districts of recruitment, reach the Calcutta depôts. In the past year only 584 registered emigrants have not been

accounted for as against 4,753 in 1890 and 6,755 in 1891. This improvement is no doubt due to the agents visiting their mufassal depôts, and insisting on details of all coolies admitted into the depôts being registered. With the introduction of sub-depôt registers since the close of the year under review, it may be expected that every registered emigrant will be accounted for by the agencies in future. Of the registered emigrants who did not reach the Calcutta depôts, no less than 1,365 were rejected as unfit for emigration. Although this compares favourably with the figure of 1891, viz., 2,057, it seems desirable, both in the interests of intending emigrants as well as of the indenting colonies, that something should be done to ensure that none but really fit persons are selected as emigrants. As pointed out by the Protector of Emigrants, two courses suggest themselves. The first is that the Emigration Agents should appoint qualified medical examiners to test the fitness of the persons recruited prior to their being presented for registration. The other is to charge a registration fee in order to ensure a proper class of intending emigrants being placed before registering officers. If the former means cannot be adopted, it may be necessary to have recourse to the latter, but the Lieutenant-Governor would be glad if this could be avoided. Another point of great importance is to reduce as low as possible the number of emigrants declared unfit for despatch after arriving in Calcutta. The proportion of persons so rejected fell from 9·7 in 1891 to 8·9 in 1892, but even the latter percentage is high. The Protector rightly points out that the position of an emigrant who is rejected after admission into a depôt is one of peculiar hardship. The small sum paid to him on discharge is very inadequate compensation for the breaking up of his home, the trouble he has been put to in coming, and the necessity of making a fresh start in life. Cases of this kind probably do much to deter intending emigrants, and it is to the interest of the Emigration Agents to have a trustworthy medical examination made at as early a stage of the proceedings as possible.

Sanitation and management of the depôts.

6. The Lieutenant-Governor has read with pleasure the favourable report of the Medical Inspector of Emigrants, Surgeon-Captain A. Leahy, on the general arrangements, sanitation and management of the depôts. As compared with the previous year, the percentages of sickness and deaths were 4·44 and 0·37 against 4·67 and 0·66 respectively. The total admissions amounted to 669, and the total mortality to 56, as against 986 and 141 respectively in 1891. The chief causes of sickness were malarial fevers, chest affections, and dysentery. There were 264 cases of malarial fever, 12 of which proved fatal, 85 cases of chest affections with 24 deaths, and 89 cases of dysentery, of which one only ended fatally. The great attention paid by the Emigration Agents to sanitation accounts in great measure for the very marked decrease in the number of cases of measles, of which there were only 64 against 183 in 1891. The hospitals of the Surinam and British Guiana depôts were improved at considerable expense, and further improvements are being undertaken in the latter. At no time during the year was the embarkation or despatch of emigrants delayed by the occurrence or existence of any epidemic disease. The aggregate mortality on the voyages to the colonies amounted to 146 against 398 in 1891, and the percentage of deaths on the number embarked in Calcutta fell from 2·54 to 1·31.

Return emigrants.

7. Five thousand two hundred and twenty-five return emigrants, including 11 from Bourbon, were re-shipped in eight sailing vessels and eight steamers from the various colonies as against 4,201 in the preceding year. Of these 87 or 1·66 per cent. died on the voyage, a percentage which the Lieutenant-Governor agrees with the Protector in considering remarkably low, looking to the fact that a certain proportion of return emigrants are advanced in age and enfeebled in health. It is satisfactory to observe that among the returned emigrants none were lepers. The savings brought back averaged Rs. 156 per man as against Rs. 138 in the preceding year, Jamaica, Trinidad and Natal showing the largest averages, and Mauritius the smallest. The figures of return emigrants who have gone back to the colonies during the year may be quoted as affording some indication of the popularity of the different colonies among the emigrant classes. Out of 551 returned coolies, 333 re-emigrated to Demerara, 110 to Trinidad, 62 to Natal, 27 to Fiji, and 19 to Surinam.

8. This branch of the work of the Protector's office was efficiently conducted during the year. Such delay as occurred in administering appears to have been due to the fact that when heirs have been traced the Emigration Agents in India cannot pay to the Protector the amount standing to the credit of the estate without the sanction of the Colonial authorities. Notwithstanding this cumbrous procedure, it is stated that all colonies except Mauritius make payments within a reasonable time. Of 500 estates, valued at Rs. 70,384, which came under administration, 360, amounting to Rs. 49,772, were finally disposed of, leaving a balance of 140, amounting to Rs. 20,611, still under enquiry, for which British Guiana, Mauritius, and Fiji are mainly responsible.

Administration of estates.

9. Owing to smaller despatches the receipts derived from the consolidated fee of Rs. 3 per head on each coolie embarked fell from Rs. 47,624 to Rs. 35,272-4, while the expenditure rose from Rs. 27,632-15-5 to Rs. 29,616-10-8. This was due to the fact that in the preceding year the amount shown as pay and allowances of Emigration officers was unusually low by reason of acting arrangements. The balance at credit of the Bengal portion of the fund at the close of the year was Rs. 5,655-9 4 against Rs. 29,616 10-8 in 1892.

Financial.

10. From the above summary it will be seen that the year 1892 was on the whole a successful one for Colonial Emigration; and the Lieutenant-Governor desires to express his thanks to Dr. Macleod, Protector of Emigrants, to Surgeon-Captain A. Leahy, Medical Inspector of Emigrants, and to the Emigration Agents to whose care and attention the good results attained were due.

ORDER.—Ordered that a copy of the Report and of this Resolution be submitted to the Government of India, Revenue and Agricultural Department, for information.

Ordered also that a copy be forwarded to the Protector of Emigrants, Calcutta, for information, and to all Commissioners of Divisions for information and circulation to all District Officers subordinate to them.

By order of the Lieutenant-Governor of Bengal,

H. H. RISLEY,

Secretary to the Govt. of Bengal.

RESOLUTION ON THE ADMINISTRATION REPORTS OF THE ALIPORE AND HAZARIBAGH REFORMATORY SCHOOLS FOR THE YEAR 1892.

No. 1865P.

RESOLUTION.

JAILS.

Dated Calcutta, the 9th June 1893.

READ—

(1) Letter No. 5260, dated the 6th May 1893, from the Inspector-General of Jails, forwarding the Administration Report of the Alipore Reformatory School for the year 1892.

(2) Letter No. 5085, dated the 29th April 1893, from the Inspector-General of Jails, forwarding the Administration Report of the Hazaribagh Reformatory School for the year 1892.

Read also—

The Reports for the year 1891 and the orders of Government recorded thereon.

The Alipore School.—The daily average number of boys confined in the Alipore School rose from 142 in 1891 to 168 in 1892. Sixty-two boys were admitted during the year and 27 were released. There were no serious offences, and discipline is reported to have been well maintained. It is satisfactory to notice that, in spite of the large increase in the number of boys, the average number of punishments to each boy fell from 1·02 in 1890 and 0·66 in 1891 to 0·45 in 1892.

With an increase in the number of boys there has been an increase of Rs. 59-3 in the money rewards earned. The average number of boys entitled to marks rose from 82·16 in 1891 to 113·5 in 1892, and the weekly average earnings from Rs. 3-2-9 per head to Rs. 4-3-3. There were no escapes and no deaths during the year, and the small increase from 2·52 to 2·96 in the number of admissions to hospital is accounted for by an outbreak of chicken-pox among the boys in the early part of the year.

2. No important buildings were undertaken, but it is reported that more workshops are urgently required. The arrangements for the work and recreation of the boys remained practically the same as in former years. At the close of 1891 gymnastic exercises were introduced into the school, and one hour's gymnastic training under a duly qualified teacher formed a part of the daily routine throughout the past year. The boys were allowed to practice as much as they pleased during their leisure hours and on Sundays, and His Honour is glad to hear that they are taking kindly to this form of exercise, which is conducive to their good health and keeps them suitably employed during play hours.

3. Of the 64 boys released from the Reformatory, concerning whom reports were received from Magistrates during the year, 9 were reconvicted and sent to jail, one was reported as bearing a bad character, while the remaining 54, of whom only 2 are following the trade they learned at school, are believed to be leading honest lives. Out of 263 boys released since the opening of the school, 38 have subsequently been sent to jail, 42 have been reported as bearing bad characters, and 183 as bearing good characters. The number following the trade learned in the Reformatory is only 29. The explanation of this very discouraging fact is doubtless to be found in caste prejudices and social customs, which compel boys on their return home to follow the professions of their parents and prevent them from taking up the trades which they have learned at school. Having regard to the great variety of caste occupations in Bengal, and to the impossibility of employing boys in reformatories on more than a few trades, the difficulty indicated by these figures is probably not to be entirely overcome. Still special care should be taken to adjust the trades taught, as far as possible, to the caste requirements of the boys, so that on release they may be able to practise them.

4. The total expenditure for 1892 was Rs. 18,298-1-4 against Rs. 15,776-5-6 in 1891, the increase being mainly due to the large number of boys confined in the school. The cost of maintenance per head fell from Rs. 111-1-6 in 1891 to Rs. 108-14-6 in 1892. The average expenditure per head on diet was Rs. 34-9-2, compared with Rs. 32-10-3 in 1891, the increase being attributed to the higher price of rations. Arrangements have been made for the purchase and storing of supplies of grain at the cheapest seasons of the year for the use of the school, and the sanction of Government has lately been given to the construction of a godown for this purpose. The net profits from the Manufacturing Department amounted to Rs. 12,259-3-4, against Rs. 10,235-12-8 in 1891.

5. A proposal to amalgamate the Alipore and Hazaribagh Schools and to locate them at Hazaribagh was under consideration during the year, but was finally abandoned, the Lieutenant-Governor deciding that it would be inadvisable to make any change in existing arrangements. The Lieutenant-Governor's acknowledgments are due to the Board of Management of the School, and he is glad to notice that Mr. C. J. Courtenay has again discharged his duties as Superintendent to the complete satisfaction of the Board.

6. *The Hazaribagh School*.—The daily average population of the Hazaribagh School was 300·93 against 296·10 in 1891. Sixty-nine boys were admitted into the school, 66 were released, and 3 died. Of the three deaths, one was that of a boy, Babu Lal, who accidentally fell into the well outside the play-ground and was drowned. The head warder, through whose neglect the boy was allowed to leave the play-ground, was fined half a month's pay, and the warder posted on the wall near the well was dismissed. Discipline was well maintained during the year, and the conduct of the boys is reported to have been exceptionally good. There were 266 punishments against 219 in 1891, but these were chiefly for short work, the number of offences under this head having increased from 23 to 158. The educational requirements of the school were well attended to, and there was a satisfactory increase in the number of boys who attended the night school. The daily routine was the same as in former years. A gymnasium was opened during the year, and an instructor on Rs. 10 a month has lately been appointed under the orders of Government. The general health of the boys is reported to have been good. The daily average of sick was 2·89 against 2·54 in 1891.

7. The total expenditure of the school in 1892 was Rs. 77-11-7 per head, against Rs. 83-3-9 in the preceding year. The cost of diet per head rose from Rs. 27-15-9 to Rs. 29-1-9, the increase being due to a rise in the cost of rice, the average price of which was 6 annas 10 pies per maund in excess of that of 1891. In his Resolution on last year's report the Lieutenant-Governor expressed a hope that greater attention would be paid to the judicious storing of food-grains at the proper season, and he is glad to notice that by the purchase of 1,000 maunds of wheat at the time of the harvest, a saving of about 5 annas a maund was effected. A new cook-shed was built during the year, and the new work-shed, which covers an area of 16,000 square feet, and in which all the trades are now carried on, was completed.

8. The net profits on articles manufactured in the school increased from Rs. 2,746-12 in 1890 and Rs. 2,661-12-9 in 1891 to Rs. 3,437-9-8 in 1892. The packing of quinine, which was introduced in September and was carried on for the remainder of the year, is a most suitable form of occupation for young boys and will be further extended. With this exception the employment of the boys remained the same as in former years.

9. Reports regarding 96 boys released from the school were received during the year, and of these four were reconvicted and sent to jail. It is said that 10 of these boys are following the trades learned in the Reformatory, and this is the best record of any year since the opening of the institution in 1882.

10. Sir Charles Elliott visited the Reformatory in November last, and was favourably impressed with the bright and healthy appearance of the boys. The arrangements for work and recreation were satisfactory, and His Honour was glad to see that no serious offences had been committed, and that the number of punishments was small. The management of the school reflects

credit on Mr. Hill, the Deputy Superintendent, who is highly spoken of by the Inspector-General of Jails and by all who have visited the school.

ORDER—Ordered that a copy of this Resolution be forwarded to the President of the Board of Management of the Reformatory School at Alipore for information and communication to the Members of the Board.

Ordered, also, that a copy of the Reports, and a copy of this Resolution, be forwarded to the Inspector-General of Jails for information and communication to the Superintendent of the Hazaribagh Reformatory School.

Ordered, also, that the Resolution be published in the *Calcutta Gazette.*

By order of the Lieutenant-Governor of Bengal,

H. J. S. COTTON,

Chief Secretary to the Govt. of Bengal.

RESOLUTION ON THE REPORT ON THE LEGAL AFFAIRS OF THE GOVERNMENT OF BENGAL FOR THE YEAR 1892-93.

No. 135J.D..

JUDICIAL.

Darjeeling, the 12th June 1893.

READ—

The Report on the Legal Affairs of the Government of Bengal for the year 1892-93.

Read also—

The Reports of the two previous years, and the orders of Government thereon.

THE report was due on 1st May, and was received on 30th May. The Legal Remembrancer remarks that, having regard to the unpunctuality of some districts and the references which are inevitable in the case of others, it is not possible for him to compile the statistics the report contains within 15 days from the date on which the district reports are due in his office. As it is, the figures of Government litigation from Manbhum and Lohardaga and from 15 Courts of Wards' Estates have not yet been received. This question will receive the separate consideration of Government.

2. Of the two appeals to the Privy Council which were pending at the close of last year, the case of Maharani Sarat Sundari Debi *versus* The Secretary of State for India in Council was disposed of by the determination of certain remanded issues by the High Court. The remaining case of Dakhina Mohan Roy Chowdhry *versus* Saroda Mohan Roy Chowdhry and others, minors under the Court of Wards, is still pending, but no appearance will be made for the wards, the amount at stake not justifying the outlay for costs. One fresh appeal on behalf of Government was filed towards the close of the year.

3. The results of Government litigation in the Civil Courts of Bengal during the year under review and the two preceding years are given in the accompanying table:—

	ORIGINAL CASES.			APPEALS— Before lower Courts.			APPEALS— Before High Court.			TOTAL.		
	1890-91.	1891-92.	1892-93.	1890-91.	1891-92.	1892-93.	1890-91.	1891-92.	1892-93.	1890-91.	1891-02.	1892-93.
Decided in favour of Government	243	238	336	45	32	44	23	10	11	311	280	391
Decided against Government	65	76	116	7	7	12	3	18	6	75	96	134
Compromised, remanded, or withdrawn.	57	125	108	1	3	8	1	7	4	59	135	120
Percentage in favour of Government.	78·8	75·7	74·4	86·5	82	78·5	88·4	43·5	64·7	80·5	74·4	74·5

N.B.—The figures of 1892-93 do not include those of the districts of Manbhum and Lohardaga, as the statements from those districts have not been received.

Excluding land acquisition cases the figures are as under—

	Original cases.			Appeals—Before lower Courts.			Appeals—Before High Court.			Total.		
	1890-91.	1891-92.	1892-93.	1890-91.	1891-92.	1892-93.	1890-91.	1891-92.	1892-93.	1890-91.	1891-92.	1892-93.
Decided in favour of Government	110	95	145	45	32	44	22	10	11	177	137	200
Decided against Government	33	37	52	7	7	12	3	10	6	43	54	72
Compromised, &c.	10	11	8	1	3	8	1	6	4	13	20	20
Percentage in favour of Government.	76·8	72	73·6	86·5	82	78·5	88	50	64·7	80·4	71·7	73·5

There is a considerable increase in the number of original cases of which no explanation is given, and it is clear that, except in the case of appeals to the High Court, the Government has been little more successful in its litigation than it was in the preceding year.

4. Of the six cases in which Government was unsuccessful in the High Court, in only one did it appear as appellant; in three of them the result was due to a Full Bench ruling setting aside the previous decision of a Divisional Bench as to the period of limitation in demands for unclaimed sale proceeds. One case related to the terms of settlement on which a resumed taluk in Kutubdia in Chittagong was sold. The facts of this case are summarised with such brevity that the Lieutenant-Governor is in doubt as to their meaning, but it seems that a principle of great importance was laid down with regard to the right of a talukdar to a permanent settlement, and His Honour would be glad to receive a special report in this case through the Board of Revenue with as little delay as possible.

5. By showing as one case analogous cases governed by a single decision and excluding land acquisition cases, the Legal Remembrancer shows that the percentage of Government successes in the Lower Appellate Courts and in Courts of first instance becomes 84·6 and 75·4 respectively. It is presumed that none of the cases in which Government was successful were analogous ones, as otherwise this mode of calculation is not legitimate. Apart from cases against the Railway administrations, the most important suit brought in the Court of first instance relates to a claim brought by a zamindar to receive compensation for the value of land previously occupied by public roads which were included in a large area acquired by Government for public purposes. The claim which was partially admitted by the Subordinate Judge appears, as the Legal Remembrancer observes, to be a novel one in this country, and the Lieutenant-Governor presumes that there must have been exceptional circumstances unexplained in the report which led to such an unusual decree being passed. It is satisfactory to note that in only two original cases did Government appear as an unsuccessful plaintiff.

6. The following figures show the results of Courts of Wards' litigation during the last three years in all courts. The figures are satisfactory in themselves and as comparad with previous years:—

	(1) 1890-91.	(2) 1891-92.	(3) 1892-93.
1. Decided in favour of Court of Wards ...	711	903	654
2. Decided against Court of Wards ...	97	139	73
3. Compromised, remanded, or withdrawn ...	30	76	66
4. Percentage in favour of Court of Wards ...	88	$86\frac{1}{5}$	89 9

7. The extent to which decretal amounts due to Government have been realised is shown by the following figures:—

	(1) 1890-91.	(2) 1891-92.	(3) 1892-93.
	Rs.	Rs.	Rs.
1. Amount under realization ...	61,231	64,248	42,617
2. Amount realized during the year ...	14,790	30,333	12,616
3. Percentage of recovery ...	$24\frac{3}{20}$	$45\frac{1}{4}$	$29\frac{1}{2}$

Of the net balance Rs. 9,288 have been remitted, and further sums are said to be irrecoverable.

8. The amount of wards' decrees recovered is as follows:—

	(1)	(2)	(3)
	1890-91.	1891-92.	1892-93.
	Rs.	Rs.	Rs.
1. Amount under realization ...	11,92,016	10,95,704	9,83,675
2. Recovered during the year ...	1,54,504	2,30,997	1,59,600
3. Percentage of recovery ...	13	$21\frac{1}{13}$	$16\frac{1}{4}$

The outstanding balance still remains excessive, and it would appear that the efforts to realise it are not marked by much success. In the Tikari estate Rs. 1,15,410 are said to be under execution, and yet only Rs. 23,922 were collected during the year, and the proceedings would appear to be hopeless. The balance due to the Burdwan Raj estate has not been materially reduced. The subject of these realisations has year after year formed the subject of unfavourable comment, but there is nothing in Mr. Allen's report which affords any excuse for the bad results or throws light on the difficulties which have been before brought to notice. The Lieutenant-Governor does not know whether commission is now granted to the Nazir or others concerned in realising these outstanding decrees, and commends this question to the consideration of the Board of Revenue.

9. The Lieutenant-Governor is glad to receive the favourable report which is given of the character and qualifications of the Government Pleaders in almost every district of these provinces, and acknowledges the generally satisfactory manner in which Government litigation has been conducted.

ORDER.—Ordered, that a copy of the Resolution be forwarded to the Superintendent and Remembrancer of Legal Affairs and the Solicitor to Government for information.

Ordered also, that a copy of the Resolution be forwarded to the Revenue Department of this Government and to the Board of Revenue for information.

Ordered also, that a copy of the Report and Resolution be submitted to the Government of India in the Home Department for information.

Ordered also, that a copy of the Resolution be published in the *Calcutta Gazette*.

By order of the Lieutenant-Governor of Bengal,

H. J. S. COTTON,

Chief Secretary to the Govt. of Bengal.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 10th June 1893.

Division	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.					
Burdwan Divn.	1	Burdwan	June 10, '93	0·27	Weather—hot and cloudy with cool mornings. Agricultural operations busily going on. Fodder and water sufficient. Prices of common rice :— Srs. Burdwan ... ... 10 to 13 per rupee. Kalna ... ... 10 to 13 per rupee. Katwa ... ... 13 per rupee. Raniganj ... ... 13 per rupee.
	2	Bankura	„ 10, '93	0·49	Weather—hot and generally cloudy. Sowing of *nuan* and *baran dhan* is still going on. Fodder and water sufficient. Common rice selling at— Srs. Sadar ... ... 11 per rupee. Vishnupur ... ... 11½ per rupee.
	3	Birbhum	„ 10, '93	0·12	Fine weather prevails. Transplantation of sugarcane finished. Sowing of paddy going on. Fodder and water sufficient. Price of rice stationary at from 12 to 14½ seers per rupee.
	4	Midnapore	„ 10, '93	1·24	Slight rain in every subdivision. Ploughing and sowing checked by the late heavy rain have now been resumed. Prices of common rice :— Srs. Sadar ... ... 11 per rupee. Contai ... ... 13 per rupee. Tamluk ... ... 10 per rupee. Ghatal ... ... 10 to 11 per rupee.
	5	Hooghly	„ 10, '93	0·11	Weather—hot days. Condition of jute, *aus* and sugarcane good. *Rabi* crops were affected to some extent by the late rain in the Serampore subdivision. Price of fodder going high at Jahanabad. Water-supply sufficient except at Pandua. Prices of common rice :— Srs. Sadar ... ... 10 to 11 per rupee. Serampore ... ... 10 to 11½ per rupee. Jahanabad ... ... 10½ to 12½ per rupee.
	6	Howrah	„ 10, '93	Nil	Weather—hot. The late cyclone has done some damage to the jute and early paddy crops. Paddy is being sown for seedlings. Condition of cattle good. Fodder and water for cattle sufficient. Price of rice 10 to 11 seers per rupee.
Presidency Divn.	7	24-Parganas	„ 10, '93	Nil	Weather—seasonable. The lands flooded are now free from water. Sowing of *aus*, *aman* and jute proceeding. No cattle-disease reported. No want of fodder and water.
	8	Nadia	„ 10, '93	1·37	Weather—hot. Prospects of crops good. Weeding of rice going on. *Aman* rice being sown. Rain has done good on the whole, though some rice on low lands has been flooded. Fodder and water for cattle sufficient. Prices stationary.
	9	Khulna	„ 10, '93	0·80	Weather—hot with a few light showers. *Boro* harvest nearly completed in Bagerhat. *Til* doing well. Sowing of *aus* and *aman* going on. Common rice selling at from 10½ to 13 seers per rupee. Fodder and water for cattle sufficient. Cattle-disease in a few villages in Magura thana.
	10	Jessore	„ 10, '93	1·05	Weather—seasonable. Sowing of *aus* and *aman* in progress. Prospects improved a little by the sunshine. Harvesting of *til* going on. Fodder sufficient. Water wanted in places in the Bangaon subdivision. Price of rice has slightly risen.
	11	Murshidabad	„ 10, '93	0·16	Weather—seasonable. Sowing of jute and *aman* continues. *Til* and *boro* paddy are being harvested. Indigo, mulberry and sugarcane doing well. Common rice sells at 11½ seers per rupee. Fodder available for cattle.

	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL—*concld.*					
CHITTAGONG DIVN.	12	Chittagong.	June 10, '93	1·31	Weather—seasonable. Prospects of crops good. Prices stationary. Condition of cattle generally good. Supply of fodder sufficient.
	13	Noakhali	„ 10, '93	2·40	Weather—warm and sultry with occasional rain. *Aus* and *aman* paddy being sown. Condition of paddy plants in low lands not good owing to accumulation of water in the fields. No cattle-disease. Fodder and water sufficient. Price of common rice ranges between 10½ to 11½ seers per rupee.
	14	Tippera	„ 10, '93	0·69	Weather—seasonable. Jute and rice flourishing. Prospects excellent. Ploughing in hand. Transplanting of *dhan* proceeding.
	15	Chittagong Hill Tracts.	„ 8, '23	1·75	Weather—hot and cloudy with occasional showers of rain throughout the week. Sowing in *jums* still continues. Ploughing in low lands for winter rice continues. No cattle-disease reported. Common rice being sold at 8 seers per rupee.
DACCA DIVN.	16	Dacca	„ 10, '93	0·24	Weather—hot. Prospects of standing crops good. Fodder available. No cattle-disease. Common rice selling at from 10 to 12 seers per rupee.
	17	Faridpur	„ 10, '93	0·95	Weather—hot. Standing crops doing well, and sowing still continues in places. Common rice sells at 11 seers per rupee. Cattle get fodder, but disease still continues in three thanas.
	18	Backergunge	„ 10, '93	1·32	Weather—seasonable. Prospects of crops fair. Some damage has been caused by the late high tides. Common rice selling at from 9 to 12 seers per rupee. Fodder and water sufficient.
	19	Mymensingh	„ 10, '93	2·01	Weather—sultry and moderately hot. Prospects of standing *aus* paddy and jute good; average outturn expected. Prices of common rice from 11 to 13 seers per rupee. Condition of cattle good. Supply of fodder and water sufficient.
RAJSHAHI DIVN.	20	Dinajpur	„ 10, '93	0·61	Weather—hot, cloudy and rainy. Rain more or less almost daily. *Bhadoi*, jute and sugarcane prospering well. Ploughing for *haimanti* commenced. Prices of rice unchanged. Cattle in good condition. Fodder and drinking water continue sufficient.
	21	Rajshahi	„ 10, '93	0·18	Weather—very hot and cloudy. The rains having ceased to fall for some days, agricultural prospects have much improved. Crops are coming on nicely. Condition of cattle good. Fodder and water-supply ample. Price of rice varies from 11 to 14 seers per rupee.
	22	Rangpur	„ 10, '93	3·60	Weather—seasonable. *Aus* and jute are both doing well. Price of common rice stationary.
	23	Bogra	„ 10, '93	1·45	Weather—unsettled. Lands are being cultivated for *aman*. *Aus* paddy and jute are progressing fairly. Common rice sells at 12 seers per rupee. Fodder and water sufficient.
	24	Pabna	„ 10, '93	1·71	Weather—showery and cloudy. Prospects of crops on high lands continue good. Weeding being retarded owing to incessant rain. Price of common rice at Pabna 11½ seers per rupee and at Sirajganj from Rs. 4-12 to Rs. 5-4 per maund. Fodder and water-supply sufficient.
	25	Darjeeling	„ 10, '93	1·44	Weather—unseasonably misty and rainy. *In the hills:—Bhutta, bhadoi dhan, marua* progressing favourably; *shama, kangni, phaphur* and potatoes flowering. *In the terai:—Bhadoi* sowings finished; prospects of standing crops good. Prices of coarse rice:— Srs. Hills ... ... 10 } per rupee. Terai ... ... 11 }
	26	Jalpaiguri	„ 10, '93	1·27	Weather—cool and pleasant. Prospects of *bhadoi* and jute favourable. The rain has done good to these crops. Common rice sells at 11½ seers per rupee. Fodder and water sufficient.

No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.				
BHAGALPUR DIVN.				
27	Monghyr	June 10, '93	0·38	Weath er—hot and, occasionally cloudy. Ploughing and sowing of paddy and *bhadoi* crops in progress. *Makai* has germinated well, but more rain is necessary for its growth. Small-pox among cattle in Nawadih and Kharakpur. Fodder and water-supply sufficient. Prices of common rice:— Srs. Sadar ... ... 13 to 14 } per rupee. Begusarai ... ... 14 } Jamui ... ... 13 }
28	Bhagalpur	„ 10, '93	0·27	Weather—hot and close. Sowings still in progress and prospects favourable, but more rain is wanted for the indigo. Price of common rice 13 seers 14 chitaks per rupee.
29	Purnea	„ 10, '93	0·09	Weather—cloudy and sultry. Very timely rain has fallen in the northern subdivisions and in several thanas of the Sadar subdivision, and is now falling at Purnea. It has fallen in time for the crops which were beginning to want it, but which will now do very well if it continues. Fodder and water plentiful. Price of rice stationary at 12 seers per rupee at Purnea and falling from 11 to 12 seers per rupee at Kishanganj.
30	Malda	„ 10, '93		Weather—hot and occasionally cloudy. Harvesting of *boro* rice nearly over; estimated outturn 14 annas. *Bhadoi* crops now being weeded everywhere. Prices of coarse rice 11 to 15 seers per rupee. Condition of cattle good.
31	Sonthal Parganas	„ 10, 93	0·49	Weather—cloudy and warm with occasional showers. *Boro dhan* harvest almost completed. Ploughing and sowing going on actively, and seedlings beginning to spring. Sugarcane doing well. Prices of rice from 11 to 13½ seers per rupee. Fodder and water abundant.
PATNA DIVISION.				
32	Patna	„ 10, '93	0·14	Weather—hot. Harvesting of *cheena* going on. Sugarcane looks well. Field being prepared for *bhadoi* and paddy crops. *Makai* sown in some places. Prices of common rice:— Srs. Patna ... ... 15 } per rupee. Barh ... ... 13½ } Bihar ... ... 16½ } Dinapore ... ... 12 to 13 }
33	Gaya	„ 10, '93	Nil	No rain during the week. Generally the days have been hot. *Cheena* harvesting completed. Sugarcane doing well. Ploughing and sowing of *marua* and paddy in progress. In some places transplantation of *marua* begun. Prices stationary. Fodder and water sufficient.
34	Shahabad	„ 10, '93	Nil	Weather—hot with easterly winds. Lands being ploughed for *bhadoi*. Sugarcane doing well. Fodder and water sufficient. Prices stationary.
35	Darbhanga	„ 10, '93	Nil	Weather—hot and occasionally cloudy with high west wind. *Bhadoi* sowings in progress. *Mung* is being collected. Rain is now much wanted for all agricultural purposes. Prices remain stationary. Fodder for cattle sufficient.
36	Muzaffarpur	„ 10, '93	Nil	Weather—hot and occasionally cloudy with east winds. *Mung* and *cheena* being harvested. Standing crops doing well. Rain wanted for agricultural operations on high lands. No disease among cattle. Fodder and water sufficient.

	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR—*concld.*					
PATNA DIVISION—*concld.*	37	Saran	June 10, '93	Nil	Weather—days hot and muggy with coolish breeze at night. Storms threaten almost daily. Standing crops doing well. Maize being sown. Water and fodder ample. Prices of common rice:— Chapra ... ... Srs. 13 c. 0 per rupee. Siwan ... . 12 0 per rupee. Gopalganj ... ... 13 5 per rupee.
	38	Champaran	" 10, '93	0·63	Weather—warm. *Dhan* still being sown. *Cheena* in good condition Prices stationary. Fodder and water sufficient.
ORISSA.					
ORISSA DIVN.	39	Cuttack	" 10, '93	0·36	Weather—hot. *Beali* and *sarad* being sown. Supply of fodder and water sufficient. Price of rice stationary.
	40	Puri	" 8, '93	Nil	Weather—hot. Cultivation and sowing of paddy stopped at present in some places on account of collection of rain water in the fields. Miscellaneous crops thriving well. Rice sells at from 14 seers 7 chitaks to 17 seers 1 chitak per rupee.
	41	Balasore	" 10, '93	0·59	Weather—still abnormally cool. Ploughing continues. Prices stationary. Water and fodder sufficient.
CHOTA NAGPUR.					
South-West Frontier Agency.					
CHOTA NAGPUR DIVN.	42	Hazaribagh	June, 10, '93	1·2	Weather—unsettled. Sugarcane doing well. Mango poor. *Bhadoi* crops and rice being sown. Fodder and water sufficient. Prices of common rice.— Hazaribagh ... . Srs. 9 to 14 per rupee. Giridi ... ... 9 to 13 per rupee.
	43	Lohardaga	" 10, '93	2·10	Weather—cloudy. Ploughing and sowing of winter rice in full progress. Common rice selling at 13 seers per rupee. Fodder and water sufficient.
	44	Palamau	" 9, '93	...	Weather—close and cloudy. Rain reported from almost all parts. Ploughing for *bhadoi* going on. Cattle-disease reported from some thanas. Prices stationary. Fodder and water sufficient.
	45	Singhbhum	" 10, '93	0·25	Weather—both sunny and cloudy with light rain occasionally. Crops doing well and sowing going on. Price of rice 10 to 12 seers per rupee. Cattle-disease in a few villages in the Kolhan.
	46	Manbhum	" 10, '93	0·58	Weather—stormy and cool. Bright warm weather is required for a few days for the sowings. Prices stationary. Water and fodder sufficient.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 13th June, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

Meteorological Report of the Province of

Meteorological Division.	District.	Representative stations.	Station Observations. — Air Pressure. — Highest, 8 A.M. barometer reading.	Lowest, 8 A.M. barometer reading.	Mean, 8 A.M. reduced to 32°.	Mean reduced to sea level and constant gravity, Lat. 45°.	Variation from normal mean.	Wind. — Mean direction at 8 A.M.	Mean velocity in miles daily.	Temperature. — Highest of month.	Lowest of month.	Mean daily maximum temperature.	Mean daily minimum temperature.	Mean daily temperature.	Variation from normal mean.	Humidity. — Mean, 8 A.M. humidity.	Variation from normal mean.
Orissa.	Puri ...	Puri ...	29·864	29·208	29·674	29·620	—	S73°W	346	93·7	61·6	88·2	78·5	83·4	—	84	—
		Gopalpur ...	29·871	29·495	29·681	29·642	—·035	S60°W	371	92·2	68·9	88·4	78·2	83·3	—0·9	83	—
		False Point ...	29·879	28·913	29·653	29·616	—·075	S67°W	325	94·5	69·1‖	87·9	77·5‖	82·8	—2·4	82	—4
	Cuttack ...	Cuttack ...	29·819	29·155	29·603	29·625	—·047	S53°W	103	103·6	71·8	94·2	78·3	86·2	—4·0	73	+6
	Balasore ...	Balasore ...	29·857	29·147	29·624	29·627	—·050	S27°W	176‖	97·5	66·8	89·6	75·9	82·8	—3·5	86	—
South-West Bengal.	Midnapore ...	Midnapore ...	29·765	28·933	29·548	29·643	—·032	S13°E	248†	103·4	68·2	93·8	75·7	84·3	—4·0	79	—
	24-Parganas ...	Calcutta ...	29·894	29·029	29·667	29·633	—·052	S27°W	131	97·1	66·2	89·2	75·5	82·4	—2·7	82	+4
		Saugor Island ...	29·873	28·983	29·654	29·625	—·065	S29°W	415	93·2	59·4	88·2	77·9	83·1	—2·8	85	0
	Howrah ...	.....															
	Hooghly ...	...															
	Nadia ...	Krishnagar ...	29·865	29·164	29·651	29·647	—·031	S16°E	168	99·2	64·7	89·3*	75·0*	82·1*	—3·8	81*	—
	Khulna ...	......															
	Jessore ...	Jessore ...	29·878	29·225	29·675	29·651	—·047	S23°E	135	96·5	67·0	89·1	75·8	82·4	—2·9	87	+3
	Burdwan ...	Burdwan ...	29·834	29·135	29·608	29·654	—·028	S1°W	124	100·1	67·2	91·1	75·9	83·5	—3·5	78	+5
		Raniganj ...	29·595	28·904	29·370	29·653	—·022	N72°E	95	106·2	64·0	93·7	74·1	83·9	—5·0	80	—
	Bankura ...	Bankura ...	29·595	28·978	29·380	29·620	—·022	S53°E	95	105·1	64·7	92·1	74·9	83·5	—6·3	79	—
	Birbhum ...	....															
	Murshidabad ...	Barhampore ...	29·859	29·257	29·647	29·662	—·027	S46°E	113	100·7	66·7	90·1	76·1	83·1	—2·6	88	+13
North Bengal.	Pabna ...	Sirajganj ...	29·864	29·326	29·678	29·674	—·035	S87°E	96	97·6	66·3	88·2	74·1	81·2	—0·9	85	—
	Bogra ...	Bogra ...	29·822	29·321	29·633	29·666	—·022	S76°E	93	98·7	65·2	88·9	73·6	81·3	—2·1	82	—
	Rajshahi ...	Rampur Boalia	29·843	29·264	29·643	29·662	—·027	S49°E	129	98·6	63·7	88·9	74·0	81·5	—2·5	83	—
	Malda ...	Malda ...	29·845	29·334	29·643	29·674	—	S63°E	91	100·6	65·5	90·4	74·5	82·5	—	79	—
	Dinajpur ...	Dinajpur ...	29·805	29·332	29·629	29·691	—·030	S87°E	96	99·1	67·8	89·7	75·1	82·4	+0·2	81	—
	Rangpur ...	Rangpur ...	29·795	29·347	29·623	29·701	—·023	S85°E	62	97·3	65·7	88·8	73·7	81·3	+1·1	84	—
	Jalpaiguri ...	Jalpaiguri ...	29·654	29·230	29·488	29·724	—·006	N84°E	71	97·9	66·1	89·6	73·3	81·5	+2·3	78	—
	Kuch Bihar ...	.. ..															
	Darjeeling ...	Darjeeling ...	23·0[illegible]6	22·767	22·954	—	+·011	N14°E	13‖	72·6	45·7	63·8	52·0	58·0	+1·5	87‖	+1
	Sikkim ...	Gnatong ...	19·252	19·158	19·202	—	—	S68°E	74	59·4	23·1	44·4	29·9	39·7	—	79	—
East Bengal.	Chittagong ...	Chittagong ...	29·853	29·421	29·676	29·709	—·014	N8[illegible]°E	116	91·2	67·1	85·9	74·2	80·1	—1·4	88	+5
	Chittagong Hill Tracts	Demagri ...	Observations not received.														
	Backergunge ...	Barisal ...	29·897	29·347	29·710	29·678	—·012	S18°E	101	95·3	65·9‡	88·6	74·9‡	81·3‡	—1·5‡	83	—
	Noakhali ...	Noakhali ...	29·872	29·429	29·699	29·680	—·017	S77°E	154	92·5	64·4	86·7	74·6	80·7	—1·2	81	—
	Faridpur ...	Faridpur ...	29·893	29·306	29·696	29·650	—·033	S30°E	107	95·5	65·9	87·1	75·0	81·1	—1·0	87	—
	Dacca ...	Dacca ...	29·895	29·209	29·697	29·666	—·050	S72°E	139	96·1	68·2	88·2	75·6	81·9	—1·4	85	+1
	Tippera ...	Comilla ...	29·879	29·389	29·708	29·661	—·0[illegible]3	S11°E	121	97·3	66·8	88·0	74·5	81·2	—1·2	89	—
	Mymensingh ...	Mymensingh ...	29·851	29·354	29·681	29·695	—·048	N79°E	124	96·2	67·6	87·4	75·0	81·3	+0·9	84	—
North Bihar.	Purnea ...	Purnea ...	29·795	28·957	29·523	29·672	—·021	N88°E	53	101·3	67·2	92·2	75·5	83·8	—0·2	79	+1
	Bhagalpur ...	Bhagalpur ...	29·759	29·313	29·555	29·667	+·009	S72°E	41	104·8	68·0	92·2	75·4	83·8	—1·9	74	—
	Darbhanga ...	Darbhanga ...	29·761	29·360	29·557	29·676	—·009	S80°E	113	103·5	67·7	93·3	75·3	84·3	—1·3	71	0
	Muzaffarpur ...	Muzaffarpur ...	29·768	29·358	29·544	29·674	—	S83°E	83	104·7	65·7	94·6	74·9	84·8	—	74	—
	Champaran ...	Motihari ...	29·705	29·313	29·49	29·672	+·003	N79°E	123	105·2	65·8	94·9	73·2	84·1	—0·8	69	—
	Saran ...	Chapra ...	29·758	29·377	29·532	29·665	+·016	S76°E	133	107·2	64·6	96·8	76·6	[illegible]6·8	—0·9	70	—
South Bihar.	Shahabad ...	Dehri ...	29·538	29·172	29·384	29·635	—·003	S61°E	136	109·4	62·0	99·5	76·5	88·2	—1·2	58	—
		Buxar ...	29·677	29·3[illegible]1	29·46[illegible]	29·657	+·012	N[illegible]4°E	191	1[illegible]9·0	63·4	98·7	77·1	87·9	—1·6	62	—
		Arrah ...	29·72[illegible]	29·345	29·512	29·652	+·015	N86°E	85	107·9	66·0	97·3	76·8	87·1	—2·1	66	—
	Gaya ...	Gaya ...	29·525	29·162	29·315	29·641	—·008	S70°E	179	109·1	62·7	98·0	77·5	87·8	—3·1	71	+15
	Patna ...	Bankipore ...	29·738	29·318	29·527	29·660	—·003	S89°E	132	108·5	64·3	96·4	76·7	86·6	—1·8	60	—1
	Monghyr ...	......															
	Sonthal Parganas ...	Naya Dumka	29·415	28·892	29·209	29·653	—·006	S73°E	157§	105·2	65·[illegible]	91·9	75·5	83·7	—3·8	73	—
Chota Nagpur.	Hazaribagh ...	Hazaribagh ...	27·884	27·708	27·713	29·643	—·011	S13°E	244	101·7	63·3	92·2	71·7	82·0	—4·0	62	+14
	Lohardaga ...	Ranchi ...	27·761	27·353	27·502	29·640	—·016	S27°W	227	102·0	61·4	[illegible]	70·4	80·7	—5·0	65	—
	Palamau ...	Daltonganj ...	29·119	28·760	28·962		—	S85°E	109	109·3	71·0	101·7	78·1	90·0	—	51	—
	Singhbhum ...	Chaibassa ...	29·1[illegible]5	28·699	28·931	29·635	—·007	S22°W	75	106·8	67·3	95·0	75·2	85·1	—5·7	77	—
	Manbhum ...	... ..															
Assam.	Sibsagar ...	Sibsagar ...	29·582	29·215	29·433	29·722	—·056	N87°E	37*	98·6	61·8	88·6	72·8	80·7	+1·8	89	0
	Goalpara ...	Dhubri ...	29·824	29·381	29·638	29·708	—·032	N14°E	156	98·8	66·9	87·0	73·9	80·5	+1·0	84	—2
	Cachar ...	Silchar ...	29·815	29·116	29·659	29·715	—·049	S76°E	95	101·6	68·3	90·2	72·9	81·6	+1·6	85	+1

* Mean of 27 days. † Mean of 25 days. ‡ Mean of 26 days. § Mean of 29 days. ‖ Mean of 30 days.

Bengal for the month of May 1893.

Cloud. Mean cloud amount, 8 A. M.	Cloud. Variation from normal mean, 8 A. M.	Rainfall.	District Observations. Rainfall. Of month. Mean of district.	Of month. Normal mean.	Of month. Variation from mean.	Of month. Number of rainy days.	Of month. Normal mean number of rainy days.	Since 16th May 1893. Mean of district	Since 16th May 1893. Normal mean.	Since 16th May 1893. Variation.	Since 16th May 1893. Mean number of rainy days.	Since 16th May 1893. Normal mean number of rainy days.	District.
5·5 2·5 7·3	— — +2·6	21·66 5·18 44·29	21·84	3·00	+18·84	8·25	4·11	17·96	1·91	+16·05	4·00	2·21	Puri.
5·2	+1·6	19·02	25·81	3·51	+22·30	10·60	5·26	20·97	2·03	+18·94	4·80	3·11	Cuttack.
3·4	—	25·71	22·47	4·75	+17·72	12·00	7·13	15·48	2·49	+15·99	6·40	3·47	Balasore.
4·8	—	10·44	17·21	5·04	+12·17	11·75	6·50	12·69	1·95	+10·74	5·75	3·26	Midnapore.
5·5 7·4	+0·7 +1·5	17·11 20·84	13·90	5·59	+8 31	11·17	7·64	9·63	2·56	+7·07	5·67	3·94	24-Parganas.
			14·32	5·71	+8·61	11·00	7·29	9·50	2·28	+7·22	5·50	3·57	Howrah.
			12·84	5·31	+7·53	10·00	7·40	9·79	2·36	+7·43	5·33	3·83	Hooghly.
5·9	—	11·27	10·81	6·37	+4 44	9·20	7·94	7·27	3·37	+3·90	4·00	4 11	Nadia.
			14·16	6·61	+7 55	10·67	8·23	10·14	2·94	+7·20	5·00	4·14	Khulna.
6·0	−0·1	16·21	13·05	6 90	+6·15	10 80	8·87	8 29	3·27	+5·02	4·60	4·41	Jessore.
6·2 2·5	+2·4 —	21·84 11·06	14·35	4·57	+9·78	8·75	6·37	8·60	2·40	+6·20	3·75	3 32	Burdwan.
5·5	—	14·26	12·57	3 83	+8·74	10·50	6·76	8·01	2·01	+6·00	5 00	3·46	Bankura.
			7·60	3·48	+4·12	8·67	6 20	5·15	2·06	+3 09	3 67	3·21	Birbhum.
6·3	+1·0	7·62	7·49	5 26	+2·23	8·00	7·42	5·20	3 08	+2·12	3·67	4·11	Murshidabad.
6·2	—	17·27	16·14	7·11	+9·03	9·00	9·20	12·08	3 70	+8 36	5·00	4 73	Pabna.
2·9	—	13·47	12·54	7·79	+4·75	9 25	9·11	7·12	4·51	+2·61	4·75	4·90	Bogra.
4·8	—	8·00	11·30	5 87	+5·43	7·67	7·49	7·47	3·49	+3 98	4·33	4·13	Rajshahi.
4·4	—	8·96	5·99	4 49	+1·50	6·50	5·64	3·97	2·77	+1·20	3 50	3·04	Malda.
4·2	—	8·83	7·91	6 10	+1·81	8·40	6 74	4·01	4·11	−0·10	4 20	3·77	Dinajpur.
1·7	—	5·57	5·51	11·23	−5·72	7·00	10·99	4 46	7·09	−2·63	4·50	6·05	Rangpur.
5·8	—	5·68	5·88	11·96	−6·08	5·00	12·00	4·28	7·44	−3·16	3·00	6·53	Jalpaiguri.
			6 70	13·38	−6·68	9·00	13·01	4 26	8 50	−4·24	4·75	7·26	Kuch Bihar.
6·3	−1·2	3·31	7·90	10·85	−2·95	9 00	12·01	5·35	6·79	−1·44	4·75	7 08	Darjeeling.
3·6	—	8·66											Sikkim.
7·3	+0 7	21·44	30·57	10·00	+20 57	15·50	10 01	25 28	4·97	+20·31	11·00	4·88	Chittagong.
			29·87	10·13	+19·74	18·00	11·50	20·89	4·16	+16·73	12 00	5 30	Chittagong Hill Tracts.
7·7	—	19·54	20·10	7 66	+12·44	13 00	9·49	14·12	3 73	+10 33	6 50	4·71	Backergunge.
4·2	—	15 33	15·10	10·39	+4·71	12·50	10·93	10·21	4·53	+5 68	7·00	5·15	Noakhali.
5·0	—	17·52	16·23	8 59	+7 64	10·00	10·21	12·17	4 09	+8·08	4·33	4·76	Faridpur.
6·7	+1·2	13·40	13·60	8 86	+4 74	11 00	11·09	7·96	3 89	+4·07	5·75	5 20	Dacca.
5·8	—	22·15	16·27	10·13	+6 14	12·50	11·71	9·04	4·26	+4 78	6 25	5·24	Tippera.
5·2	—	12·48	14·30	9 70	+4·60	10·60	11·51	9·38	4·56	+4 82	4·80	5·84	Mymensingh.
1·4	−2·3	1·41	1·51	5·58	−4·07	3 00	5·93	0 16	3·41	−3 25	0·33	3 00	Purnea.
4·5	—	4·87	3·48	3 31	+0·17	6 25	4·33	1·59	1·95	−0 36	2·75	2·36	Bhagalpur.
3·2	+0·5	4·95	3·74	2·63	+1·11	4 67	3 61	0·71	1·28	−0·57	1·33	1·74	Darbhanga.
2·5	—	2·39	2·05	2 46	−0·41	5 00	3 57	0·53	1·30	−0·77	1·67	1·86	Muzaffarpur.
3·5	—	2·82	2·63	2·59	+0·04	6·00	3 93	1·04	1·28	+0·36	2·50	2·05	Champaran.
3·6	—	1·97	1·99	2·00	−0·01	5·33	2·82	0·89	1·09	−0·20	2·07	1 51	Saran.
1·7 2·7 1·7	— — —	1·65 1·69 3·66	2 29	1·32	+0·97	4·60	2·03	0·87	0·84	+0·03	2·20	1·07	Shahabad.
3·5	+0·9	2·81	2·91	1·77	+1·14	5·75	2·28	·31	1·32	−0·01	3 25	1 31	Gaya.
4·0	+0·8	1·30	2·37	2·09	+0·28	4 25	2·65	0·45	1·35	−0·90	1·75	1·51	Patna.
			2·65	2·33	+0·32	4·00	3·17	0·06	1·47	−1·41	0·33	1·67	Monghyr.
3·6	—	8·76	8·05	3·84	+4 21	8·67	5·22	3·90	2·33	+1·57	3·33	2·80	Sonthal Parganas.
3·6	+0·9	5·11	6·16	2·46	+3·70	9·25	3 94	3·79	1·52	+2·27	5·25	2 21	Hazaribagh.
3·5	—	4·44	3·28	2·85	+0·43	5·50	4·34	1·64	1·57	−0·23	2 50	2 57	Lohardaga.
0·0	—	0·32	0·30	1·41	−1·11	2·00	2·53	0·28	1·05	−0·77	2 00	1·53	Palamau.
4·5	—	9·38	9·38	4·17	+5 21	11·00	6·11	6 92	2·42	+4 50	6 00	3 47	Singhbhum.
			8·17	2 77	+5·40	8·00	4·54	6·03	1·53	+4 50	2 00	2·32	Manbhum.
5·4	−2·7	7·09											Sibsagar.
5·5	+0·2	8·16											Goalpara.
7·5	+0·6	20·29											Cachar.

Table of Rainfall recorded at stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ORISSA	Puri ...	Puri ...	...	...	...	0·02	...	0 57	...	...	2·11	0·06	...	...	...	...	...	...	...	...	...	...
		Khurda ...	...	...	...	0·78	...	0·18	...	0·18	2·53	0·03	...	...	...	...	...	...	...	...	...	...
		Banpur ...	...	...	...	0·72	...	0·65	...	...	1·25	1·50	...	0·70	0·16	...	...	...	...	...	...	...
		False Point ...	...	...	0·02	0·75	...	1·74	...	...	0·69	...	0·09	0·68	0·10	...	...	...	...	...	...	...
		Gop ...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·70	...	...	...	...	...	...
		Salpara ...	...	...	...	2·20	...	1·05	...	...	1·75	0·13	...	...	0·07	...	...	...	...	...	...	...
		Pipli ..	...	...	1·00	...	0·57	...	...	1·33	0·02	...	0·72	...	...	...	...	...	...	...	...	...
	Cuttack ..	Jagatsingpur	...	...	1·10	...	2·75	...	...	1·85	...	0·88	...	0·58	...	...	...	...	...	...	...	...
		Banki ...	...	...	...	1·20	...	0·60	...	0·10	1 70	...	0·20	...	...	0·19	...	...	...	...	...	...
		Cuttack ..	...	...	...	0·6?	...	0·94	...	...	0·67	0·51	0 15	1·21	1·45	...	...	...	...	...	...	...
		Kendrapara ..	...	...	0·02	0·80	...	1·46	...	...	0·94	0·16	...	0·83	0·20	...	...	...	...	...	...	...
		Jajpur ..	...	...	...	1·03	...	0·85	...	0·06	0·62	0·09	...	0·10	0·2?	...	0·07	...	...	...	...	...
		Dharmsalla ...	...	...	1 00	...	0·80	...	...	0·96	...	0·12	0·6?	0·66	0·20	...	...	...	...	...	...	...
		Salipur ...	...	...	0·97	...	0·70	...	...	0·17	...	...	...	...	...	...	...	...	...	...	...	...
		Pal Lahara ...	...	...	...	1·50	0·62	...	0·70	...	1·70	...	...	0·60	...	...	...	...	...	...	...	...
	Balasore ..	Akhyapada ...	...	...	...	0·75	...	0·52	...	...	0·16	...	0·14	...	0·40	...	...	...	...	...	...	...
		Chandbali .	...	...	...	0·78	...	1·33	...	...	0·25	...	0·10	1·15	0·28	...	...	...	...	...	...	...
		Bhadrak ..	...	...	...	...	1·30	0·45	...	...	0 10	...	0·15	...	0 5?	...	...	...	...	...	...	...
		Soro ..	...	...	...	...	...	...	0·30	0·25	0·15	...	...	1·00	...	...	...	...	...	...	...	...
		Balasore ...	...	...	...	0·45	2·31	0·74	0 07	1·62	0·23	...	...	0·22	0·05	...	...	...	...	...	...	...
		Jellasore ..	...	...	0·40	2·?0	...	...	...	1·54	0·13	...	...	...	...	...	...	...	...	...	...	...
		Baripada ..	...	...	0·35	0·04	0·46	...	0·61	0·22	0·06	0·53	0·74	0·70	...	...	...	...	...	...	...	...
SOUTH-WEST BENGAL.	Midnapore ..	Contai ...	...	...	0·03	0·19	0·05	1·09	0 17	1·00	0·66	...	...	0·09	0·28	...	...	...	...	...	...	...
		Tamluk	...	...	...	2·1?	0·28	...	...	1·68	0·54	0·15	0·17	...	0·16	...	...	...	...	...	...	...
		Midnapore ..	...	...	0·03	1·16	0·50	...	...	0·64	0·19	...	...	...	1·08	...	...	...	...	...	...	...
		Ghatal ..	0·72	...	0 09	2·0?	0·83	...	0·09	0·85	0·11	...	...	...	1·15	...	...	...	...	...	...	...
		Kukrahaty ...	...	...	...	2·58	1·23	0·14	0·55	1·05	...	...	0·36	...	0·12	...	...	...	...	...	...	...
		Garhbeta ...	...	...	...	0·50	...	...	...	0·62	0·03	0·97	...	...	0 34	...	...	...	...	...	...	...
		Panskura ...	...	0·10	0·77	0·50	0·15	...	...	1·68	0·86	...	0·67	...	0·6	...	...	...	...	...	...	...
		Dantoon ..	...	...	...	0·14	0 82	0·88	0·16	1·50	0·25	...	...	...	...	...	...	...	...	...	...	...
	24-Parganas .	Saugor Island	...	...	0·03	0·35	1·42	0 39	0·22	1·62	0·16	0·65	...	...	0·10	...	...	...	...	...	...	...
		Diamond Harbour.	...	...	0·62	2·12	1·30	0·70	...	2·10	...	...	0·30	...	0·04	...	...	...	...	...	...	...
		Canning Town	0·55	...	...	1·76	0 12	...	1·84	2·60	...	...	...	...	1·32	...	...	...	...	...	...	...
		Alipore (Observatory)	0 11	...	0·08	2·01	0·34	...	1·83	0·51	...	...	0 25	...	0·02	...	...	...	...	...	...	...
		Barrackpore .	...	...	...	0·25	...	...	1·11	0·42	...	...	...	...	...	...	...	...	...	...	...	...
		Dum Dum ..	0·10	...	...	0·90	0·68	0·06	1 04	0·63	...	...	0·91	...	...	...	...	...	...	...	...	...
		Barasat ..	...	...	...	0·54	0·53	...	0·51	0·27	...	...	...	...	...	...	...	...	...	...	...	...
		Basirhat	0·15	0·98	...	0 59	1·04	0·02	...	0·99	...	0·93	...	...	...	...	...	...	...	...	...	...
	Howrah ..	Howrah ...	0 09	...	...	1·00	0·40	...	0·1?	2·32	...	...	0·35	...	...	...	...	...	...	...	...	...
		Mohesreka ..	0·18	...	0·05	2·89	0·35	...	0 72	0·?8	...	0·21	...	...	...	...	...	...	...	...	...	...
		Ulubaria ...	0 10	...	...	2·00	1·25	...	0·82	0 87	...	...	...	...	0·1?	...	...	...	...	...	...	...
	Hooghly ..	Serampore ...	...	...	0·01	0 42	0·10	...	1·29	0·44	...	...	...	...	...	...	...	...	...	...	...	...
		Hooghly .	...	...	...	0·81	0·01	0·14	0 33	0·32	...	0·08	...	...	...	...	...	...	...	...	...	...
		Jahanabad ..	...	0·58	2·80	...	...	...	0·58	0·18	0·04	...	0·53	...	0·21	...	...	...	...	...	...	...
	Nadia ..	Ranaghat ..	0·04	...	...	1·35	...	...	0·50	0·71	...	...	0·91	...	...	...	...	...	...	...	...	...
		Krishnagar ..	1·09	...	...	0 90	...	0·18	0·43	1·08	...	...	0·01	...	...	...	...	...	...	...	...	...
		Chuadanga ..	0·23	...	...	0 30	...	...	0 60	0·49	...	...	0·15	...	...	2·30	...	...	...	...	...	...
		Meherpur ..	...	...	...	0·27	...	...	0 6?	0·40	...	...	0·34	...	1·56	...	...	...	...	...	...	...
		Kushtia .	1·50	...	...	0·23	...	0·02	0 09	0·63	...	0·15	...	...	...	0·6?	...	...	...	...	...	...
	Khulna .	Satkhira ...	...	...	...	2·53	0·48	0·18	0·37	1·00	...	...	...	...	...	...	...	...	...	...	...	...
		Bagerhat ..	0·12	...	...	0·95	...	0·71	0·38	1·69	...	...	0·63	...	...	...	...	...	...	...	...	...
		Khulna ...	0·56	...	...	0·82	...	0·65	0·21	0·27	...	...	0·40	...	...	...	...	...	...	...	...	...
		Nakipur ...	...	...	...	...	...	0·79	0·75	1·12	...	...	...	...	...	...	...	...	...	...	...	...
		Rampal ..	...	...	...	0·74	...	0·60	0·30	1·50	...	...	0·40	...	...	...	...	...	...	...	...	...
	Jessore ..	Narail ...	0·52	...	...	2·67	...	0·32	0·20	0·93	...	...	...	...	...	...	...	...	...	...	...	...
		Jessore ...	1·12	...	...	1·27	...	2·13	0·51	1·18	...	0·20	0·17	...	0·35	...	...	...	...	...	...	...
		Jhenidah ..	0·10	...	...	1·43	...	0·7?	1·05	0·4?	...	...	0·45	...	...	...	...	...	...	...	...	...
		Magura .	0·05	...	...	1·48	...	0·03	1·05	0·37	...	0·06	0·45	...	0·10	...	...	...	...	...	...	...
		Bangaon ...	0·35	...	...	0·64	...	0·20	0·55	0·45	...	...	...	...	...	1·40	...	...	...	...	...	...
	Burdwan .	Kalna	0·04	...	...	1·20	...	...	0·85	1·19	...	...	0·07	...	0·29	...	...	...	...	...	...	...
		Burdwan ..	...	...	0·18	3·87	...	...	2·43	0 69	0·06	0·02	0·09	...	0·10	...	...	...	...	...	...	...
		Katwa ..	...	...	...	2·59	...	0·91	0·70	0·84	...	...	...	...	0·43	...	...	...	...	...	...	...
		Raniganj ..	...	...	0·32	1·60	...	...	0·94	0·86	0·70	2·09	...	...	0·04	...	...	...	...	...	...	...
		Mankur ..	...	...	0·38	1·77	...	...	0·83	0·63	0·27	0·69	0·11	...	...	...	...	...	...	...	...	...
	Bankura ..	Bankura ..	...	...	0·7?	0·80	0·03	...	1·50	1·18	2·38	0·65	...	...	...	...	...	...	...	...	...	...
		Vishnupur ...	...	...	1·18	1·32	...	...	...	0·60	0·08	...	0·08	...	0·28	...	...	...	...	...	...	...
		Maliara ...	...	...	0·55	1 33	...	0·51	1·12	0·50	0·34	1·02	...	...	0·08	...	...	...	...	...	...	...
		Khatra ...	...	...	0·23	...	0·05	...	0·21	0·98	0·13	0·05	...	...	0·3?	...	...	...	...	...	...	...
		Indas ...	...	...	0·54	2·33	...	...	0·93	1·08	0·09	...	0·37	...	0·14	...	...	...	...	...	...	...
		Kotalpur ...	...	...	...	0·75	...	...	...	1·12	...	0·42	...	...	0·15	...	...	...	...	...	...	...
		Anda ..	...	1·80	1·90	...	...	...	1·15	0·12	0·60	...	0·25	...	...	...	...	...	...	...	...	...
		Gangajalghati	...	...	1·28	0·65	...	0·60	0·93	0·38	0·78	0·74	...	...	0 35	...	...	...	...	...	...	...
		Raipur ...	...	...	0·15	1·32	0·16	...	0·19	0·95	...	...	...	...	1·55	...	...	...	...	...	...	...
		Sonamukhi ...	...	...	0·70	1·27	...	...	1·07	0·81	1·61	...	0·63	...	0·13	...	...	...	...	...	...	...
	Birbhum ..	Suri ..	...	...	...	0·89	...	0·20	0·17	0·57	...	...	...	...	0·25	...	...	...	...	...	...	...
		Hetampur ..	...	...	0·03	0·43	...	0·41	0 67	0·67	0·17	...	...	...	0·35	...	...	...	...	...	...	...
		Rampur Hát	...	...	...	0·52	...	0·25	0·53	...	...	...	...	...	1·26	...	...	...	...	...	...	...
		Bolpur ...	...	...	...	1·80	...	0·05	0·85	0·45	...	0·93	...	...	...	...	...	...	...	...	...	...
		Murarai ...	...	...	...	1·36	...	0·49	...	1·70	0·92	...	...	...	...	...	...	...	...	...	...	...
	Murshidabad	Kandi ...	...	...	...	0·28	...	0·06	0·20	0·55	...	...	...	...	0·11	...	...	...	...	...	...	...
		Berhampore...	0·02	...	...	0·26	...	...	0·41	0·61	...	...	...	...	...	...	...	...	...	...	...	...
		Lalbagh ..	0·42	...	0·20	...	...	...	...	1·27	0·36	...	...	0·20	...	...	...	...	...	...	...	...
		Azimganj ..	0·20	...	...	0·35	...	...	...	1·38	0·41	...	...	...	...	0·15	...	...	...	...	...	...
		Jangipur ...	0·11	...	0·13	1·15	...	0 38	...	1·77	0·05	...	...	...	...	0·20	...	...	...	...	...	...
		Lalgola	...	...	...	0 90	...	...	1·02	...	0·60	...	...	...	...	...	...	...	...	...	...	...
		Akhriganj ...	0·03	...	...	0·40	...	...	...	1·20	1·60	...	...	...	...	0·63	...	...	...	...	...	...
		Patkabari ...	...	...	...	0·60	...	0·30	...	1·40	...	...	...	...	...	...	...	...	...	...	...	...
NORTH BENGAL.	Pabna ...	Pabna ...	0·40	...	...	2·46	...	0·06	0·06	0·64	...	0·12	0·09	...	...	...	...	...	...	...	...	...
		Sirajganj ..	0·44	...	0·06	0·29	0·24	2·58	0·05	0·63	...	...	...	...	...	...	...	...	...	...	...	...
	Bogra ...	Sherpur ...	...	...	0·07	0·35	0·15	3·05	...	0·50	...	...	...	...	...	0·68	...	...	...	...	...	...
		Nowkhilla ...	...	...	...	1·07	0·90	3·02	...	1·09	...	...	...	...	...	...	...	...	...	...	...	...
		Bogra ...	...	...	...	0·38	0·18	2 10	...	1·15	...	...	...	...	...	0·20	...	...	...	...	...	...
		Panchbibi ...	...	...	...	0·40	...	3·90	...	2·25	0·15	...	...	...	...	...	...	...	...	...	...	...
	Rajshahi ...	Boalia ...	0·03	...	...	1·39	...	0·02	0·01	1·10	...	...	...	...	...	0·04	...	...	...	...	...	...
		Nator ...	0·40	...	1·45	1·35	...	0·30	0·03	1·15	...	0·09	...	...	...	...	...	...	...	...	...	...
		Naogaon ...	...	...	0·09	0·75	...	2·10	...	1·15	0·05	...	...	...	...	...	...	...	...	...	...	...
		Lalpur ...	0·43	...	1·30	...	...	...	...	1·30	1·10	...	...	...	0·57	...	...	...	...	...	...	...
		Manda ..	...	...	0·50	...	...	...	0·83	1·92	...	...	...	...	...	...	...	...	...	...	...	...

in Bengal in May 1893.

21	22	23	24	25	26	27	28	29	30	31	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 16th May 1893 to 31st May 1893.	Average rainfall from 16th May to 31st May.	Station.	District.	Meteorological division.
...	...	3·90	6·76	4·61	2·90	...	...	...	...	..	6	3·45	20·93	2·58	6·76	18·17	1·48	Puri ...	Puri ...	ORISSA.
...	...	3·19	2·25	2·00	2·64	...	...	...	...	...	8	4·84	13·80	3·51	3·19	10·10	2·07	Khurda.		
...	...	1·40	0·52	0·54	0·82	0·08	...	...	...	...	10	3·58	8·34	2·05	1·51	3·36	1·71	Banpur.		
...	...	4·79	5·57	14·90	14·83	...	...	0·04	...	...	9	4·58	44·29	3·84	14·90	40·22	2·31	False Point.		
6·30	7·40	6·20	2·94	...	...	...						?		?			?	*Gop.*		
...	...	1·20	1·95				...	...	1·20	1·95		?		?			?	*Satpara.*		
...	...	2·80	5·48	4·50	2·85	...	...	...	...	..	8	?	19·27	?	5·48	15·63	?	*Pipli*		
...	5·80	6·50	6·00	3·00	..	...	...	...	...	...	9	4·35	28·46	2·99	6·59	21·39	1·41	Jagatsingpur.	Cuttack	
...	...	1·26	1·85	1·06	1·00	...	...	...	...	...	10	3·63	9·16	2·09	1·85	5·17	1·47	Banki.		
...	..	2·85	3·75	5·78	2·40	0·13	...	...	0·01	...	12	5·50	20·47	4·20	5·78	14·92	2·80	Cuttack.		
...	0·26	5·93	11·35	9·30	8·78	...	...	...	...	...	11	5·68	40·12	3·91	11·35	35·62	1·98	Kendrapara.		
...	0·47	5·20	11·17	6·10	4·15	...	...	0·75	...	..	11	7·16	39·86	4·49	11·17	27·84	2·43	Jajpur.		
...	3·60	5·10	7·24	5·65	...	...	...	...	...	...	11	?	25·93	?	7·24	21·59	?	*Dharmsala.*		
												?		?			?	*Salipur*		
...	...	0·50	0·60	0·40	...	...	...					?		?			?	Pal Lahara.		
...	...	3·70	3·60	3·45	1·10	...	...	0·30	...	...	10	?	14·12	?	3·70	12·15	?	Akhyapada ...	Balasore.	
...	0·12	7·50	6·20	6·00	3·92	...	...	0·50	...	...	12	6·41	28·13	4·39	7·50	24·24	2·38	Chandbali.		
...	0·20	4·50	8·66	5·18	3·44	0·15	...	0·63	...	...	12	7·11	25·40	5·16	8·66	22·81	3·06	Bhadrak.		
3·30	4·50	6·90	4·60	2·30	..	...	2·00		...	...		7·12		5·09			3·05	Soro		
...	...	1·61	4·66	5·18	3·08	1·07	0·21	2·64	0·01	...	13	8·59	24·15	4·97	5·18	18·46	2·69	Balasore.		
...	0·85	1·85	5·10	4·53	1·37	0·30	2·50	...	...	...	11	5·88	20·59	3·3[illegible]	5·10	16·52	1·69	Jellasore.		
...	...	...	1·02	3·30	2·88	1·80	1·39	...	...	...	12	7·73	14·10	4·91	3·30	10·39	2·11	Baripada.		
...	0·09	1·00	2·76	4·89	6·41	0·95	0·78	0·43	...	0·04	13	5·90	20·91	4·57	6·41	17·35	2·01	Contai ..	Midnapore ...	SOUTH-WEST BENGAL.
...	...	0·01	1·53	1·92	5·58	1·47	0·94	..	...	...	12	6·11	16·53	5·07	5·58	11·45	2·20	Tamluk.		
...	...	...	0·55	1·00	2·52	2·90	0·52	...	...	...	10	7·05	11·09	5·13	2·90	7·49	1·94	Midnapore.		
...	0·12	...	0·52	0·40	5·02	7·35	1·06	...	...	...	12	6·93	20·32	5·38	7·35	14·47	1·64	Ghatal.		
...	...	0·30	1·05	2·31	4·38	0·57	0·91	...	...	...	13	?	15·55	?	4·38	9·52	?	*Kukrahaty.*		
...	...	...	0·18	0·20	3·60	4·60	1·12	...	...	0·30	10	?	12·46	?	4·60	10·00	?	*Garhbeta.*		
...	...	...	0·44	1·61	5·00	2·08	..	...	...	0·31	13	?	14·77	?	5·00	9·44	?	Panskura.		
...	0·03	0·42	1·12	3·65	2·40	0·90	0·75	1·70	...	...	13	?	14·72	?	3·65	10·97	?	Dantoon.		
...	0·03	0·92	1·91	6·08	1·36	2·07	0·72	0·21	...	...	15	7·05	18·24	4·65	6·08	13·30	2·35	Saugor Island	24-Parganas.	
...	...	0·72	0·63	0·86	4·12	2·10	0·50	0·15	...	...	13	7·16	10·20	5·16	4·12	9·08	1·96	Diamond Harbour.		
...	...	...	0·92	2·00	5·89	2·80	1·32	...	...	...	11	?	21·12	?	5·89	12·93	?	*Canning Town.*		
...	...	0·05	0·43	0·88	6·18	2·17	2·28	...	...	...	11	7·32	17·11	5·42	6·15	11·96	2·33	Alipore (Observatory).		
...	0·50	..	0·07	1·22	3·71	1·30	0·99	...	...	...	8	7·58	10·17	5·24	3·71	8·39	2·16	Barrackpore.		
...	...	0·18	0·15	1·93	3·05	2·27	1·52	...	...	...	12	8·21	13·44	5·93	3·05	9·12	2·74	Dum-Dum.		
...	...	0·19	...	0·42	3·14	1·90	1·33	...	...	...	9	8·11	8·85	6·05	3·14	6·98	2·67	Barasat.		
...	0·44	...	...	1·28	2·40	2·68	1·24	...	...	...	11	8·05	12·74	6·06	2·68	8·04	3·71	Basirhat.		
...	...	...	0·63	0·46	4·55	1·55	2·25	...	...	...	10	7·31	14·10	5·16	4·55	9·84	2·14	Howrah ...	Howrah.	
...	0·48	0·07	0·25	0·87	2·11	3·65	1·77	...	...	...	12	7·28	14·53	6·25	3·65	9·15	2·41	Mohesreka		
...	0·05	...	0·44	0·92	4·15	2·54	2·08	...	...	...	11	?	15·32	?	4·15	10·18	?	*Uluberia.*		
...	0·35	0·20	0·23	0·32	4·09	2·18	2·31	...	...	...	11	7·84	11·94	4·98	4·09	9·68	2·00	Serampore ...	Hooghly.	
...	...	..	...	0·21	2·55	2·56	1·25	...	...	...	8	7·25	8·20	5·7.	2·56	6·57	2·59	Hooghly.		
...	0·80	...	0·03	0·20	3·21	7·56	1·31	...	...	...	11	7·11	18·33	5·17	7·56	13·11	2·48	Jahanabad.		
...	0·77	...	...	...	2·87	2·91	1·11	0·02	...	...	8	6·60	11·19	5·26	2·91	7·69	2·74	Ranaghat ...	Nadia.	
...	0·04	...	0·01	0·05	2·62	3·33	0·93	...	...	...	8	7·55	11·27	5·83	3·33	7·58	2·54	Krishnagar.		
...	...	...	...	...	2·10	2·28	1·81	0·06	...	...	9	8·90	10·32	7·74	2·39	6·25	4·34	Chuadanga.		
...	...	...	...	...	0·53	2·48	2·08	0·11	...	0·24	10	7·90	8·70	5·82	2·48	5·44	3·18	Meherpur.		
...	...	...	0·13	...	2·30	2·87	3·50	0·43	...	0·15	11	8·70	12·59	7·19	3·60	9·38	4·05	Kushtia.		
...	...	0·13	...	1·45	2·40	1·59	1·13	...	...	...	10	7·79	11·17	6·28	2·53	6·61	3·00	Satkhira	Khulna.	
...	...	0·04	0·07	1·64	7·90	1·62	1·25	0·21	...	...	11	8·32	17·21	6·94	7·90	12·73	3·20	Bazerhat.		
...	0·04	0·03	0·08	1·49	6·58	0·75	1·32	0·20	...	...	11	8·58	14·09	6·62	6·58	11·09	2·62	Khulna.		
...	...	0·39	0·27	1·10	1·82	0·87	0·37	...	...	...	9	?	7·48	-	1·82	4·82	?	*Nakipur.*		
...	0·30	0·50	0·10	2·12	4·50	1·20	0·70	...	...	...	12	?	12·96	?	4·50	9·42	?	*Rampal.*		
...	0·07	...	...	0·30	3·06	1·56	1·21	0·22	...	...	10	9·58	11·08	6·79	3·06	6·42	2·75	Narail	Jessore.	
...	...	..	0·13	0·33	3·50	3·42	1·66	0·15	...	...	14	9·21	16·21	7·35	3·50	9·19	3·38	Jessore.		
...	...	...	...	0·03	3·87	2·11	2·66	0·25	...	...	10	9·00	13·23	6·53	3·87	8·92	3·35	Jhenidah		
...	...	...	...	0·05	4·62	3·05	2·52	0·96	...	...	10	9·79	15·35	7·95	4·62	11·20	3·86	Magura		
...	...	...	...	0·22	2·10	1·65	1·72	0·04	...	...	10	6·81	9·32	5·88	2·10	5·73	3·03	Bangaon		
...	0·20	...	...	...	3·07	4·45	1·05	...	...	...	8	6·47	12·32	4·86	4·45	8·77	2·16	Kalna ..	Burdwan	
...	...	...	0·28	0·01	1·90	9·62	2·19	...	...	0·40	10	7·05	21·84	4·98	9·62	14·40	2·71	Burdwan		
...	0·01	...	...	...	1·65	3·07	1·52	...	...	0·07	8	6·47	12·19	5·31	3·07	6·72	2·72	Katwa.		
...	...	...	...	...	1·05	2·75	0·71	...	...	...	9	5·50	11·06	3·13	2·75	4·51	2·00	Raniganj		
...	...	...	...	...	1·80	6·57	0·42	...	...	...	10	?	13·47	?	6·57	8·79	?	*Mankur.*		
...	...	...	0·42	0·06	1·85	3·31	0·35	...	...	0·97	11	8·45	14·26	3·87	3·31	6·90	2·14	Bankura	Bankura	
...	0·08	...	0·30	0·11	2·60	5·90	1·40	...	...	...	9	7·45	13·93	4·79	5·90	10·39	2·27	Vishnupur		
...	...	...	0·12	...	1·37	2·25	0·65	...	...	0·15	12	5·45	9·99	3·2[illegible]	2·25	4·54	2·00	Maliara.		
...	...	0·47	...	0·28	3·10	5·60	0·69	...	...	...	10	5·70	12·09	3·39	5·60	10·14	2·01	Khatra.		
...	0·07	...	0·18	...	2·30	9·02	0·95	...	...	...	10	?	18·00	?	9·02	12·52	?	*Indus.*		
...	...	...	...	0·76	3·12	4·52	..	...	...	...	7	?	10·84	?	4·52	8·40	?	*Kotalpur.*		
...	...	...	...	0·30	2·75	3·85	0·49	0·15	0·20	0·39	13	?	13·77	?	3·85	7·05	?	*Anda.*		
...	...	...	0·53	...	1·74	3·30	0·86	...	...	0·35	13	?	12·49	?	3·30	6·78	?	*Gangajalghati.*		
...	...	...	...	0·45	4·55	5·95	0·49	...	...	...	10	?	15·76	?	5·95	11·44	?	*Raipur.*		
...	...	...	...	...	1·53	7·32	0·52	...	...	...	10	?	15·59	?	7·32	9·37	?	*Sonamukhi.*		
...	...	0·18	...	...	0·83	2·86	0·56	...	...	...	9	5·95	6·51	3·72	2·86	4·48	2·16	Suri	Birbhum.	
...	0·03	..	...	...	1·21	2·95	0·91	...	...	...	10	6·46	8·73	3·05	2·95	6·00	2·02	Hetampur.		
...	...	...	...	...	1·28	3·21	0·52	...	...	...	7	6·19	7·56	3·07	3·21	5·01	2·00	Rampur Hât.		
...	...	...	...	...	2·11	4·00	1·00	...	...	...	7	?	11·19	?	4·00	7·11	?	*Bolpore.*		
...	...	...	...	...	1·22	1·73	...	...	...	1·75	7	?	9·17	?	1·75	4·70	?	*Morarai*		
...	...	...	...	...	0·95	2·80	0·98	0·05	...	0·08	6	7·13	5·95	4·55	2·80	4·86	3·00	Kandi ...	Murshidabad.	
...	...	...	...	...	1·40	3·41	1·29	0·11	...	...	8	8·56	7·62	5·54	3·41	6·21	3·03	Berhampore.		
...	...	...	...	...	1·29	3·15	1·36	0·31	...	...	9	7·42	8·56	5·19	3·15	6·11	3·39	Lalbagh.		
...	...	...	...	...	1·45	2·18	2·04	0·36	...	0·10	10	7·37	8·62	5·25	2·18	6·13	3·21	Azimganj.		
...	...	...	...	...	1·02	1·05	1·14	0·03	...	0·63	10	6·75	8·26	5·00	1·77	4·47	3·00	Jangipur.		
...	...	...	...	...	1·20	2·10	...	...	0·09	...	5	7·31	5·91	5·72	2·10	3·39	3·42	Lalgola.		
...	...	...	...	...	1·75	1·09	0·47	0·47	...	0·63	9	?	8·87	?	1·75	5·01	?	*Akhriganj.*		
...	...	...	...	...	1·20	1·90	1·35	...	...	0·40	7	?	7·15	?	1·90	4·85	?	*Patkabari.*		
...	...	...	...	...	2·46	2·64	5·08	0·37	...	0·65	9	8·45	15·03	6·95	5·08	11·20	3·53	Pabna ..	Pabna ...	NORTH BENGAL.
...	...	...	...	...	0·71	3·94	4·09	0·55	...	3·67	10	9·95	17·25	7·27	4·09	12·96	3·87	Sirajganj.		
...	...	...	...	...	0·40	3·07	3·17	0·13	...	0·70	10	10·14	12·27	8·48	3·17	7·47	4·92	Sherpur ..	Bogra.	
...	...	...	...	0·16	0·35	1·98	3·28	0·23	...	0·12	10	9·43	12·20	6·92	3·28	6·12	3·77	Nowkhilla.		
...	...	...	...	0·01	0·11	3·00	4·50	1·10	...	0·74	10	9·30	13·47	8·37	4·50	9·46	4·74	Bogra.		
...	...	...	...	...	...	2·15	2·55	...	...	0·71	7	7·57	12·20	7·40	3·90	5·41	4·59	Panchbibi.		
...	...	...	...	...	1·66	2·39	0·54	0·42	...	0·25	7	7·90	7·85	5·44	2·30	5·26	3·08	Boalia ..	Rajshahi.	
...	...	...	...	0·06	1·25	4·70	3·10	0·10	...	1·44	10	7·85	15·42	6·82	4·70	10·65	3·54	Nato		
...	...	...	...	...	2·00	2·50	2·00	...	...	...	6	6·71	10·64	5·36	2·50	6·50	3·84	*Naogaon.*		
...	...	...	...	2·50	2·40	...	...	0·10	...	0·11		?		?			?	*Lalpur.*		
...	...	...	...	...	3·61	1·18	...	...	...	...	5	?	8·04	?	3·61	4·79	?	*Manda.*		

Table of Rainfall recorded at Stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
NORTH BENGAL —concld.	Malda ...	Malda ...	...	...	0·36	1·24	...	0·06	0·72	0·48	...	...	...	...	...	...	...	...	...	...	...	...
		Chanchal ...	...	...	...	0·23	...	0·04	0·05	0·82	...	...	...	...	0·02	...	0·02	...	...	...	...	...
		Gajol ...	...	...	..	1·42	...	...	0·10	0 35	...	...	...	...	0·09	...	...	...	..	...	...	...
		Sibganj ...	...	...	1·02	1·39	...	0·26	0·78	3·55	0·10	...	...	...	...	...	...	...	...	...	...	...
	Dinajpur ...	Mohadebpur	...	...	0·30	0·70	...	1·25	...	2·20	4·30	...	...	...	...	0·50	...	...	...	...	...	...
		Churamon ...	...	...	...	...	...	0·22	...	0·02	...	0·06	0·55	...	0·03	...	0·02	...	...	...	...	...
		Raiganj ...	...	...	0·82	0·29	...	0·26	..	0·25	...	...	...	...	0·40	...	...	...	...	...	...	...
		Dinajpur ...	...	...	0 10	1·27	...	0·15	0·82	0·03	...	...	...	...	...	...	...	...	...	...	...	...
		Baloorghat .	...	...	0·43	0·54	...	2·96	...	1·05	...	...	...	...	...	...	...	...	...	...	...	...
		Thakurgaon...	...	...	3·22	0·28	...	0·06	...	...	...	...	...	...	...	0·81	...	...	...	...	...	...
	Rangpur ...	Bhawaniganj (*Gyabanda*).	...	.	0·24	0·45	...	...	...	0·50	...	...	...	...	...	...	...	...	...	...	...	...
		Rangpur ...	...	...	...	0·36	...	0·22	...	0·06	...	...	...	...	0·46	...	...	...	...	...	...	...
		Kurigaon	...	...	0·17	1·05	...	0·49	...	0·01	...	...	...	...	...	...	...	...	...	...	...	...
		Gobindpur ...	...	...	..	0 23	..	3·55	...	1·71	0·05	0·03	...	...	...	...	...	...	...	...	...	...
		Bagdogra (*Nilphamari*)	...	...	0·06	0 12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ulipur ..	...	...	...	0·35	...	0·86	...	..	...	...	...	...	...	...	...	...	...	...	...	...
		Sundergunge	...	...	.	...	...	.	...	1·71	0·05	1·20	...	...	...	...	...	...	...	...	...	...
	Jalpaiguri ...	Jalpaiguri .	...	...	0·08	0·49	0 02	0 05	0·92	...	0·02	0·01	0·01	...	...	...	...	...	...	...	...	0·11
		Alipore Duar	...	...	0·53	0·82	...	0·03	0·18	...	...	...	...	...	...	...	...	...	...	...	...	...
		Falacotta ...	...	...	...	0·75	...	...	0·85	...	...	...	...	...	0·17	...	...	...	...	...	...	0·20
		Debiganj ...	...	...	1·27	...	...	0·06	..	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bhagatpur (*Nagrakatta*).	0·18	...	0·31	0·01	...	...	1 75	...	...	...	1·80	...	0·40	...	...	...	...	...	...	5·80
	Kuch Bihar ...	Dinhatta ...	...	...	0·35	0·77	0·81	0·55	...	..	...	...	...	...	...	...	...	...	...	...	...	...
		Kuch Bihar ...	...	...	0·30	1·00	0·45	0·17	0·47	...	...	...	...	...	...	...	...	...	...	...	...	0·11
		Mickliganj ...	...	...	1·30	0·48	...	...	...	...	...	...	...	...	0·56	...	...	...	...	...	...	...
		Mathabhanga	...	...	0·72	0·87	0·10	0·08	0·66	...	...	...	...	...	0·11	...	...	...	...	...	...	0·05
	Sikkim	Gnatong ...	0·38	0·02	0·12	0·26	0 31	0·09	0·69	...	0·28	0·13	0·10	0·78	0·27	0·29	0·15	0·13	0·12	0·39	0·39	0·22
	Darjeeling ...	Buxa ...	0·39	...	..	1·04	0·08	...	1·59	0·11	...	...	0·69	...	0·33	...	...	...	...	...	...	4·25
		Siliguri ...	0·04	...	0·21	0 05	..	...	0·41	...	...	...	1·88	0·07	0·47	...	...	...	...	...	...	0·09
		Darjeeling ...	0·03	...	...	0 26	0·32	...	0·83	0 01	0·07	...	...	0·03	0·20	0·07	...	...	...	...	...	0·19
		Kalimpong ...	0·03	...	.	0·22	...	...	0·55	0·03	0·04	...	0·10	...	...	...	...	...	...	...	0·70	1 01
		Kurseong ...	0·65	...	0·15	0·46	0·12	0·45	1 08	0·04	...	...	...	0·13	0·34	...	...	...	...	...	...	7·40
	British Bhutan	Pedong ...	0·23	...	0·03	0·05	0·04	0·28	0·50	0·03	0·10	...	0·24	...	0·08	...	...	...	...	...	0·38	0·80
		Mongpoo ...																				
EAST BENGAL	Chittagong ...	Cox's Bazar ...	1·53	...	...	0·30	...	...	2·13	1·32	0·04	...	...	...	...	...	...	...	...	0·13	0·26	0·35
		Chittagong ...	2·82	...	...	0·70	...	0·23	1·38	0·13	...	...	...	...	...	...	...	..	...	0 07	1·20	1·37
		Kutubdia ..	4·82	..	...	...	...	0·22	4 65	0·59	...	...	...	...	...	...	...	...	...	...	0·50	0·87
		Satkanya ...	1·97	...	...	0·62	...	0·13	2·25	0·80	...	...	...	0·38	...	...	...	...	...	0·09	2·75	1·55
		Kodala ...																				
		Fenoa ...	2 46	...	0·11	0·57			2·70	0·15												
		Mirsarai ...	1·95	.	...	1·19	0·30	0·46	1·63	0·31	...	...	...	...	...	...	...	...	...	0·21	0·89	0·64
		Chandpore ...		1·90	...	...	...	0·62	0·90							...	...	...	...	..	1·20	2·92
	Chittagong Hill Tracts.	Rangamati ...	1·88	..	..	0·19	...	0·85	4 60	0·52	...	...	...	0·94	...	...	...	...	0·24	0·41	0·59	0·45
		Bandarban ...	1·42	...	0·88	0·33	0 32	0·75	2·50	0·22	...	...	0·44	...	...	...	...	...	...	0·15	2·50	2·09
	Backergunge...	Patuakhali ...	1·08	...	...	0·25	0·03	0·72	0·68	0·62	...	0·17	0·33	...	...	...	...	...	...	...	...	0·43
		Firojpur ...	0·31	...	.	0·69	...	1·77	0·42	0·95	...	0·39	0·20	...	...	...	...	...	...	...	...	...
		Barisal ...	2·70	...	...	1·80	...	1·01	0·45	0·82	...	...	1·45	...	...	...	...	...	...	...	...	...
		Gournaddi ...	2·45	...	...	0 94	...	1·48	0·35	1·86	...	...	0·25	...	...	...	...	...	...	...	...	...
		Bhola ...	4·10	...	...	0·90	..	1·12	0·42	0·58	...	0·05	0·12	...	...	...	...	...	...	...	...	...
		Doulatkhan ..	5 13	...	...	1·91	...	0·62	0·65	0·30	...	..	0·14	...	...	...	...	...	...	...	...	...
		Bauphal ...	...	...	...	...	0·72	2·25	0·76	0·53	...	...	0·89	0·12	...	...	...	...	...	...	...	...
	Noakhali ...	Noakhali ...	2·38	...	...	0 77	...	0·40	0·50	0·37	...	...	0·02	...	...	...	...	...	...	...	0·01	...
		Fenny ...	0·53	...	...	0·50	0·42	1·75	1·50	0 52	...	...	...	...	...	...	...	...	...	0·60	0·55	...
		Harishpur ...	4·70	...	...	0·18	...	0·11	0 40	0·66	...	...	0·01	...	...	...	...	...	...	0·06	0·44	0·20
		Ramganj ...	1·05	..	...	0·79	...	0·57	0 68	1·48	...	...	0·45	...	...	...	...	...	...	...	...	...
	Faridpur ...	Madaripur ...	1·00	...	...	1·12	...	0·13	0·41	1·32	...	...	0·55	...	...	...	...	...	...	...	...	...
		Faridpur ...	1·35	...	.	0·52	0·06	0·38	0·31	0·30	...	...	0·12	...	...	...	...	...	...	...	...	...
		Goalundo ...	3·12	...	...	0·75	...	0·20	0·40	...	...	...	..	...	...	0·15	...	...	...	...	...	...
	Dacca ...	Munshiganj	2·08	...	...	1·46	0·09	1·80	0·73	0·52	...	...	0·18	...	...	...	...	...	...	...	...	...
		Dacca ...	2·35	...	...	0·36	0·06	0 82	0·64	1 00	...	...	...	...	...	...	...	...	...	...	...	...
		Narainganj	2·38	.	...	0·89	0·34	0·74	0 48	0·32	...	...	0·04	...	...	...	...	...	...	...	...	...
		Manikganj	1·79	..	...	2·99	0·55	0·06	0·04	0·19	...	...	0·24	...	...	...	...	...	...	...	...	...
		Joydebpur ...	0·47	...	0·16	0·74	...	0·34	0 02	0·32	...	...	0·06	...	...	...	...	...	...	...	...	...
	Hill Tippera	Agartola ...	...	...	...	0·28	2·78	1·13	..	1·85	...	...	...	...	...	...	...	...	...	...	...	...
	Tippera ...	Comilla ...	1·39	...	0·79	0·93	5·31	0·96	0·23	1·39	...	0·15	0·18	...	...	...	...	...	...	...	..	...
		Chandpur ...	2·80	...	..	0·57	...	0·47	0·88	1·67	...	...	0·22	...	...	...	...	...	...	...	...	...
		Brahmanbaria	0·75	...	..	1·15	0·52	1·75		0·45	...	...	0·35	...	...	...	...	...	...	...	...	...
		Ramchandrapur.	0 05	...	...	1·05	1·09	0·36	0·06	0·41	...	...	...	...	...	...	...	...	...	...	...	...
		Nasirnagar...	1·10	...	...	0·50	0·75	0·95	..	0·45	...	...	...	...	...	...	...	...	...	...	...	...
		Daudkandi ...	1·75	..	...	0·25	0·20	...	0·30	0·65	...	...	0·10	...	...	...	...	...	...	...	...	...
		Kasba ...	1·10	0·08	0·10	2·60	2·20	1·00	0·31	0·80	...	...	...	...	...	...	...	...	...	...	...	...
		Laksham ...	1·85	...	...	...	0·85	1·23	1·50	1·85	...	...	...	...	...	...	...	...	...	...	...	...
	Mymensingh	Kishoreganj	0·15	...	..	0·42	0·54	2·07	...	1·38	...	1·06	1·59	...	...	...	...	..	...	...	...	...
		Atia (*Tangail*)	0·23	...	0·35	..	1·12	2·37	...	0·51	...	...	0 33	...	...	...	...	...	...	...	...	...
		Mymensingh	0 02	...	...	0·84	1 43	1·22	0·15	0·82	...	1·22	.	...	...	0·03	...	...	...	...	...	...
		Jamalpur ...	...	...	...	0·80	0·51	1·18	..	0.78	...	0·39	0·17	...	...	...	...	...	...	...	...	...
		Netrokona ...	...	...	...	1·41	0·40	1·07	..	0·85	...	...	...	...	...	...	...	...	...	...	...	...
		Subarnakhali	..	...	...	0·35	0·22	1·83	0·31	0 50	...	...	...	...	...	...	...	...	...	...	...	...
		Durgapur ..	0·60	...	...	...	1·60	0·60	..	..	...	...	...	...	...	...	...	...	...	...	...	...
		Sherpur Town	...	...	...	0·61	2 76	1·73	...	1·17	...	...	0·44	...	...	...	...	...	...	...	...	...
		Dewanganj ...							..	2·80	...	...	...	...	...	...	...	...	...	...	...	...
NORTH BIHAR	Purnea ...	Kishanganj ...	...	...	1 20	0·15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Araria ...	...	...	..	0·83	...	...	...	...	...	...	...	0·03	0·56	...	...	...	...	...	...	...
		Purnea ...	...	..	0·15	0·17	.	0·68	0·05	...	...	0·03	...	...	0·21	...	...	...	...	...	...	...
		Gondwara (*Korah*).	...	0·15	...	...	1·83	...	0·12	...	...	...	...	0·20	...	...	...	...	...	...	...	...
		Barsoe ...	...	...	1·60	..	0·80	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Forbesgunj ...	..	...		0·80	...	...	...	...	0·63	...	...	...	0·20	...	...	...	...	...	...	...
		Kaliaganj ...	.	...	0·50	1·00	...	...	.	...	...	...	...	...	0·20	...	...	...	...	...	...	...
	Bhagalpur ..	Madhipura ...	...	...	...	0·22	0·25	...	0·25	...	...	...	...	...	0·06	...	...	...	...	...	...	...
		Bongaon (Sylabad).				0·22			...	...	...	...	...	0·11	...	...	...	...	...	...	...	...
		Supaul ...	..	...	..	...	...	...	0·25	...	...	...	...	0·04	0·10	...	...	...	...	...	...	...
		Protabganj ...	...	..	..	...	...	...	..	...	...	...	...	0 27	1·49	...	...	...	...	...	...	...
		Bhagalpur ...	...	...	0·57	1·28	0·65	0·25	0·42	0·22	...	...	...	...	...	...	...	...	...	...	...	...
		Banka ...	...	...	.	1 06	...	0·24	1·69	..	...	...	...	...	...	...	...	...	...	...	...	...
		Kolgong ...	...	...	0·22	0·91	0·09	0·10	.	0·23	...	...	...	...	1·01	...	...	...	...	...	...	...

in Bengal in May 1893—*continued.*

21	22	23	24	25	26	27	28	29	30	31	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 16th May to 31st May 1893.	Average rainfall from 16th May to 31st May.	Station.	District.	Meteorological division.
...	...	...	...	...	0·26	2·45	1·20	0·17	...	2·02	9	5·08	8·96	4·13	2·45	6·10	2·49	Malda ...	Malda ...	NORTH BENGAL *concld.*
...	...	...	...	0·05	0·08	0·80	0·83	0·04	...	0·04	4	5·62	3·02	4·86	0·83	1·84	3·04	Chanchal.		
...	...	...	...	...	0·62	0·73	1·37	0·31	...	0·60	8	?	5·59	?	1·42	3·63	?	*Gajol.*		
...	...	...	...	...	0·35	2·59	1·50	0·05	0·03	0·09	9	?	11·71	?	3·55	4·61	?	*Sibganj.*		
...	...	..	...	...	0·31	2·95	1·80	...	...	0·72	10	7·33	15·03	6·24	4·30	5·78	3·70	Mohadebpur ..	Dinajpur.	
...	...	..	...	0·21	...	0·73	0·94	0·06	...	1·76	6	5·75	4·60	4·70	1·76	3·70	3·10	Churamon.		
...	...	...	...	...	...	0·35	0·58	0·40	...	...	8	6·62	3·34	6·23	0·82	1·33	3·70	Raiganj.		
...	...	...	..	...	0·10	0·34	0·98	0·11	3·33	0·27	10	7·60	7·50	7·22	3·33	5·13	4·83	Dinajpur.		
...	...	...	...	...	...	1·33	1·17	0·23	...	1·38	8	6·38	9·08	6·09	2·94	4·10	5·23	Baloorghat.		
...	...	0·13	...	..	...	...	...	0·32	0·28	...	6	?	5·10	?	3·22	0·73	?	*Thakurgaon.*		
...	...	...	...	...	0·36	1·40	3·25	0·10	...	0·65	8	10·05	6·95	8·89	3·25	5·76	5·17	Bhawaniganj (*Gyabanda*).	Rangpur.	
...	..	..	...	...	...	0·29	1·11	0·61	1·35	0·11	8	10·40	4·57	10·22	1·35	3·47	6·73	Rangpur.		
...	...	...	...	...	0·15	0·56	1·12	0·40	1·84	2·70	9	13·36	8·40	13·78	2·70	6·77	7·74	Kurigram.		
...	...	...	...	...	...	2·20	3·83	...	...	0·70	6	?	12·30	?	3·83	6·73		Gobindpur.		
...	...	...	...	...	...	0·04	0·45	0·06	1·22	0·07	3	10·14	2·02	12·03	1·22	1·84	8·68	Bazdogra. (*Nilphamari.*)		
...	...	0·42	...	...	...	0·87	1·46	...	...	0·72	6	?	4·68	?	1·47	3·47	?	*Ulipur*		
...	...	...	...	...	...	0·48	0·47	...	...	0·92								Sundergunge.		
...	...	...	...	...	0·03	...	0·00	0·01	3·16	0·58	5	12·00	5·88	11·96	3·46	4·28	7·44	Jalpaiguri ..	Jalpaiguri.	
...	...	.	...	...	0·65	...	0·28	...	0·66	3·95	7	?	7·10	?	3·95	5·54	?	*Alipore Duar.*		
...	...	..	...	...	0·65	...	0·18	...	1·11	1·99	8	?	5·90	?	1·99	4·13	?	*Falacotta.*		
...	0·20	...	...	...	0·06	0·06	0·30	0·22	0·12	0·93	6	?	3·22	?	1·27	1·80	?	*Debiganj.*		
...	..	...	0·03	..	0·27	...	0·04	1·72	1·70	10·15	10	?	24·16	?	10·15	19·71	?	*Bhagatpur (Nagrakatta).*		
...	0·20	0·01	...	...	0·01	0·12	0·45	0·68	0·16	5·71	10	12·58	9·82	13·96	5·71	7·34	9·40	Dinhatta ...	Kuch Bihar.	
...	...	...	...	...	0·25	...	0·62	0·13	0·46	3·24	11	14·28	7·20	14·76	3·24	4·81	8·00	Kuch Bihar.		
...	...	..	..	...	...	...	0·12	...	0·92	0·43	6	11·83	3·81	12·15	1·30	1·47	8·26	Mekliganj.		
...	...	...	...	...	0·56	...	0·56	0·04	0·60	1·62	9	13·33	5·97	12·68	1·62	3·43	8·34	Mathabhanga.		
...	0·11	...	...	...	0·38	...	0·33	1·48	0·35	0·89	23	?	8·63	?	1·48	4·79		Gnatong ...	Sikkim.	
...	...	...	0·10	...	0·09	...	0·11	0·12	0·62	2·32	12	16·63	11·84	20·33	4·25	7·01	13·14	Buxa ...	Darjeeling.	
...	...	...	.	...	0·18	...	0·03	0·04	6·25	3·34	7	11·27	13·06	8·80	6·25	9·93	6·03	Siliguri.		
...	0·11	...	..	..	0·77	0·06	0·03	0·17	0·23	0·13	10	13·47	3·31	8·53	0·83	1·49	4·34	Darjeeling.		
...	...	...	...	0·07	0·31	..	...	0·04	..	0·24	7	10·25	3·40	5·67	1·01	2·37	3·64	Kalimpong.		
...	...	...	...	...	0·36	0·18	0·02	0·46	0·88	0·39	14	?	13·02	?	7·40	9·60	?	Kurseong.		
...	0·02	...	..	0·05	0·39	0·03	0·05	0·19	0·37	0·42	11		4·19		0·80	2·61		Pedong ...	British Bhutan	
																		Mongpoo.		
...	0·82	0·39	1·80	2·81	1·70	8·30	3·52	3·28	0·02	6·53	16	10·11	35·23	10·36	8·30	29·91	5·18	Cox's Bazar ..	Chittagong .	EAST BENGAL.
0·03	0·51	.	..	0·71	1·02	2·93	8·03	3·71	0·31	0·75	15	9·90	25·99	9·63	8·03	29·64	4·76	Chittagong.		
1·19	0·59	0·23	0·65	1·73	1·61	4·00	6·04	0·30	0·18	1·60	17	?	29·77	?	6·04	19·49	?	*Kutubdia.*		
0·34	0·43	...	0·15	0·85	1·40	3·05	7·23	0·46	0·40	0·98	18	?	26·15	?	7·25	29·00	?	*Satkanya.*		
																		Kodala.		
							8·60	1·29	0·35									Fenoa.		
0·36	0·21	...	...	0·24	0·59	2·16	4·98	1·20	0·24	0·12								Mussarai.		
...	..	...	1·03	1·12	1·13	7·50	7·50	1·75	0·45	2·08			17·68		4·98			Chandpore.		
...	0·14	...	..	0·11	0·32	2·12	7·95	6·81	0·30	1·45	18	11·50	29·87	10·13	7·95	20·80	4·16	Rangamati ...	Chittagong Hill Tracts.	
0·76	0·43	..	...	0·60	0·71	3·79	0·76	0·43	...	...	18	?	19·08	?	3·79	12·22	?	*Bandarban* ...		
...	...	0·25	0·27	3·30	9·25	3·20	0·21	...	...	...	14	9·50	20·79	8·23	9·25	16·91	4·37	Patuakhali ...	Backergunge.	
...	...	0·35	0·71	1·53	9·18	2·48	0·86	0·07	...	...	13	8·63	19·88	7·10	9·18	15·15	3·22	Pirojpur.		
0·52	...	..	0·22	1·23	4·82	5·60	0·56	0·22	...	...	13	10·00	21·40	8·03	5·60	13·17	3·88	Barisal.		
...	...	...	0·23	0·42	4·88	5·35	0·95	0·34	...	...	13	?	19·50	?	5·35	12·17	?	*Gournaddi.*		
0·47	0·09	...	...	0·91	2·90	6·27	0·28	0·05	...	0·27	12	9·84	18·33	7·24	6·27	11·24	3·46	Bhola.		
0·62	...	..	...	0·97	3·30	9·34	0·36	...	...	...	11	?	23·34	?	9·34	14·59	?	*Doulatkhan.*		
...	...	..	..	2·34	4·62	4·83	0·83	...	...	...	10	?	17·90	?	4·88	12·67	?	*Bauphal.*		
1·58	0·01	...	...	0·26	1·80	5·02	1·44	0·17	0·20	0·31	13	10·00	15·33	9·32	5·02	10·80	4·54	Noakhali ...	Noakhali.	
...	...	..	.	0·05	0·42	3·10	4·20	0·58	0·05	...	12	11·85	14·87	10·97	4·20	9·62	4·52	Fenny.		
0·67	...	...	..	0·80	1·39	2·75	4·29	0·03	...	...	12	?	16·60	?	4·70	10·63	?	*Harishpur.*		
...	...	...	..	0·13	1·37	10·40	0·85	0·34	0·08	...	11	?	18·18	?	10·40	13·17	?	*Ramganj.*		
...	...	...	...	0·22	3·56	5·11	1·45	0·41	...	...	11	10·05	15·28	9·24	5·11	10·75	3·83	Madaripur .	Faridpur.	
...	...	...	...	...	2·95	6·45	3·32	1·70	...	0·06	10	10·70	17·52	8·90	6·45	14·48	4·79	Faridpur.		
...	...	...	...	...	3·45	4·15	2·76	0·92	...	...	9	9·89	15·90	7·63	4·15	11·28	3·64	Goalundo.		
...	...	0·17	...	...	1·31	2·64	1·31	1·31	...	0·09	11	11·24	13·60	9·43	2·64	6·83	4·13	Munshiganj ...	Dacca.	
...	...	0·28	...	...	1·30	3·16	1·52	2·32	...	0·33	10	11·10	13·54	8·95	3·16	8·91	3·96	Dacca.		
...	...	0·67	...	...	1·09	2·64	1·34	1·24	...	0·38	12	11·71	12·57	8·20	2·64	7·33	3·58	Narainganj.		
...	...	0·15	...	...	1·62	3·82	2·10	0·79	...	0·25	11	10·20	14·59	8·35	3·82	8·73	3·87	Manikganj		
...	...	0·02	...	...	0·96	3·57	2·40	1·00	0·02	1·96	10	?	12·04	?	3·57	9·93	?	*Joydebpur.*		
...	...	...	...	...	0·11	3·14	2·04	2·10	0·44	1·33	10	11·53	15·20	10·74	3·14	9·16	4·10	Agartala .	Hill Tippera.	
0·05	0·20	0·13	0·08	...	0·30	6·33	1·40	0·55	...	1·93	16	11·47	22·30	10·35	6·33	10·97	4·34	Comilla ..	Tippera.	
...	...	...	..	0·15	1·68	3·53	0·83	0·34	...	0·70	12	12·00	13·84	8·62	3·53	7·24	4·00	Chandpur.		
...	0·05	0·10	...	...	0·30	4·30	1·35	1·43	...	1·25	12	11·84	13·75	10·81	4·30	8·78	4·40	Brahmanbaria.		
...	...	0·02	...	...	0·05	3·02	1·00	...	...	1·20	7	?	8·31	?	3·02	5·29	?	*Ramchandrapur.*		
...	...	...	...	...	0·75	2·35	2·10	2·75	..	0·75	10	?	12·46	?	2·75	8·70	?	*Nasirnagar.*		
...	...	...	...	...	0·50	1·90	1·50	1·40	...	0·55	11	?	9·10	?	1·90	5·85	?	*Daudkandi.*		
...	...	...	...	...	..	3·50	0·45	0·60	...	1·90	11	?	14·63	?	3·50	6·45	?	*Kasba.*		
...	...	0·75	...	...	0·25	5·05	2·50	0·25	0·42	0·35	12	?	16·85	?	5·05	9·57	?	*Laksham.*		
...	0·14	...	...	...	0·61	5·08	2·50	1·91	...	2·05	13	11·74	19·30	10·19	5·08	12·20	4·57	Kishoreganj.	Mymensingh.	
...	...	...	...	...	1·16	3·62	6·55	0·58	...	2·89	11	9·79	19·71	7·04	6·55	14·80	3·23	Atia (*Tangail*).		
...	...	...	...	...	0·38	2·50	3·41	0·92	...	0·14	11	13·05	12·48	11·03	3·41	7·35	5·83	Mymensingh.		
...	...	...	...	...	0·23	1·45	2·65	0·12	...	...	10	10·32	8·28	8·79	2·65	4·45	4·03	Jamalpur.		
...	...	...	...	...	...	3·20	0·58	2·59	...	1·24	8	12·63	11·74	11·46	3·20	8·01	5·15	Netrokona.		
...	...	...	...	0·08	1·48	3·11	3·87	0·52	...	1·05	10	?	13·26	?	3·87	10·06	?	*Subornakhali.*		
...	...	...	...	...	...	1·80	2·20	0·70	1·50	0·15	8	?	9·15	?	2·20	6·35	?	*Durgapur.*		
...	...	..	...	...	...	2·46	2·47	0·30	...	0·48	9	?	12·42	?	2·76	5·71	?	*Sherepur Town.?*		
							4·35					?		?			?	*Dewanganj.*		
...	...	...	..	...	...	...	0·06	...	...	...	2	7·17	1·41	6·32	1·20	0·06	3·96	Kishanganj ...	Purnea	NORTH BIHAR.
...	...	...	...	...	0·25	...	...	0·05	...	...	3	5·89	1·72	5·62	0·83	0·30	3·41	Araria.		
..	...	...	...	...	0·01	0·06	0·03	...	0·02	...	4	4·89	1·41	4·51	0·68	0·12	2·93	Purnea.		
...	...	...	...	...	0·13	...	...	...	0·44	1·04	7	?	4·21	?	1·83	1·61	?	*Gondwara (Korah).*		
...	...	...	...	...	0·10	0·30	...	0·05	...	0·30	5	?	3·35	?	1·80	0·75	?	*Barsoe.*		
...	0·23	...	...	...	...	...	...	...	...	...	4	?	1·86	?	0·80	0·23	?	*Forbesganj.*		
...	...	...	...	...	...	...	...	...	1·00	...	4	?	2·70	?	1·00	1·00	?	*Kaliaganj.*		
...	...	...	...	...	0·04	...	...	...	0·12	1·50	5	5·00	2·44	4·05	1·50	1·66	2·39	Madhipura ..	Bhagalpur.	
							...	0·27	...	0·28		?		?			?	Bongaon. (Sytabad).		
...	...	0·32	...	...	...	0·16	...	...	0·16	...	5	4·55	1·03	3·80	0·32	0·64	2·17	Supaul.		
...	...	...	...	...	...	..	..	...	...	...	2	?	1·76	?	1·40	Nil	?	*Protabganj*		
...	...	...	...	...	...	0·52	0·36	...	0·60	...	9	4·15	4·87	2·50	1·23	1·48	1·50	Bhagalpur.		
...	...	...	...	...	...	1·72	0·25	...	0·53	0·08	6	3·60	5·57	2·68	1·72	2·38	1·73	Banka.		
...	...	...	...	..	...	0·40	0·06	...	...	...	6	?	3·11	?	1·01	0·55	?	*Kolgong.*		

Table of Rainfall recorded at Stations

Meteorological division.	District.	Station.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
NORTH BIHAR—concld.	Darbhanga ..	Tajpur ..	...	...	...	1·80	0·85	...	0·57	...	...	...	...	...	...	...	...	...	...	...	...	...
		Darbhanga ...	...	...	...	2·22	0·70	0·07	0·32	...	...	0·61	...	...	...	...	...	...	...	...	...	...
		Madhubani ..	...	...	1·58	...	0·10	...	0·29	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bahera ...	...	...	...	2·17	0·41	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Roshera ...	...	...	...	0·02	0·31	...	0·45	...	...	...	...	...	0·12	...	...	...	...	...	...	...
	Muzaffarpur	Sitamarhi ..	...	...	0·63	...	...	...	0·34	...	...	0·15	...	...	0·15	...	...	...	...	...	...	...
		Muzaffarpur	...	...	...	0·46	0·50	...	0·53	...	...	0·12	...	...	...	...	...	...	...	...	...	...
		Hajipur ...	...	...	...	0·87	0·81	...	...	0·02	...	...	...	...	...	...	...	...	...	...	...	...
		Paru ..	...	...	0·11	...	0·18	...	0·12	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mahua (Chitwara).	...	...	0·07	0·38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Siuhar ...	...	...	...	0·36	0·18	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Pupri ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Champaran	Motihari ..	...	...	...	0·47	0·18	...	0·36	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bettiah ..	...	...	...	0·15	0·26	...	0·27	...	0·30	...	...	...	...	...	...	...	...	...	...	...
		Bagaha ..	...	...	...	0·92	0·54	0·10	0·47	...	2·83	0·43	...	...	...	...	...	...	...	...	...	...
		Burhurwa ..	...	...	...	0·71	0·48	...	0·22	...	0·15	...	...	...	...	...	...	...	...	...	...	...
	Saran	Gopalganj ..	...	...	...	...	0·70	0·11	...	...	0·21	...	...	...	...	...	...	...	...	...	...	...
		Siwan ...	...	...	...	0·95	0·11	...	...	0·11	...	...	...	...	...	...	...	...	...	...	...	...
		Chapra	...	...	...	0·38	0·45	0·05	...	0·03	...	...	...	...	...	...	...	...	...	...	...	...
		Sreepore ..	...	...	...	...	0·90	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
SOUTH BIHAR	Shahabad	Buxar .	...	...	...	0·15	0·24	0·04	0·82	0·08	...	...	...	...	...	...	...	...	...	...	...	...
		Dehri ..	...	...	...	0·47	0·04	0·02	0·20	0·74	...	...	...	...	...	...	...	...	...	...	...	...
		Bhabhua .	...	...	...	...	0·10	...	0·87	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sasaram ..	...	...	...	...	...	...	1·40	...	...	...	...	...	...	...	...	...	...	...	...	...
		Arrah ...	...	...	1·00	0·63	...	0·03	0·34	...	...	...	...	...	...	...	...	...	...	...	...	...
		Mohaniah ..	...	...	...	...	...	0·13	0·06	...	...	...	...	...	...	...	...	...	...	...	...	...
		Khiri ..	...	...	...	0·60	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Ageaon ...	...	...	0·65	...	0·35	...	...	0·50	...	...	...	...	...	...	...	...	...	...	...	...
		Ramnagar ...	...	...	...	0·29	0·55	...	1·31	...	...	...	...	...	...	...	...	...	...	...	...	...
		Koath ..	...	...	0·54	...	...	...	...	0·35	...	...	...	...	...	...	...	...	...	...	...	...
		Sikroul ...	...	...	...	...	...	...	1·04	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bassawan .	...	...	...	...	...	0·05	0·84	...	...	...	...	...	...	...	...	...	...	...	...	...
		Manaharpur	...	...	...	...	0·41	...	0·63	...	...	...	...	...	...	...	...	...	...	...	...	...
	Gaya	Aurungabad ..	...	...	...	...	0·18	...	0·06	0·67	0·05	...	...	...	...	...	...	...	...	...	...	...
		Gaya ..	...	...	...	0·18	0·58	...	...	1·02	...	...	...	...	...	...	...	...	...	...	...	...
		Nawada ..	...	...	0·53	0·05	0·21	...	...	0·69	...	0·02	...	...	...	...	...	...	...	...	...	...
		Jahanabad ..	...	...	...	0·09	0·70	...	...	1·32	0·07	...	...	...	...	...	...	...	...	...	...	...
		Arwal ...	...	...	...	0·55	0·30	...	...	0·76	...	...	...	...	...	...	...	...	...	...	...	...
		Daudnagar	...	...	...	0·42	...	...	...	0·68	...	...	...	...	...	...	...	...	...	...	...	...
		Sherghati ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Rajauli .	0·10	...	...	...	0·30	...	...	0·41	...	0·32	...	...	...	...	...	...	...	...	...	...
		Pakri Barawan.	...	...	1·20	...	0·46	...	...	0·70	...	1·25	...	...	...	...	...	...	...	...	...	...
	Patna	Patna .	...	...	...	0·15	0·94	0·04	...	0·07	...	...	...	...	...	...	...	...	...	...	...	...
		Dinapore ..	...	...	...	0·32	0·66	0·07	...	0·04	...	...	...	...	...	...	...	...	...	...	...	...
		Bihar ..	...	...	...	0·40	0·73	...	...	1·14	...	1·40	...	...	...	...	...	...	...	...	...	...
		Barh ...	...	...	...	0·85	0·85	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Bickram ...	...	...	...	0·27	1·35	...	...	1·00	...	...	...	...	...	...	...	...	...	...	...	...
		Hilsa ..	...	...	...	0·50	0·72	0·13	...	1·42	...	...	...	...	...	...	...	...	...	...	...	...
	Monghyr	Begusarai ..	...	...	0·17	1·23	0·77	...	0·14	...	...	...	...	...	...	...	...	...	...	...	...	...
		Monghyr ..	...	...	...	1·03	0·67	...	0·34	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jamui ..	...	...	0·03	1·50	0·36	...	...	0·61	...	0·91	...	...	...	...	...	...	...	...	...	...
		Gogri ..	...	...	...	3·18	0·73	...	0·95	...	...	...	...	...	...	...	...	...	...	...	...	...
		Sheikpura	...	...	...	1·56	...	0·70	...	0·45	...	2·22	...	...	...	...	...	...	...	...	...	...
		Chakai Bamda	0·02	...	...	1·12	0·44	...	...	0·41	...	0·55	...	...	...	...	...	...	...	...	...	...
		Chupreen ...	...	...	1·95	0·10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Sonthal Parganas.	Rajmahal ..	...	...	0·61	1·00	...	0·06	0·57	0·15	...	...	...	...	3·59	...	...	...	...	...	...	...
		Godda ...	...	...	0·06	1·12	...	0·12	1·01	1·32	0·02	...	...	...	0·56	...	...	...	...	...	...	...
		Pakour .	...	...	1·43	1·22	...	0·83	...	1·40	0·23	0·04	...	...	...	...	...	...	...	...	...	...
		Naya Dumka	...	...	...	1·53	...	0·22	0·05	0·57	0·02	0·03	...	0·66	1·02	...	...	...	...	...	...	...
		Deoghur	...	...	...	1·05	0·30	...	...	0·30	...	0·10	...	...	0·50	...	...	...	...	...	...	...
		Jamtara ...	...	...	1·13	0·54	...	0·30	0·22	0·33	0·15	0·53	...	...	...	...	...	...	...	...	...	...
		Belbadda ...	...	1·74	...	1·35	...	...	0·18	0·94	...	...	...	...	1·29	...	...	...	...	...	...	...
		Nanihat ..	...	...	...	2·15	...	...	0·3	0·7	...	...	...	...	...	...	...	...	...	...	...	...
CHOTA NAGPUR.	Hazaribagh	Pachamba (Giridi).	...	...	...	0·15	0·01	...	0·75	0·30	...	2·00	...	0·12	0·25	...	...	...	...	...	...	...
		Hazaribagh ...	...	0·30	0·15	0·31	0·01	...	1·12	...	0·02	0·46	...	...	...	...	...	...	...	...	...	...
		Semtagurah ..	...	...	...	...	0·93	...	...	...	...	...	...	0·09	...	...	...	...	...	...	...	...
		Mahudi Hills	...	...	0·57	...	...	0·25	...	...	...	1·16	...	...	...	...	...	...	...	...	...	...
		Jhoomrah Hills	...	...	...	0·50	...	0·06	0·49	...	0·70	...	...	...	...	...	...	...	...	...	...	...
		Barhi ...	...	...	0·12	1·58	0·36	...	...	...	...	0·06	...	...	...	...	...	...	...	...	...	...
		Chatra ..	...	...	0·18	...	...	...	...	...	...	...	0·05	...	1·00	...	...	...	...	...	...	...
		Karagdeha ...	...	...	...	0·55	0·29	...	0·37	0·18	...	0·20	...	...	0·30	...	...	...	...	...	...	...
		Ramghar ..	...	...	0·72	0·23	0·33	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Lohardaga ..	Lohardaga ...	...	0·14	...	0·49	...	0·04	...	...	0·64	...	...	...	...	...	...	...	...	...	...	...
		Ranchi ...	...	...	1·29	...	...	0·23	0·32	...	0·07	...	...	0·05	...	...	...	...	...	...	...	...
		Silli ...	...	...	0·31	...	0·10	...	...	0·80	...	...	...	0·70	...	...	...	...	...	...	...	...
		Sirguja ...	...	...	...	...	0·17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Jashpur ..	...	...	0·95	...	0·67	...	...	0·34	0·62	0·15	...	...	0·02	...	...	...	...	...	...	...
		Gangpur ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Palamau ..	Palamau (Daltonganj).	...	...	...	...	...	...	...	0·02	...	...	...	...	...	...	...	...	...	...	...	...
		Balumat ...	...	...	0·02	0·34	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Hoseinabad ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Singhbhum ..	*Garwah* ..	...	...	0·05	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Chaibassa ...	...	...	0·18	...	0·70	0·09	0·24	0·07	0·84	0·03	...	0·32	...	...	...	...	...	...	...	...
		Chakradharpur.	...	...	...	...	1·00	...	0·16	0·24	0·30	...	...	0·59	...	...	...	...	...	...	...	...
		Ghatsila ...	...	...	0·63	0·90	0·17	...	...	...	...	...	...	0·26	0·40	...	...	...	...	...	...	...
		Baharagura	...	...	...	...	1·18	1·02	...	0·20	...	...	...	...	0·35	...	...	...	...	...	...	...
	Manbhum ..	Gaikura ...	...	0·40	...	0·11	0·90	...	0·25	0·52	0·21	...	0·48	...	...	...	...	...	...	...	...	...
		Kankapur ...	...	...	0·35	0·24	0·16	0·15	...	...	0·34	...	...	...	0·49	...	...	...	...	...	...	...
		Purulia ...	...	...	0·08	...	0·70	...	...	0·12	0·75	...	...	...	0·08	...	...	...	...	...	...	...
		Gobindpur ...	...	...	...	...	0·27	0·05	0·54	0·21	0·23	1·25	...	...	...	...	...	...	...	...	...	...
		Raghunathpur.	...	...	0·39	...	...	0·15	0·32	[illegible]	0·45	2·05	...	...	...	...	...	...	...	...	...	...
		Barabhum ..	...	...	0·30	...	...	...	0·20	...	0·60	...	...	...	...	...	...	...	...	...	...	...
		Jhalda ...	...	0·85	0·07	...	0·45	0·10	...	0·33	...	...	0·19	0·27	...	...	...	...	...	...	...	...
		Chas ...	...	...	0·67	...	...	...	0·53	0·20	...	0·36	...	...	0·10	...	...	...	...	...	...	...
		Pandra ...	...	...	0·38	...	0·84	...	0·30	0·50	0·20	0·35	...	...	...	...	...	...	...	...	...	...
	Orissa Tributary Mahals.	Keonjher ...	...	...	0·42	0·36	1·10	...	...	0·85	0·49	...	...	0·03	...	...	...	...	...	...	...	...
		Anundpur ...	...	...	...	0·79	0·11	0·44	...	...	0·06	0·20	0·07	...	0·80	0·08	...	...	...	...	...	...
		Talcher ...	...	...	...	1·52	...	0·07	...	...	0·30	0·60	0·22	...	0·16	...	...	...	...	...	...	...
		Narsingpur ...	...	...	0·30	...	...	...	...	0·43	0·18	0·55	0·03	...	...	...	...	...	...	...	...	...
		Angul ...	...	...	...	0·83	...	0·45	...	...	...	0·12	...	1·17	...	...	...	...	...	...	...	...
		Dhenkanal ...	0·40	...	...	1·21	...	...	...	0·23	0·01	...	...	...	0·71	0·12	...	...	...	...	...	...
		Bispura ...	...	...	...	...	...	...	...	...	...	...	...	...	0·12	...	...	...	...	...	...	...
		Kumpsbongai																				
		Baramba ...	...	...	...	0·55	...	0·15	...	...	0·82	...	...	0·03	...	2·32	...	...	...	...	...	...

in Bengal in May 1893—*concluded.*

21	22	23	24	25	26	27	28	29	30	31	Number of rainy days.	Average number of rainy days.	Total rainfall for the month.	Average rainfall for the month.	Heaviest rainfall during the month.	Total rainfall from 16th May 1893 to 31st May 1893.	Average rainfall from 16th May to 31st May.	Station.	District.	Meteorological Division.
...	...	0·52	...	...	0·03	...	...	...	...	...	4	2·74	3·77	2·66	1·80	0·55	1·35	Tajpur ...	Darbhanga.	NORTH BIHAR —*concluded.*
...	...	...	...	...	...	..	...	...	...	0·94	5	4·05	4·95	2·72	2·22	0·94	1·38	Darbhanga.		
...	...	...	..	...	0·30	...	...	0·33	...	...	5	4·05	2·51	1·99	1·58	0·63	1·18	Madhubani.		
...	...	...	...	...	0·53	0·30	...	0·47	...	...	5	?	3·88	?	3·17	1·30	?	*Bahera.*		
...	...	...	...	...	...	...	...	...	...	...	4	?	1·50	?	0·62	Nil	?	*Roshera.*		
...	...	...	...	...	...	...	...	0·04	0·73	...	5	4·74	2·04	2·66	0·78	0·77	1·35	Sitamarhi	Muzaffarpur.	
...	...	...	...	...	...	...	0·31	..	0·21		6	3·35	2·13	2·72	0·53	0·52	1·38	Muzaffarpur		
...	...	...	...	...	...	.	...	0·15	0·12	0·02	4	2·63	1·99	1·99	0·87	0·29	1·18	Hajipur.		
...	...	...	...	...	...	..			0·52			?		?			?	*Paru.*		
...	...	...	..	...	..	...						?		?			?	*Mahua* (Chitwarra.)		
...	...	...	...	...	...	..						?		?			?	*Siwhar.*		
...	...	...	...	...	...	...						?		?			?	*Pupri.*		
...	...	...	...	...	...	0·46	0·28	...	1·07	...	6	4·25	2·82	2·50	1·07	1·81	1·39	Motihari ..	Champaran.	
...	0·05	...	...	...		1·16	...	...	...	0·25	6	3·61	2·44	2·68	1·16	1·46	1·17	Bettia.		
...	0·71	...	...	..	0·06	..	0·05	0·30	0·83	...	9	?	7·24	?	2·83	1·95	?	*Bagaha.*		
...	...	...	...	...	...	0·11	...	..	0·58	...	6	?	2·25	?	0·71	0·69	?	*Burhurwa.*		
...	...	...	...	...	...	0·04	...	..	0·78	...	4	3·36	1·84	2·64	0·78	0·82	1·24	Gopalganj ...	Saran.	
...	...	...	...	...	...	0·45	...	0·33	...	0·18	6	2·90	2·15	1·84	0·95	0·96	1·10	Siwan.		
...	...	0·06	...	...	...	0·15	0·06	0·31	0·18	0·10	6	2·20	1·97	1·52	0·58	0·86	0·94	Chapra.		
...	...	...	...	...														Sereepore.		
...	...	...	...	...	...	...	...	...	...	0·30	4	2·15	1·63	1·03	0·82	0·30	0·65	Buxar ...	Shahabad ...	SOUTH BIHAR.
...	...	...	...	...	...	...	...	0·13	0·02	0·13	5	1·57	1·65	1·42	0·74	0·28	1·17	Dehri.		
...	...	0·18	...	...	...	0·09	...	...	0·62		4	1·70	1·86	1·16	0·87	0·89	0·59	Bhabhua.		
...	0·26	...	...	...	..	...	..	...	...	0·20	3	2·15	1·86	1·17	1·41	0·46	0·65	Sasaram.		
...	...	...	...	..	0·05	...	0·83	0·18	0·11	1·27	7	2·60	4·44	1·80	1·27	2·44	1·14	Arrah.		
...	...	...	...	..	...	...	...	...	...	0·10	2	?	0·59	?	0·40	0·49	?	*Mohaniah.*		
...	...	...	...	...	...	...	...	.	...	0·14		?		?			?	*Khiri.*		
...	...	..	...	...	0·10	...	0·15	0·20	0·60	0·61	8		3·16	?	0·65	1·66	?	*Ageaon.*		
...	...	...	...	...	..	...	...	...	...	...	3	?	2·15	?	1·31	Nil	?	*Ramnagar.*		
...	...	...	...	...	..	...	...	...	...	...	2	?	0·89	?	0·54	Nil	?	*Koath.*		
...	...	...	...	...	..	..	..	...	...	0·30	2	?	1·34	?	1·04	0·30	?	*Sikrohl.*		
...	...	...	...	...	...	...	...	...	...	...	1	?	0·89	?	0·84	Nil	?	*Bassawan.*		
...	...	0·08	...	...	...	..	...	...	...	...	2	?	1·12	?	0·63	0·08	?	*Manaharpur.*		
...	...	...	...	...	...	0·10	...	...	0·21	0·21	5	2·11	1·48	1·68	0·67	0·52	1·28	Aurungabad ...	Gaya.	
...	...	...	...	...	...	..	...	0·58	0·34	0·11	6	2·25	2·81	1·61	1·02	1·03	1·34	Gaya.		
...	...	...	...	...	...	0·17	...	0·12	1·86	...	6	2·53	3·65	2·02	1·86	2·15	1·40	Nawada.		
...	...	...	...	..	...	0·52	...	0·66	0·23	0·12	6	2·24	3·71	1·74	1·52	1·53	1·26	Jahánabad.		
...	...	...	...	..	...	...	0·11	0·36	2·21	...	6	?	4·29	?	2·21	2·68	?	*Arwal.*		
...	...	...	...	...	...	...	...	..	...	...	2	?	1·10	?	0·68	Nil	?	*Daudnagar.*		
...	...	0·05	...	...	...	0·09	...	...	...	...		?		?			?	*Sherghati.*		
...							...	...	...	...		?		?			?	*Rajauli.*		
...												?		?			?	*Pakri Barawan.*		
...	...	...	...	...	...	...	...	0·06	...		2	3·15	1·24	2·20	0·94	0·06	1·51	Patna	Patna.	
...	...	...	...	...	..	0·10	...	0·42	...	0·14	5	2·20	1·75	1·69	0·66	0·66	1·17	Dinapore.		
...	...	0·30	...	...	..	0·10	...	...	...	...	6	2·85	4·09	2·20	1·40	0·40	1·38	Bihar.		
...	...	0·53	...	...	0·13	...	...	...	...	...	4	2·40	2·36	2·26	0·85	0·66	1·35	Barh.		
...	...	...	...	...	...	...	...	0·70		0·47	5	?	3·79	?	1·35	1·17	?	*Bickram.*		
...	...	...	...	...	..	...	...	...	...	...	4	?	2·77	?	1·42	Nil	?	*Hilsa.*		
...	...	...	...	...	...	...	...	..	..	...	4	2·95	2·31	2·29	1·23	Nil	1·42	Begusarai .	Monghyr.	
...	...	...	...	...	...	...	..	...	..	...	3	2·85	2·04	2·51	1·03	Nil	1·64	Monghyr.		
...	...	...	...	...	...	0·19	...	...	...	...	5	3·70	3·60	2·19	1·50	0·19	1·34	Jamui.		
...	...	...	...	...	...	...	...	...	...	...	3	?	4·88	?	3·18	Nil	?	*Gogri.*		
...	...	...	...	...	...	...	..	..	...	...	4	?	4·93	?	2·22	Nil	?	*Sheikpura.*		
...	...	...	...	...	...	1·61	0·18	...	0·07	...	6	?	4·40	?	1·61	1·86	?	*Chahai Bamda.*		
...	...	...	...	...	...	...	...	...	..	0·40								Chupreon.		
...	...	...	...	...	...	1·64	0·74	...	0·25	1·26	9	5·63	9·87	5·05	3·59	3·89	2·63	Rajmahal ...	Sonthal Parganas.	
...	...	...	...	...	0·07	1·17	0·63	...	...	...	7	4·47	6·08	3·60	1·32	1·87	2·31	Godda.		
...	...	...	...	...	0·35	2·43	0·82	...	0·11	...	9	5·93	8·86	4·31	2·43	3·71	3·02	Pakour.		
...	...	...	...	...	0·98	2·36	1·32	...	...	...	8	5·22	8·76	3·48	2·36	4·66	2·14	Naya Dumka.		
...	...	...	...	...	0·43	2·95	1·37	...	...	...	8	4·45	7·02	3·15	2·95	4·77	1·73	Deoghur.		
...	...	0·34	...	...	0·75	3·11	0·32	...	...	...	11	5·60	7·72	3·45	3·11	4·52	1·94	Jamtara		
...	...	...	...	...	...		0·40	0·50	...	0·86	8	?	7·26	?	1·74	1·76	?	*Belbadda.*		
...	...	...	...	...	...	2·75	0·71	...	...	...		?		?			?	*Nanihat*		
...	...	...	...	...	0·55	2·16	0·05	0·11	0·47	...	10	4·58	6·92	2·29	2·16	3·34	1·50	Pachamba .. (Giridi).	Hazaribagh ...	CHOTA NAGPUR
...	...	...	...	...	0·16	0·64	...	0·14	1·41	0·39	9	4·16	5·11	2·34	1·41	2·74	1·50	Hazaribagh.		
...	...	...	...	...	0·32	0·59	0·18	0·11	0·46	2·72	8	4·18	5·70	2·58	2·72	4·38	1·48	Semtagurah.		
...	...	...	...	...	0·43	...	...	..	...	...	4	3·45	2·41	2·21	1·16	0·43	1·46	Mahudi Hills.		
...	...	...	...	...	0·80	2·30	0·10	0·50	0·10	0·90	10	3·35	6·90	2·89	2·39	4·70	1·64	Jhoomrah Hills.		
...	...	0·11	...	...	0·27	0·47	...	...	2·23	0·15	8	?	5·35	?	2·23	3·23	?	*Barhi.*		
...	...	...	...	...	0·36	0·16	...	...	0·49	...	5	?	2·24	?	1·00	1·01	?	*Chatra.*		
...	...	...	...	..	...	1·65	0·08	0·11	0·39	...	9	?	4·18	?	1·65	2·23	?	*Karagdeha.*		
...	...	...	...	0·66	0·84	...						?		?			?	*Ramghar.*		
...	...	...	...	...	0·32	0·05	...	..	...	...	4	3·57	1·68	2·53	0·64	0·37	1·79	Lohardaga ...	Lohardaga.	
...	...	...	...	...	0·94	1·03	...	0·39	...	0·55	7	5·10	4·87	3·17	1·29	2·91	1·95	Ranchi.		
...					1·10		1·00		0·60			?		?			?	*Silli.*		
...	1·20	...	...	...	...	0·50	..	0·90	...	0·50	5	?	3·27		1·20	3·10		Sirguja.		
...	...	...	...	0·23	...	0·02	0·01	...	...	0·69	7	?	3·70		0·95	0·95		Jashpur.		
...	...	0·85	...	0·06	...	...	...	...	...	0·82	2	?	1·73		0·85	1·73		Gangpur.		
...	...	0·13	...	...	...	0·14	...	...	0·01	...	2	2·53	0·30	1·41	0·14	0·28	1·05	Palamau. (Daltongunj).	Palamau.	
...	...	...	...	...	...	0·22	...	...	...	0·95	3	?	1·53	?	0·95	1·17	?	*Balumat.*		
...	...	...	...	...	...	...	...	...	0·72	...	1	?	0·72	?	0·72	0·72	?	*Hoseinabad.*		
...	...	...	...	...	...	...	...	...	...	...	Nil	?	0·05	?	Nil	Nil	?	*Garwah.*		
...	...	...	0·98	0·55	2·30	1·15	0·14	1·80	...	...	11	6·11	9·38	4·17	2·30	6·92	2·42	Chaibassa ...	Singhbhum.	
...	0·22	0·48	0·38	2·00	0·18	0·02	0·70	...	...	0·29	12	?	6·54	?	2·00	4·25	?	*Chakradharpur.*		
...	...	...	0·30	0·50	2·20	4·35	0·27	0·50	...	...	11	?	10·78	?	4·35	8·12	?	*Ghatsila.*		
...	...	...	0·95	1·95	3·00	2·21	0·30	1·78	...	...	10	?	12·94	?	3·00	10·19	?	*Baharagura*		
...	...	0·85	0·60	1·58	...	...	1·36	...	...	0·85	12	?	8·11		1·58	5·24		Gailkura.		
...	...	...	0·85	0·35	2·24	3·56	0·16	1·40	...	...	12	?	10·25		3·56	8·56	1·91	Kalikapur.		
...	...	...	...	...	1·29	4·65	0·25	0·24	...	...	7	5·45	8·07	3·57	4·65	6·34	1·15	Purulia .	Manbhum.	
...	...	...	...	...	0·82	2·90	0·89	...	...	1·11	9	3·63	8·27	1·96	2·90	5·72	?	Gobindpur.		
...	...	...	...	...	1·52	2·30	0·32	...	...	0·32	10	?	7·96	?	2·30	4·46	?	*Raghunathpur.*		
...	...	...	0·80	0·50	2·20	3·30	...	...	...	0·35	8	?	8·25	?	3·30	7·15	?	*Barrabhum.*		
...	...	...	..	1·64	1·88	...	0·11	...	0·17	0·33	11	?	6·39	?	1·88	4·13	?	*Jhalda.*		
...	...	...	...	...	0·40	2·50	0·17	1·00	...	...	9	?	5·93	?	2·50	4·07	?	*Chas.*		
...	...	...	...	...	1·24	5·13	0·15	0·02	...	...	9	?	9·71	?	5·13	6·54	?	*Pandra.*		
...	0·02	1·00	0·50	0·80	0·15	...	0·88	...	...	1·40	11	?	7·99	?	1·40	4·75		Keonjhur ...	Orissa Tributary Mahals.	
..	...	0·84	2·03	2·16	1·03	...	...	0·59	...	...	10	?	9·20	?	2·16	6·85		Anandapur.		
...	0·65	0·45	0·62	1·91	1·22	...	...	...	...	0·75	11	?	8·47	?	1·91	5·60		Talcher.		
...	0·63	...	0·31	..	0·62	1·70	...	...	...	0·32	9	?	5·29	?	1·70	3·60		Narsingpur.		
...	1·25	0·41	0·50	2·08	0·51	...	0·30	...	...	0·02	10	?	7·64	?	2·05	5·07		Angul.		
0·05	...	2·56	2·63	4·44	0·68	...	...	...	...	...	9	?	13·04	?	4·44	10·36		Dhenkanal.		
...	0·80	0·40	0·23	...	...	...	...	...	...	...	4		1·55	?	0·80	1·43		Bispara.		
																		Kunjabongar.		
...	...	0·94	1·13	1·20	1·41	...	...	...	...	...	8		8·55	?	2·32	4·68		Baramba.		

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL, AND OF THE METEOROLOGICAL OBSERVATIONS TAKEN IN ASSAM, FOR THE MONTH OF MAY 1893.

THE discussion of the weather experienced in Bengal during the past month is readily separated into three parts, because of the decided character of the conditions which prevailed at different times. During the first period, which was comparatively short, lasting only till the 8th, a disturbance, which originated to the west of the province, caused showery weather in all districts, and as the accompanying depression filled up rapidly, the pressure arrangement not only in Bengal, but also over the Bay, became very uniform and initiated what may be considered as the second period. This interval, which continued till the 17th, was characterised by very uniform pressure throughout, and consequently fine calm cloudless weather. The third period, from the 17th till the end of the month, is notable because of the cyclone, which, forming in the south of the Bay, advanced northwards into the north-west angle, and there developed into one of the most severe experienced at the head of the Bay during the past quarter of a century. There is a very intimate connection between the conditions during the second interval and the stormy weather which followed, but they are here separated for convenience of discussion. The effect of the calm weather which always precedes a disturbance in the Bay has been frequently discussed in meteorological publications, and though allowing that the history of the cyclone should be taken up from the 8th rather than from the 17th, the present method is taken for the sake of brevity.

During the first eight days the effects of two slight disturbances were felt in Bengal. Both came from the west, and were due to depressions of considerable depth, the first of which was filling up as the month began. With an interval of two or three days only the second came, and caused a rapid fall of pressure on the 7th in the western districts, especially in Chota Nagpur. It practically disappeared on the following day, as there was a rise equally rapid in the same districts. Easterly winds with cloudy skies and numerous local storms prevailed during these early days of May, but rainfall was more general on the 2nd and again on the 7th and 8th than on the other days. Though unusually late in the season, hail showers were reported from many places on the 7th, but this late occurrence of hail may possibly be accounted for during the present year by the very low temperature which has prevailed, and which was a very noticeable feature of the weather on the 7th in the western districts.

A noteworthy feature of the recovery of pressure in connection with both these depressions was its commencing in the north-east of the province, and from there spreading to the south-west, in consequence of which the area of low pressure was driven southwards, and the easterly circulation, instead of changing, as it would have done if the depressions had passed eastwards, became even more prominent.

After the 8th pressure became very uniform, and though showers continued to fall and temperature was very low for some time, weather steadily improved. By the middle of the month, fine cloudless weather prevailed, and almost for the first time during the present year heat was greater than the average for the season of the year. Over Bengal and the north of the Bay this fine weather continued till the 21st, but in the south of the Bay as well as at the Burmah stations unsettled conditions began to appear about the 17th.

Cyclonic storm from the 17th to the 29th.—From the 17th signs of unsettled weather appeared in the stronger winds at the Ceylon stations, and in the easterly directions in Burmah, but the disturbance had at that time probably not concentrated into a well-defined storm, as vessels proceeding up the Bay experienced strong winds but variable pressure. Gradients gradually became steeper in the south of the Bay as the area of stormy weather extended northwards, and as pressure fell briskly for several days at all the coast stations, the depression steadily widened and deepened till the 21st, when its influence at the Burmah and Orissa stations became more marked. The area of low pressure within which defect was more than ·15 inch then covered the whole of the north of the Bay. The sea was very rough at Diamond Island, and a fairly strong wind was blowing, but after a day or two both wind and sea began to moderate. This improvement in the east of the Bay was only temporary, as after the storm attained to great intensity in the north-west angle, the wind again strengthened at Diamond Island. While this improvement was going on the Burmah coast, the depression had become better defined in the north-west of the Bay, and it then appeared as if the disturbance was similar in character to the ordinary small storms which occur frequently in the rainy season.

On Monday, the 22nd, pressure was rising briskly in the south-east of the Bay and changes were small elsewhere, while wind velocity was low except at Diamond Island and in Ceylon. After this the motion of the depression was slow towards the north, the centre probably passing at no great distance from the North Orissa coast. On the 23rd pressure fell rapidly at False Point, and the wind blew from the north-east with steadily increasing velocity. By the evening of this day pressure had fallen to 29 inches, the velocity of the wind rose to 40 miles an hour, and incessant heavy rain fell. At 8 A.M. on the morning of the 24th, the centre was almost east of False Point, and wind velocity was increasing at all the stations on the north-west coast as well as over Lower Bengal, but rainfall, though very heavy in Orissa and gradually extending to South-West Bengal, was very partial at stations further inland, or entirely absent. During Wednesday and Thursday the motion of the depression was very slow, and at times it appeared to be almost stationary, but it was steadily developing. On the afternoon of Thursday it seemed to be moving in a more westerly

direction so as to pass well to the west of Balasore. The wind directions at Saugor Island, Calcutta and Balasore began to change to south through east, and the strength of the wind moderated at the first two. During the evening of Thursday, however, the winds returned to their previous north-easterly direction and began to increase rapidly in velocity. On the near approach of the centre to the north coast of the Bay, pressure fell with great rapidity at Saugor Island, and reached its lowest point about 5 o'clock on Friday morning, when it was 28·423 inches. The centre must have been then a short distance to the west of Saugor Island. A hurricane began at about 4 A.M., and continued for several hours. At 5 A.M. the velocity was reported to be not less than 90 miles an hour, and the continuance of these high winds is shown by the average velocity from 8 A.M. on Friday to 8 A.M. on Saturday, being 50 miles an hour. After passing Saugor Island the centre moved more to the west, passing half-way between Calcutta and Midnapore in the early part of the afternoon. It then turned to the east and passed slowly across the central and eastern districts of Bengal, but with steadily diminishing intensity. At 8 A.M. on the 28th the centre of the disturbance was between Dacca and Sirajganj, and at that time its influence did not extend to Bihar, where pressure was falling slightly and winds were becoming easterly. On the 29th a very shallow depression remained, extending over the eastern districts of Bengal and the greater part of Assam with lowest pressure between Mymensingh and Silchar. General rain was falling on the parts affected by the depression, though not very heavily, as the largest fall that was reported was under 3 inches, but with its final disappearance on the following day very heavy rain fell at Cachar, and cloudly showery weather became general over the northern districts of Bengal and in Bihar.

The north-easterly motion of the depression had an important influence on the quantity of rain and its distribution over the northern districts. As the cyclonic circulation which prevailed over a wide area meant westerly and north-westerly directions and comparative absence of moisture even when the centre was still at a short distance from the coast. It was only after the depression filled up in Assam that rainfall became general in North Bengal and Bihar.

Pressure.—At the beginning of the month there was defect everywhere, varying from ·1 inch in the eastern districts to ·17 inch in the west of Bihar. The rise that commenced on the 1st in North Bengal and spread southwards and westwards continued till the 4th, when the distribution was above the normal by ·05 inch. It again began to fall slowly on the 5th and 6th, but very rapidly on the 7th, after which, as in the previous case, a rapid rise commenced in the north and spread southwards. Excess was then as much as ·2 inch. From the 8th till the approach of the deep depression from the Bay small changes prevailed, mean pressure remaining considerably above the normal. From the 13th to the 21st there was a steady moderate fall; on the 22nd a slow rise prevailed even in Orissa, but on the 23rd, though pressure was still rising over nearly the whole of Bengal and the Bay, there was a rapid fall at False Point and a brisk fall at the other Orissa stations. From this date till the 29th very large changes occurred at stations near which the centre passsed. Readings at Calcutta, Midnapore, Balasore and False Point fell to 29 inches and at Saugor Island on the morning of the 26th the lowest reading observed was 28·423 inches. Owing to the slow motion of the depression changes during the 26th were very small except at Saugor Island, Balasore, Midnapore: and at Sirajganj and Faridpur, where there was a rapid fall. The recovery in South-West Bengal began about 24 hours after the centre passed, but as the disturbance was rapidly moderating, the changes in the central districts were not so delayed. The rise that followed continued till there was a considerable excess at the end of the month.

Temperature.—Two periods of unusually cool weather occurred during May—the one between the 4th and the 8th, and the other from the 24th to the 29th. At other times readings were more frequently below than above the normal, but from about the middle of the month till the 22nd there was excessive temperature over the greater part of the province, especially in the northern districts. While mean temperatures were below the normal, the greater part of the defect was due, not so much to the air being cool, but to the sun being obscured by clouds. This is shown in the night temperatures being only slightly below the normal, while in maximum temperature there was a very large defect. From the 4th to the 9th means were frequently between 15° and 20° below the normal in the western districts, but in the eastern half of the province defect was generally below 5°. Between the 24th and the 29th, while the cyclonic storm was passing across the province, there was again a large defect, chiefly in Orissa, South-West Bengal, and part of the central and eastern districts. In Bihar and North Bengal readings during these days never differed much from the normal. The result of these very low readings in the western districts at the beginning and end of the month is very obvious in the means for the month. The monthly mean defect for Chota Nagpur is 4·9°, in South-West Bengal 3·7°, in Orissa 2·7°, and in South Bihar 2·3° below the normal. In East Bengal and North Bihar defect is 1°, in North Bengal less than half a degree, while in Assam there is excess of 1·4°.

Rainfall.—During the disturbed weather, which continued for some days at the beginning of the month, fairly general rain fell at times, and the average fall was considerably above the normal for those days. An interval of dry weather then commenced and continued except in part of East and North Bengal till the 22nd, when the disturbance in the Bay began to cause general rain in Orissa. From the 23rd to the 25th excessive rain fell over the whole of Orissa, but especially near the coast, and the falls continued on the 26th, but were not so heavy. As the depression advanced northwards, the heavy rainfall spread gradually over South-West Bengal. In the southern half it was general and heavy from the 25th to the

27th, and in the northern half, as in all the central and eastern districts, on the 26th to 28th or 29th. In North Bengal and Bihar scattered showers fell up to the 29th, when fairly general rain was received, but in both these districts the average fall was below the normal. The average falls for the larger divisions are below the normal by less than half an inch in North Bengal and North Bihar, and above elsewhere by 1·67 in South Bihar, 3·07 in Chota Nagpur, 9·13 in East Bengal, 6·75 in South-West Bengal, and 19·65 inches in Orissa. The fall in Orissa is more than six times the normal and in South-West Bengal, East Bengal, and Chota Nagpur more than twice the normal.

The actual falls in Orissa vary from 10 to 44 inches; in South-West Bengal from 10 to 20 inches; in East Bengal from 10 to 35 inches. In North Bengal they are generally between 5 and 10 inches, and in Bihar and Chota Nagpur under 5 inches. The excessive character of the rainfall accompanying the cyclonic storm may be shown by quoting some of the falls in Orissa and South-West Bengal for a period of not more than 24 hours: Kendrapara and Jajpur 11 inches on the 24th; Soro 8·6 inches, and several other places more than 6 inches on the same day; Kendrapara 9·3 inches on the 25th; and Jajpur, Salipur and Chandbali 6 inches or more. In South-West Bengal the heaviest falls were on the 26th or 27th, when the following places reported a fall for one day of more than 7 inches:—Bagerhat, Jahanabad, Burdwan, Indas and Sonamukhi in the Bankura district. In East Bengal on the same days similar amounts of more than 7 inches fell in the Backergunge and Noakhali districts.

The following table gives full data for comparison of the actual and normal rainfall of the month of May for all districts of the province. The figures are derived from the average and actual rainfall of the rain-reporting stations in each district, due allowance being made for the area which each station represents. This gives a more accurate average than the arithmetical means given in the weekly and monthly tables. The first column gives the normal or average district rainfall as determined from the observations of the past 15 years. The second column gives the actual district rainfall as determined from the weighted actual rainfall of the month at the reporting stations in each district. The third column expresses the ratio of the actual district rainfall of the past month to the normal rainfall as a percentage. The fourth column gives the same information as the third in a slightly different form, stating as a percentage how much the district rainfall of the month varied in excess or defect from the normal:—

Percentage Table for May 1893.

Division.	District.	Normal district rainfall for May.	Actual district rainfall for May 1893.	Percentage of actual to normal rainfall.	Percentage excess (+), defect (−).
Orissa ...	Puri	2·76	17·57	637	+537
	Cuttack	3·95	32·08	812	+712
	Balasore	4·95	24·76	500	+400
South-West Bengal	Midnapore	5·05	13·92	276	+176
	24-Parganas	5·79	13·67	236	+136
	Howrah	5·81	14·36	247	+147
	Hooghly	5·34	12·93	242	+142
	Burdwan	5·01	16·35	326	+226
	Bankura	4·03	13·37	332	+232
	Birbhum	3·40	7·58	223	+123
	Nadia	6·35	10·82	170	+ 70
	Khulna	6·61	14·15	214	+114
	Jessore	7·01	13·73	196	+ 96
	Murshidabad	5·21	7·76	149	+ 49
East Bengal ...	Chittagong	6·54	29·01	4[illegible]	+314
	Backergunge	7·80	20·39	261	+161
	Noakhali	10·05	15·24	152	+ 52
	Faridpur	8·80	16·25	185	+ 85
	Dacca	8·70	13·52	155	+ 55
	Tippera	10·21	17·72	174	+ 74
	Mymensingh	9·[illegible]4	13·34	131	+ 34
North Bengal ...	Pabna	7·11	16·14	227	+127
	Bogra	7·91	12·73	161	+ 61
	Rajshahi	6·09	11·41	187	+ 87
	Malda	4·50	5·99	133	+ 33
	Dinajpur	6·45	7·91	123	+ 23
	Rangpur	11·24	5·68	51	— 49
	Kuch Bihar	13·86	7·22	52	— 48
	Jalpaiguri	11·96	5·88	49	— 51
	Darjeeling	8·58	3·31	39	— 61
North Bihar ...	Purnea	5·50	1·49	27	— 73
	Bhagalpur	3·19	3·74	117	+ 17
	Darbhanga	2·68	3·67	137	+ 37
	Muzaffarpur	2·51	2·06	82	— 18
	Champaran	2·60	2·60	100	0
	Saran	1·92	2·00	104	+ 4
South Bihar ...	Shahabad	1·30	2·39	184	+ 84
	Gaya	1·74	2·80	161	+ 61
	Patna	2·18	2·64	121	+ 21
	Monghyr	2·34	2·72	116	+ 16
	Sonthal Parganas	3·75	8·01	214	+114
Chota Nagpur ...	Hazaribagh	2·38	5·71	240	+140
	Lohardaga	2·85	1·93	68	— 32
	Palamau	1·41	0·30	21	— 79
	Singhbhum	4·17	9·38	225	+125
	Manbhum	3·25	8·11	250	+150

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the month of May 1893:—

Meteorological Divisions.	Temperature.						Rainfall.							
	Highest observed during month.	Lowest observed during month.	Averages for month.			Average mean of month above or below normal mean of month.	Of month.			Rainy days.			Since 16th May 1893.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in month.	Normal average number in month.	Variation.	Average.	Normal average.
Orissa	103·6	61·6	89·6	77·7	83·7	−2·7	23·49	3·87	+19·62	10·43	5·70	+4·73	19·22	2·18
South-West Bengal	106·2	59·4	90·6	75·7	83·1	−3·7	12·15	5·40	+6·75	9·76	7·41	+2·35	8·40	2·64
North Bengal	100·6	63·7	89·2	74·0	81·7	−0·3	8·90	9·26	−0·36	8·12	10·83	−2·71	5·69	4·28
East Bengal	96·2	64·4	87·4	74·8	81·1	−1·0	17·65	8·52	+9·13	12·12	9·21	+2·91	11·99	5·27
North Bihar	107·2	64·6	94·0	75·2	84·6	−1·0	2·62	3·11	−0·49	5·06	4·06	+1·00	0·92	1·76
South Bihar	109·2	62·0	97·0	76·7	86·9	−2·3	4·04	2·37	+1·67	5·77	3·21	+2·56	1·59	1·51
Chota Nagpur	106·8*	61·4*	92·7*	72·4*	82·6*	−4·9	5·72	2·65	+3·07	7·50	4·18	+3·32	3·77	1·[illegible]
Assam	101·6	61·8	88·6	73·2	80·9	+1·5								

* Daltonganj not included.

METEOROLOGICAL OFFICE, BENGAL
The 13*th June* 1893.

C. LITTLE,
Offg. Meteorological Reporter to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	STATION OBSERVATIONS. Air pressure. Mean barometric height 8 A.M. reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Wind. Prevailing direction.	Mean wind velocity.	Temperature. Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri ..	29·718	29 673	—	SW	295	90·7	10th June	78·1	5th June	89·5	81·4	85·5
		Gopalpore ...	29·714	29·675	+·100	SSW	350	89 2	5, 7, 8,10 ,,	77·8	5th ,,	88·9	79·2	84 1
		False Point .	29·722	29·684	+·108	SW	326	89·5	6, 7, 9, 10,,	71 6	5th ,,	89·1	79·8	84·5
	Cuttack	Cuttack ...	29·638	29·660	+·108	SW	88	97·1	4th ,,	74 3	5th ,,	93·5	79·3	87·4
	Balasore	Balasore ...	29 663	29 665	+·119	SW	195†	95·4	5th ,,	77 7	5, 8 ,,	92·1	78 8	85·5
South-West Bengal.	Midnapore . ..	Midnapore ..	29·570	29 664	+·114	SW	139	98·3	5th ,,	74·1	9th ,,	94 3	77·9	86·1
	24-Parganas	Calcutta ..	29·702	29·669	+·111	SW	96	91·6	5, 6 ,,	78·2	4th ,,	90 9	79·8	85 4
		Saugor Island	29·704	29 673	+·110	S & SSW	408	91 2	9 & 10 ,,	77·0	4th ,,	90·4	81 8	86 1
	Howrah													
	Hooghly													
	Nadia	Krishnagar .	29·666	29 660	+·106	Sly	177	96·2	5th ,,	70·7	5th ,,	94·6	77·6	86·2
	Khulna													
	Jessore	Jessore ...	29·699	29 678	+·101	SSE	105	93 5	6, 7, 10 ,,	71·4	5th ,,	93 1	78·2	85·7
	Burdwan ...	Burdwan ..	29·616	29 651	+·105	S	146	96 1	5th ,,	77 2	9th ,,	93 0	79·3	86·1
		Raniganj ...	29 348	29 630	+·077	S	74	97·7	5th ,,	?	?	94·8	?	?
	Bankura	Bankura ...	29·377	29·624	+·087	S	97	98·6	5th ,,	75·6	9th ,,	95 6	78 0	86·8
	Birbhum													
	Murshidabad	Berhampore...	29·641	29·655	+·093	SWly	125	95·2	6th ,,	75 8	5th ,,	94 1	78·9	86·5
North Bengal.	Pabna	Sirajganj ..	29·680	29·676	+·088	SSE	93	92·1	5th ,,	75·7	7th ,,	91·2	78·0	84·6
	Bogra	Bogra ..	29 652	29 665	+·103	E	105	94·2	5th ,,	7-·2	8th ,,	92 3	76·8	84·6
	Rajshahi	Rampur Boalia.	29·633	29·653	+·099	S	166	94·1	6th ,,	74 6	5th ,,	92·5	77·2	84·9
	Malda	Malda ..	29·614	29·646	—	SE	92	97·1	5th ,,	75 5	7th ,,	94·2	77·8	86·0
	Dinajpur	Dinajpur ...	29·596	29 670	+·075	E	102	97·1	5th ,,	75·2	8th ,,	91 2	76·7	83·9
	Rangpur	Rangpur ..	29·610	29·687	+·068	Variable	94	92·8	4th ,,	73·7	8th ,,	90·2	75·8	83·0
	Jalpaiguri	Jalpaiguri	29·468	29 706	+·093	NE	62	93·9	5th ,,	73 6	5, 9 10 ,,	89·7	74 6	82·2
	Kuch Bihar * ...													
	Darjeeling	Darjeeling ...	22·942	—	+·047	NEly	142	66·6	5th ,,	52·6	5th ,,	63·4	53·7	58·5
	Sikkim * ...	Gnatong ...	19·189	—	—	NW	57	53·4	4th ,,	28·6	5th ,,	51 0	33·1	42·1
East Bengal.	Chittagong	Chittagong ...	29·692	29·726	+·091	Ely	102	89·7	6, 7 ,,	73·6	5th ,,	87·3	76·4	81·9
	Chittagong Hill Tracts	Demagiri ...						Observations not received.						
	Backergunge	Barisal ..	29·733	29·691	+·107	Calm & Sly	98	93·8	7th June	79·8	7th ,,	82·0	78·0	85·0
	Noakhali	Noakhali ...	29·709	29 699	+·091	SSE	151	91·5	7th ,,	73·8	5th ,,	88·5	77·8	83·2
	Faridpur	Faridpur ...	29·707	29·701	+·105	S	116	91·5	7, 9 ,,	72 9	6th ,,	90·6	78·3	84·5
	Dacca	Dacca ...	29·717	29·686	+·091	S	169	93·1	7th ,,	75·7	5th ,,	91·4	79 1	85·3
	Tippera	Comilla ...	29·726	29·700	+·097	SSW	138	92·8	7, 8 ,,	75·3	9, 10 ,,	90·9	78·2	84·6
	Mymensingh	Mymensingh	29 690	29·700	+·091	SSW	138	91·2	7th ,,	74·6	5th ,,	89·5	77 8	83·7
North Bihar.	Purnea	Purnea ...	29·571	29·618	+·083	NE	72	102·3	5th ,,	73·2	4th ,,	97·3	78·1	87·7
	Bhagalpur	Bhagalpur ...	29·517	29·629	+·084	Calm & E	16	101·8	5th ,,	74·5	5th ,,	97 2	77·7	87·5
	Darbhanga	Darbhanga ...	29·508	29·625	+·064	ESE	198	101·0	5th ,,	74·2	4, 5 ,,	96·9	78 7	87·8
	Muzaffarpur	Muzaffarpur	29·488	29·617	—	ENE	232	103·7	5th ,,	74·2	5th ,,	100·2	80 1	90·2
	Champaran	Motihari ...	29·431	29·613	+·065	ENE	191	101·2	6th ,,	68·8	4th ,,	98 3	77·6	88·0
	Saran	Chapra ...	29·468	29·588	+·062	SEly	201	103·8	6th ,,	75·6	5th ,,	101 4	80·2	90·8
South Bihar.	Shahabad	Dehri ...	29·276	29·578	+·044	SW	115	105·4	7th ,,	79·0	6th ,,	102 8	80 9	91·9
		Buxar ...	29 398	29·588	+·051	E	150	106·5	6th ,,	77·7	5th ,,	102·1	80·6	91·4
		Arrah ...	29 448	29 587	+·063	E	81	103 4	6th ,,	75·0	5th ,,	101·0	80·4	90·7
	Gaya	Gaya ...	29·256	29·580	+·049	S	139	107·6	6th ,,	77·8	9th ,,	103 9	81 3	92·6
	Patna	Bankipore ...	29·466	29 597	+·051	E	127	104·5	5th ,,	76·2	5th ,,	101 5	79 7	90 6
	Monghyr													
	Sonthal Parganas ...	Naya Dumka	29·186	29·626	+·090	SSE	122	98·7	5th ,,	75 8	8th ,,	94 6	77·7	86·2
Chota Nagpur.	Hazaribagh	Hazaribagh	27·690†	29·616†	+·066†	SW	231	98·7	7th ,,	70 3	9th ,,	94 4	73 9	84·2
	Lohardaga	Ranchi .	7·577	29·617	+·075	SW	187	95·0	7th ,,	65·4	9th ,,	92·4	71·6	82·0
	Palamau	Daltonganj	28·882	—	—	SWly	120	108·3	8, 9 ,,	77·0	5th ,,	105·7	81·5	93·6
	Singhbhum	Chaibassa	28·916	29 647	+·121	WSW	48	98·5	6th ,,	75·7	9th ,,	96·0	77 9	87 0
	Manbhum													
Assam.	Sibsagar	Sibsagar ..	29·427	29·715	+·068	Ely		94·1	8, 9 ,,	74·0	5th ,,	90·6	76·1	83·4
	Goalpara . .	Dhubri	29·63?	29·699	+·088	NE	109	90·2	5th ,,	73 8	10th ,,	87·1	75·7	81·5
	Cachar	Silchar ...	29·670	29·726	+·088	Calm		91·5	7th ,,	70·3	4, 5, 6 ,,	87·4	73·2	80·3

* Means of 5 days. | † Mean of 6 days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period
The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01
rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station
district, *i.e.*, from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one on

for the week ending Saturday, the 10th of June 1893.

Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	DISTRICT OBSERVATIONS. Rainfall. Of week. Mean for district.	Of week. Normal mean.	Of week. Average number of rainy days.	Of week. Normal number of rainy days.	Since 1st of month. Mean for district.	Since 1st of month. Normal mean.	Since 1st of month. Variation.	Since 16th May 1893. Mean for district.	Since 16th May 1893. Normal mean.	Since 16th May 1893. Variation.	District.
—	83·8	82	3·7	Nil		1·08		1·38		1·30			2·09		Puri.
−1·2	83·7	81	1·3	Nil											
−2·2	85·7	76	6·4	Nil											
−2·7	85·2	73	4·3	0·14		1·06		1·39		1·59			3·50		Cuttack.
−0·6	84·1	88	3·6	0·44		1·30		1·63		1·77			4·27		Balasore.
−3·2	85·2	76	3·1	0·98	0·38	2·04	0·75	2·00	0·75	2·49	−1·74	13·44	4·43	+9·01	Midnapore.
−0·6	84·4	83	6·4	Nil	0·11	2·01	0·14	2·28	0·86	2·88	−2·02	10·38	5·38	+5·00	24-Parganas.
−1·0	85·7	82	8·9	0·04											
					Nil	1·91	0·00	2·29	0·59	2·66	−2·07	10·08	4·96	+5·12	Howrah.
					0·04	2·05	0·33	2·24	0·61	2·75	−2·14	10·35	5·12	+5·23	Hooghly.
−0·7	84·7	79	4·9	1·37	1·32	2·29	1·60	2·54	2·42	3·13	−0·71	8·50	6·46	+2·04	Nadia.
					1·34	2·92	1·67	2·95	3·17	3·71	−0·54	13·30	6·39	+6·91	Khulna.
−0·2	84·9	85	6·4	1·05	0·52	2·76	1·20	2·75	1·31	3·54	−2·23	9·61	6·72	+2·89	Jessore.
−1·7	84·2	79	5·4	0·27	0·30	1·87	0·75	2·23	1·18	2·30	−1·12	10·86	4·75	+6·11	Burdwan.
[illegible]	81·4	85	1·4	0·85											
−1·4	83·3	83	4·1	0·49	1·05	1·83	2·00	2·02	2·10	2·49	−0·39	10·11	4·23	+5·83	Bankura.
					0·31	1·67	1·00	1·90	1·93	2·17	−0·24	6·90	4·00	+2·90	Birbhum.
+0·6	82·7	86	6·1	0·16	0·24	1·59	0·67	2·23	3·50	2·34	+1·16	8·69	5·26	+3·43	Murshidabad.
+2·0	82·4	87	7·6	0·01	0·86	2·58	2·00	2·53	2·59	3·70	−1·11	14·68	7·35	+7·33	Pabna.
+0·5	82·9	85	4·0	1·45	0·89	2·53	0·75	2·47	1·70	4·18	−2·48	8·82	8·37	+0·45	Bogra.
0	83·9	83	5·1	0·24		2·20		2·46		2·06			6·18		Rajshahi.
—	83·3	84	6·1	Nil	0·48	1·63	1·00	1·72	1·17	2·23	−1·06	5·15	4·65	+0·50	Malda.
−0·1	80·5	87	6·7	0·88	0·94	2·32	0·24	2·01	1·58	3·55	−1·97	5·58	7·16	−1·58	Dinajpur.
+0·9	80·5	87	2·9	3·60	2·47	3·91	2·75	3·32	4·54	5·56	−1·02	8·70	12·43	−3·73	Rangpur.
+0·9	77·7	87	7·9	1·24	1·27	5·53	3·00	4·10	8·35	7·45	+0·90	12·63	14·50	−1·87	Jalpaiguri.
					6·22	6·78	3·75	4·57	9·77	8·35	+1·42	14·04	16·81	−2·77	Kuch Bihar.
−0·8	58·1	94	8·7	1·44	3·14	4·23	4·25	4·29	6·70	5·54	+1·16	12·05	11·94	+0·11	Darjeeling.
—	44·7	87	7·1	2·75											Sikkim.
+0·3	80·9	90	7·6	0·82		6·21		3·74		7·93			12·74		Chittagong.
					2·49	4·40	2·00	4·00	3·63	5·87	−2·25	24·51	10·03	+14·48	Chittagong Hill Tracts.
+2·8	84·3	84	8·1	1·11	1·59	4·45	2·00	3·39	3·57	5·60	−2·03	17·69	9·24	+8·45	Backergunge.
+1·3	82·3	87	3·1	2·40	1·53	6·06	2·50	3·46	3·52	8·09	−4·57	13·73	12·38	+1·35	Noakhali.
+2·2	83·4	86	4·6	0·95	0·78	3·09	1·33	2·88	2·44	4·12	−1·68	14·61	8·19	+6·42	Faridpur.
+1·5	84·1	84	8·3	0·13	0·16	2·65	0·50	2·84	1·54	3·98	−2·44	9·50	7·39	+2·11	Dacca.
+2·1	82·1	94	5·7	1·06		3·13		3·49		4·92			8·77		Tippera.
+2·0	82·6	89	7·1	2·01	1·58	3·79	2·25	3·14	4·07	5·38	−1·31	13·45	9·98	+3·47	Mymensingh.
+1·6	83·8	76	2·3	0·99	3·41	1·60	2·00	1·65	4·84	2·39	+2·45	5·33	5·45	−0·12	Purnea.
+1·7	84·6	72	3·6	0·27	0·07	0·84	0·25	1·33	0·94	1·18	−0·24	2·53	2·79	−0·26	Bhagalpur.
+1·1	85·3	69	1·9	Nil	Nil	0·63	0·00	1·02	0·38	0·91	−0·53	1·09	2·18	−1·09	Darbhanga.
—	86·0	76	2·4	Nil	0·01	0·58	0·00	1·02	0·46	1·18	−0·72	0·99	2·10	−1·11	Muzaffarpur.
+1·8	85·0	71	4·0	0·63	0·89	0·86	1·00	1·17	1·20	1·25	−0·05	2·84	2·61	+0·23	Champaran.
+2·1	87·9	68	1·7	Nil	0·18	0·71	0·33	0·71	0·37	0·89	−0·52	1·25	1·95	−0·70	Saran.
+2·0	87·8	61	0·6	Nil											
−0·1	88·3	59	1·4	0·10		0·23		0·43		0·31			1·15		Shahabad.
+0·7	87·1	69	1·4	Nil											
+0·6	85·3	78	4·3	Nil	Nil	0·34	0·00	0·54	1·33	0·54	+0·79	2·64	1·88	+0·76	Gaya.
+0·1	88·4	62	1·6	0·14	0·04	0·36	0·25	0·79	1·62	0·49	+1·13	2·07	1·89	+0·18	Patna.
					0·27	0·63	0·67	1·03	0·68	0·86	−0·18	1·78	2·24	−0·46	Monghyr.
−1·0	83·5	75	2·6	0·49	0·39	1·25	1·33	1·79		1·77			3·87		Sonthal Parganas.
−2·8	80·8	70	4·4	0·87		0·92		1·32		1·17			3·04		Hazaribagh.
−4·8	80·1	70	1·4	2·10	1·18	0·90	2·00	1·30	2·37	1·04	+1·33	4·01	3·03	+0·98	Lohardaga.
—	90·1	51	0	0·03	0·03	0·55	0·00	0·73	1·25	0·71	+0·54	1·53	1·77	−0·24	Palamau.
−3·8	83·2	74	4·6	0·25		1·11		1·75		1·41			3·88		Singhbhum.
					0·53	1·23	2·50	1·65	0·89	1·50	−0·61	6·87	2·98	+3·89	Manbhum.
+0·7	80·1	90	7·1	1·74											Assam.
−0·5	78·2	88	5·6	2·34											
−2·3	79·0	87	6·7	4·77											

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 10th of June 1893.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 4th.	Monday, 5th.	Tuesday, 6th.	Wednesday, 7th.	Thursday, 8th.	Friday, 9th.	Saturday, 10th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th May 1893.	Average rainfall from 16th May to date.
ORISSA	Puri ...	Puri ...	...	...	...	...	...	...	...	Nil	Nil	0.98	Nil	1.08	18.17	2.54
		Khurda ...										1.00		1.27		3.37
		Banpur ...										1.45		1.61		2.44
		False Point ...	...	...	...	...	...	...	...	Nil	Nil	0.90	Nil	1.25	40.43	3.60
		Gop ...										?		?		?
		Satpara ..										?		?		?
		Pipli ...										?		?		?
	Cuttack ...	Jagatsingpore										0.46		0.65		2.04
		Banki ..										0.68		1.83		2.78
		Cuttack ...										1.27		1.81		4.45
		Kendrapara ...	...	0.31	...	...	..	...	...	1	0.31	1.28	0.47	1.69	36.09	3.69
		Jajpur ...	...	0.11	..	...	...	..	...	1	0.11	1.60	0.47	1.98	28.31	4.48
		Dharmsala ...	1.9									?		?		?
		Salipore ...	0.70									?		?		.
		Pal Lahara ...										?		?		?
	Balasore .	*Akhyapada* ...	...	0.20	...	...	...	...	...	1	0.20	?	0.93	?	13.08	?
		Chandbali ...	..	0.05								0.95		1.50		3.92
		Bhadrak ...	...	0.71	...	...	...	...	0.10	2	0.81	1.13	1.36	1.92	24.17	4.95
		Soro ...										1.18		1.28		4.44
		Balasore ..	...	0.59	...	...	...	...	...	1	0.59	1.12	0.59	1.52	19.05	4.21
		Jellasore ...										1.58		2.13		3.70
		Baripodah .	...	...	...	...	..	...	..	Nil	Nil	1.93	1.12	2.27	11.51	4.37
SOUTH-WEST BENGAL.	Midnapore	Contai ...	...	...	...	...	...	...	...	Nil	Nil	1.97	0.21	2.34	17.56	4.41
		Tamluk ...	0.20	...	...	...	...	...	...	1	0.20	1.66	0.60	2.18	12.05	4.45
		Midnapore ...	0.44	...	...	...	...	0.80	...	2	1.24	1.91	1.82	2.50	9.31	4.14
		Ghatal ..	0.06	...	...	...	...	...	...	Nil	0.06	2.61	0.33	3.12	14.80	4.74
		Kukrahaty ...	0.15	...	...	...	...	...	...	1	0.15	?	1.03	?	10.55	?
		Garhbeta ..	..	0.41	...	0.83	...	...	...	2	1.24	?	1.76	?	11.76	?
		Panskura ...										?		?		?
		Dantoon ...	0.21	...	...	...	...	...	...	1	0.21	?	1.83	?	12.80	?
	24-Parganas ...	Saugor Island	...	...	...	...	...	0.04	...	Nil	0.04	1.82	0.09	2.28	13.39	4.79
		Diamond Harbour ...	0.07	...	...	...	...	...	...	Nil	0.07	1.68	1.04	2.19	10.12	4.33
		Canning Town	...	...	..	...	...	...	0.21	1	0.21	?	1.51	?	14.44	?
		Alipore (Observatory.)	...	...	...	...	...	...	...	Nil	Nil	1.90	0.24	3.61	12.20	5.39
		Barrackpore...	...	...	...	...	...	...	...	Nil	Nil	2.24	1.25	3.39	9.64	5.50
		Dum-Dum ...	...	...	...	...	...	...	...	Nil	Nil	1.86	Nil	2.69	9.12	5.40
		Barasat .	...	...	...	...	...	...	...	Nil	Nil	2.01	1.03	2.88	8.01	5.55
		Basirhat ...	...	...	...	...	...	...	0.65	1	0.65	2.56	1.61	3.12	9.65	6.77
	Howrah ...	Howrah	...	...	...	...	...	...	...	Nil	Nil	1.66	0.53	2.57	10.37	4.72
		Mohesreka ...	...	...	...	...	...	...	...	Nil	Nil	2.15	0.64	2.73	9.79	5.17
		Ulubaria ...	...	...	...	...	...	...	...	Nil	Nil	?	0.33		10.51	?
	Hooghly ...	Serampore ...	...	...	...	...	...	...	...	Nil	Nil	2.12	1.23	3.19	10.91	5.15
		Hooghly ...	0.11	...	...	...	...	...	...	1	0.11	1.79	0.59	2.61	7.16	5.07
		Jahanabad	...	...	...	...	...	...	...	Nil	Nil	2.23	Nil	2.45	13.11	5.12
	Nadia ...	Ranaghat .	...	...	...	...	...	..	...	Nil	Nil	2.12	0.47	2.99	8.81	5.70
		Krishnagar ...	...	1.25	4.12	...	...	..	...	2	1.37	2.02	1.53	2.77	9.11	5.38
		Chuadanga ..	...	0.85	0.61	...	...	...	...	2	1.46	2.03	3.15	3.02	9.40	7.22
		Meherpore ..	...	...	1.40	...	...	...	...	1	1.40	2.11	4.21	2.85	9.65	5.88
		Kushtia	...	1.07	0.90	...	...	0.39	...	3	2.36	3.19	2.74	4.04	12.12	8.06
	Khulna ...	Satkhira	...	0.70	...	...	...	..	1.20	2	1.90	2.41	3.04	3.78	9.65	5.90
		Bagerhat	...	0.75	0.04	...	...	0.52	...	2	1.31	3.59	4.40	4.03	17.13	7.19
		Khulna .	...	0.80	...	...	...	...	...	1	0.80	2.77	2.04	3.34	13.13	6.10
		Nakipur ..										?		?		?
		Rampal ...	...	1.00	...	...	...	...	...	1	1.00	?	1.95	?	11.37	?
	Jessore ...	Narail	...	0.25	..	...	...	...	...	1	0.25	2.76	0.91	3.37	7.33	6.22
		Jessore .	...	0.94	0.09	...	...	...	0.02	1	1.05	2.72	2.23	3.47	11.42	6.91
		Jhenidah	...	0.11	0.01	...	...	...	...	1	0.12	3.46	0.46	4.31	9.38	7.69
		Magura	...	0.40	0.30	...	...	...	...	2	0.70	2.57	2.06	3.52	13.26	7.45
		Bangaon ...	...	0.45	...	...	...	...	...	1	0.45	2.31	0.83	3.03	6.58	5.40
	Burdwan	Kalna	..	...	...	...	...	...	...	Nil	Nil	1.92	0.10	2.37	8.87	4.59
		Burdwan ...	..	0.02	...	0.25	...	...	...	1	0.27	1.61	0.52	1.85	14.92	4.63
		Katwa ...	...	0.08	...	...	...	...	...	Nil	0.08	2.60	0.69	3.31	7.41	5.97
		Raniganj ...	..	0.05	..	...	0.15	0.65	...	2	0.85	1.33	3.42	1.63	7.93	3.44
		Mankur ...	...	...	...	0.35	...	...	...	1	0.35	?	0.81	?	9.60	?
	Bankura	Bankura ..	0.24	...	...	0.20	...	0.05	...	2	0.49	1.96	0.57	2.61	7.53	4.66
		Vishnupur ...	...	...	...	0.50	...	0.06	...	1	0.56	1.97	1.81	3.00	12.26	4.68
		Maliara ..	0.27	0.49	...	0.01	...	1.96	...	3	2.73	1.83	5.34	2.42	9.88	3.97
		Khatra ...	...	...	...	0.13	...	0.28	...	2	0.41	1.54	0.65	1.92	10.79	3.75
		Indas .	...	...	...	0.43	...	...	...	1	0.43	?	2.36	?	14.88	?
		Kotalpur ..	...	0.45	...	0.64	...					?		?		?
		Onda ..	...	...	0.15	0.20	0.40	...	...	3	0.75	?	0.94	?	8.89	?
		Gangajalghati	0.84	0.41	...	0.46	...	...	...	3	1.71	?	5.76	?	12.54	?
		Raipur ..	...	...	...	...	...	1.55	...	1	1.55	?	1.94	?	13.38	?
		Sonamukhi ...	0.48	.	...	0.13	...	...	...	2	0.61	?	1.47	?	10.84	?
	Birbhum ...	Suri	...	...	...	0.10	...	0.02	...	1	0.12	1.46	2.60	2.08	7.03	3.92
		Hetampore ..	...	...	...	0.51	...	0.03	...	1	0.54	2.14	1.60	2.25	7.60	3.93
		Rampur Hat...	...	...	0.25	0.03	...	...	...	1	0.28	1.41	1.60	2.18	6.61	4.09
		Bolpur	...	...	...	0.31	...	...	...	1	0.31	?	0.31	?	7.82	?
		Murari ..	...	...	...	...	...	...	...	Nil	Nil	?	3.38	?	8.08	?
	Murshidabad	Kandi ..								Nil	Nil	1.56	1.37	2.39	6.23	4.84
		Berhampore ...	...	0.15	...	0.01	...	...	...	1	0.16	1.62	2.43	2.38	8.69	5.30
		Lalbagh ...	...	0.49	0.32	...	...	...	...	2	0.81	1.79	4.17	2.67	10.23	5.79
		Azimganj ...	...	0.46	0.04	0.02	...	...	...	1	0.46	1.72	4.13	2.54	10.26	5.44
		Jangipur .	...	...	...	...	...	...	...	Nil	Nil	1.27	4.71	1.84	9.18	4.68
		Lalgola ..	...	...	...	...	...	...	...	Nil	Nil	1.60	4.09	2.21	7.48	5.50
		Akhriganj ...	...	..	0.30	0.04	0.05	...	...	1	0.39	?	1.76	?	9.24	?
		Patkabari										?		?		?
NORTH BENGAL	Pabna ..	Pabna ..	...	0.08	0.11	0.40	0.55	...	0.48	4	1.71	3.00	1.01	3.87	18.11	7.32
		Sirajganj ...	...	...	0.01	...	...	...	...	Nil	0.01	2.16	3.27	3.53	18.23	7.36
	Bogra ..	Sherepore ..	...	...	...	...	...	...	...	Nil	Nil	2.16	0.85	3.77	8.32	8.51
		Nowkhilla ...	..	...	...	...	0.12	...	...	1	0.12	2.60	1.33	4.57	7.95	7.83
		Bogra ..	...	...	...	...	1.45	...	...	1	1.45	2.79	1.86	4.45	11.31	9.01
		Panchbibi ...	...	...	...	...	...	...	2.00	1	2.00	2.57	2.28	3.95	7.60	8.15
	Rajshahi ...	Boalia ...	...	...	...	0.18	...	...	...	1	0.18	2.81	3.36	3.37	8.62	6.21
		Nator ...	...	...	...	...	1.84	...	...	1	1.84	2.06	2.14	2.49	12.79	5.90
		Naugaon ...										1.72		3.01		6.44
		Lalpore .	...	.	...	0.22	..	...	...	1	0.22	?	0.52	?		?
		Manda ...	...	...	...	...	...	...	0.90	1	0.90	?	1.40	?		?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 10th of June 1893—contd.

Meteorological Division.	District.	Station.	Rainfall.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th May 1893.	Average rainfall from 16th May.
			Sunday, 4th.	Monday, 5th.	Tuesday, 6th.	Wednesday, 7th.	Thursday, 8th.	Friday, 9th.	Saturday, 10th.							
NORTH BENGAL—concld.	Malda ...	Malda ...	...	...	...	...	...	...	...	Nil	Nil	1·60	0·77	2·30	6·87	4·51
		Chanchal ...	...	...	...	0·72	...	...	0·24	2	0·96	1·66	1·58	2·15	3·12	4·79
		Gajol ...										?		?		?
		Silganj ...	...	...	0·18	...	...	...	...	1	0·18	?	1·67	?	6·28	?
	Dinajpur ...	Mohadebpore	...	...	...	...	0·32	...	0·33	2	0·65	2·89	1·41	4·55	7·19	7·56
		Churaman ...	...	...	...	0·16	...	0·12	0·08	2	0·31	2·40	0·74	3·84	4·44	6·03
		Raiganj ...	...	...	...	1·70	...	0·11	0·50	3	2·31	1·94	8·27	2·74	4·60	6·15
		Dinajpur ...	...	...	...	0·15	0·26	0·15	0·05	3	0·61	2·35	1·22	3·35	6·35	7·86
		Balurghat ...	...	...	...	...	0·72	0·13	...	2	0·85	2·01	1·68	3·47	5·78	8·17
		Thakurgaon ...	...	...	...	...	0·22	0·10	4·75	3	5·07	?	5·46	?	6·19	?
	Rangpur ...	Bhawanigunge (*Gyabanda*)	0·18	...	...	...	...	..	0·65	2	0·83	3·31	1·61	4·95	7·37	0·86
		Rangpur ...	...	...	...	...	1·29	1·14	1·17	3	3·60	3·50	5·54	4·85	8·81	11·53
		Peerganj ...	...	...	...	0·23	0·85	0·45	0·42	4	1·95	?	4·58	?	?	?
		Kurigaon ...	...	...	...	...	1·03	0·37	0·62	3	2·02	5·57	6·06	7·47	11·83	15·35
		Gobindgunge	...	...	...	...	...	...	0·83	1	0·83	?	3·36	?	10·09	?
		Bagdogra (*Nilphamari*)	...	...	...	...	1·16	1·57	0·71	3	3·44	3·25	4·94	4·94	6·78	13·95
		Ulipore ...	...	...	...	...	0·62	...	0·85	2	1·47	?	3·58	?	7·05	?
		Sundergunge...	...	...	...	...	...	0·05	0·44	1	0·49	?	1·13	?	?	?
	Jalpaiguri ...	Jalpaiguri ...	...	...	...	0·14	0·02	0·99	0·12	3	1·27	5·53	8·35	7·45	12·63	14·50
		Alipore Dooar	...	...	...	3·10	0·05	2·33	2·08	3	7·62	?	10·20	?	15·74	?
		Fallacotta	...	...	...	1·68	0·42	0·21	1·30	4	3·61	?	7·37	?	11·50	?
		Debiganj ...	...	...	...	...	2·04	4·15	11·00	3	17·19	?	18·34	?	20·23	?
		Bhagatpore (Nagrakatta)	...	...	1·35	0·36	0·99	1·63	1·08	5	5·39	?	15·57	?	35·28	?
	Kuch Bihar...	Dinhatta ...	0·02	...	...	1·32	0·66	2·43	0·95	4	5·38	7·20	11·13	8·69	18·47	17·77
		Kuch Bihar ...	0·40	...	...	0·90	0·59	1·24	1·85	5	4·98	8·85	7·23	10·92	12·04	19·37
		Mickliganj ...	...	...	...	...	1·59	1·12	3·69	3	6·40	5·27	9·16	6·53	10·63	14·59
		Mathabhanga	...	...	...	...	1·87	2·11	4·12	3	8·10	5·79	11·54	7·24	14·97	15·50
	Darjeeling ...	Buxa ...	...	1·21	...	1·00	...	1·30	1·49	4	5·00	8·19	13·22	9·91	20·83	23·28
		Siliguri ...	0·10	.	0·19	1·23	...	2·39	0·48	4	4·30	3·48	7·66	5·14	17·59	10·78
		Darjeeling ...	...	0·13	0·02	0·13	0·62	0·15	0·39	5	1·44	3·18	2·76	4·31	4·25	8·44
		Kalimpong ...	...	...	0·49	0·17	...	0·86	0·37	4	1·72	2·05	3·14	2·78	5·51	5·25
		Kurseong ...	...	..	0·16	0·29	..	1·10	1·16	4	2·71	?	5·29	?	14·89	?
		Pedong ...	...	0·18	0·03	0·12	0·02	0·70	0·14	4	1·19	?	2·56	?		?
EAST BENGAL	Chittagong ...	Cox's Bazar ...	0·02	0·03	...		0·02	0·92	0·01	1	1·00	6·64	3·01	8·30	5·25	13·44
		Chittagong ...		0·17	...	0·82	0·01	0·30				5·78		7·55	32·92	12·03
		Kutubdia ...	...	0·10								?		?		?
		Satkanya ...		0·15	...	...	...	0·45				?		?		?
		Kodala ...										?		?		?
		Fenoa ...	0·38	...	...	1·51						?		?		?
		Mirsarai ...	0·8	0·88	...	0·03	...	1·36	0·15	3	2·50	?	4·81	?		?
		Chandpur ...	0·10	0·09	...	...	0·12					?		?		?
	Chittagong Hill Tracts.	Rangamati ...	0·09	0·82	...	..	..	1·58	...	2	2·49	4·40	3·62	5·87	24·51	10·03
		Bundarban ...	0·19	0·38	0·12	...	...	3·02	0·08	4	3·70	?	35·93	?	29·07	?
	Backergunge	Patuakhali ...	...	2·11	...	...	...	...	0·07	1	2·18	5·43	3·15	6·99	20·06	11·01
		Pirojpur ...	...	0·82	...	...	..	0·65	...	2	1·47	3·93	2·79	4·75	17·94	8·02
		Barisal ...	...	0·70	...	...	...	0·10	0·52	3	1·32	3·57	5·13	4·53	18·30	8·37
		Gournaddi ...	...	0·52	0·18	...	...	0·38				?		?		?
		Bhola ...	...	0·98	...	...	...	0·41	...	2	1·39	4·85	3·19	6·13	14·43	0·51
		Daulatkhan ...	...	1·76	...	...	...	...	0·82	2	2·58	?	4·15	?	18·64	?
		Bauphal ...	...	0·85	...	...	...	...	0·10	2	0·95	?	1·12	?	13·79	?
	Noakhali ...	Noakhali ...	...	0·93	...	...	...	0·83	0·64	3	2·40	5·69	4·20	7·36	15·00	11·72
		Fenny ...	-	0·15	...	...	...	0·25	0·23	2	0·65	6·43	2·82	8·81	12·44	13·02
		Harishpore ...	...	0·80			0·08					?		?		?
		Ramganj ...	...	0·42								?		?		?
	Faridpur ...	Madaripur ...	...	0·11	...	...	...	...	...		0·11	3·36	1·13	4·24	11·88	8·41
		Faridpur ...	...	0·03	0·92	...	...	...	...	1	0·95	3·03	3·3.	4·51	17·28	9·05
		Goalundo ...		0·67	0·60	...	...	...	...	1	1·27	2·62	2·87	3·61	15·95	7·12
	Dacca ...	Munshiganj ...		0·10	...	...	...	...	0·06	2	0·16	3·42	1·25	4·58	8·08	8·53
		Dacca ...	...	0·16	...	...	...	...	0·08	1	0·24	3·01	0·61	4·03	9·52	7·94
		Narayanganj...	...	0·09	...	...	...	...	0·06	1	0·15	1·90	2·05	2·63	9·43	6·04
		Manikganj ...	...	...	0·07	...	...	...		Nil	0·07	2·27	2·24	3·34	10·97	7·06
		Joydebpore ...	...	...	...	...	...	..	0·01	Nil	0·01	?	0·42	?	10·35	?
	Hill Tippera	Agartola ...							1·62	1	1·62	2·58	5·20	4·35	14·36	8·28
	Tippera ..	Comilla ...	...	...					0·69	1	0·69	4·16	3·54	5·73	14·51	9·80
		Chandpore ...	...	0·80	...	...	...	...	0·10	2	0·90	3·56	5·61	5·00	12·84	7·92
		Brahmanbaria										3·45		4·59		9·07
		Ramchandrapore ...	...	...	...	...	...	...	...	Nil	Nil	?	1·30	?	6·59	?
		Nasirnagar ...										?		?		?
		Daudkandi ...										?		?		?
		Kasba ...							1·10	1	1·10	?	5·16	?	11·61	?
		Laksham ...										?		?		?
	Mymensingh..	Kishorganj ...	...	...	...	...	...	0·25	1·11	2	1·36	3·92	3·76	5·83	10·05	10·34
		Atia (*Tangail*)	...	...	...	...	.	...	...	Nil	Nil	3·05	1·19	4·01	15·99	7·47
		Mymensingh ..	...	0·05	0·14	...	1·53	...	0·29	3	2·04	4·65	4·91	6·28	12·26	11·83
		Jamalpur							0·13	1	0·13	3·05	3·29	4·30	7·74	8·26
		Netrakona ...	0·72	1·19	...	...	0·91			3	2·82	4·30	5·62	6·51	13·63	12·91
		Subornakhally	...	...	...	...	...	...	...		Nil	?	3·00	?	13·06	?
		Durgapore ..	...	...	...	1·00	0·75	0·40		Nil	3·05	?	7·15	?	13·50	?
		Sherepore Town	...	...	...	...	...	0·16	0·90	4	0·16	?	1·81	?	7·52	?
		Dewanganj ..							7·50	1	7·50	?		?		?
NORTH BIHAR	Purnea	Kishanganj ..	...	...	...	...	1·50	1·40	1·86	3	4·76	2·17	6·66	3·03	6·72	6·68
		Araria ..	...	...	...	..	0·09	1·70	2·70	2	4·49	1·05	7·44	1·84	7·74	4·89
		Purnea ...	...	...	...	...	...	...	0·99	1	0·09	1·58	1·42	2·29	1·54	4·77
		Gonawara (Korah) ...	...	...	...	...	...	0·49	6·40	2	6·89	?	6·96	?	8·57	?
		Barsoe ...							0·75	1	0·75	?		?	2·40	?
		Forbesganj .	..	...	...	...	...	.	2·93	1	2·93	?	5·09	?	5·32	?
		Kaliaganj	...	...	...	...	...	2·00	2·00	2	4·00	?		?		?
	Bhagalpur ...	Madhipura ...	..	...	...	...	...	..	...	Nil	Nil	0·77	0·35	1·03	2·01	3·32
		Bongaon (Sufabad).	...	...	...	0·23	0·85	0·45	0·42	4	1·95	?		?		?
		Supaul ...	...	...	...	...	...	...	...	Nil	Nil	0·65	1·73	1·17	2·37	3·26
		Protabganj	...	...	...	...	...	...	0·09	Nil	0·09	?	0·79	?	0·79	?
		Bhagalpur	...	.	...	...	...	0·03	0·24	1	0·27	1·01	0·77	1·18	2·25	2·72
		Banka ...	...	...	...	...	...	...	...	Nil	Nil	1·01	0·90	1·41	3·48	2·93
		Colgong .	...	...	...	0·16	...	...	0·02	1	0·18	?	1·31	?	1·86	?
	Darbhanga ..	Tajpur ..	...	...	...	...	...	...	...	Nil	Nil	0·55	0·60	0·69	1·15	1·69
		Darbhanga ...	...	...	...	...	...	...	...	Nil	Nil	0·51	0·23	0·85	1·17	2·03
		Madhubani ...	...	...	...	...	...	...	...	Nil	Nil	0·83	0·32	1·19	0·95	2·77
		Bahera .	...	...	...	...	...	...	...	Nil	Nil		Nil	?	1·30	?
		Roshera ...	...	...	...	...	...	...	...	Nil	Nil	?	0·50	?	0·50	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 10th of June 1893—concld.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 4th.	Monday, 5th.	Tuesday, 6th.	Wednesday, 7th.	Thursday, 8th.	Friday, 9th.	Saturday, 10th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th May 1893.	Average rainfall from 16th May.
NORTH BIHAR—concluded.	Muzaffarpur...	Sitamarhi ...	...	...	...	0·03	...	...	...	Nil	0·03	0·83	0·55	1·05	1·32	2·40
		Muzaffarpur	...	...	...	...	...	...	...	Nil	Nil	0·55	Nil	0·75	0·52	2·27
		Hajipur ...	...	...	...	...	...	...	...	Nil	Nil	0·37	0·83	0·43	1·12	1·63
		Paru	...	...	...	0·15	...	...	...	1	0·15	?		?		?
		Mahwa (Chitwarra.)										?		?		?
		Siuhar ...										?		?		?
		Pupri ...										?		?		?
	Champaran	Motihari ...	...	...	...	...	...	...	0·63	1	0·63	0·76	0·72	1·20	2·53	2·65
		Bettiah	...	...	...	...	...	0·02	1·13	1	1·15	0·96	1·68	1·30	3·14	1·54
		Bagaha ...	...	...	...	...	...	...	...	Nil	Nil	?	2·40	?		?
		Burhurwa	...	...	...	...	...	...	...	Nil	Nil	?	0·24	?	0·93	?
	Saran ..	Gopalganj	...	...	...	...	...	...	...	Nil	Nil	1·06	0·11	1·22	0·03	2·38
		Siwan ..	...	...	...	...	...	...	0·54	1	0·54	0·72	0·31	0·93	1·52	1·97
		Chapra ...	...	...	...	...	...	...	...	Nil	Nil	0·36	0·47	0·52	1·33	1·49
SOUTH BIHAR	Shahabad ...	Sreepore ...	...	...	...	...	...	...	...	Nil	Nil	0·24	0·56	0·26	0·86	0·92
		Buxar ...	...	...	...	...	...	...	...	Nil	Nil	0·10	2·63	0·12	2·91	1·29
		Dehri ...	...	...	...	...	...	...	...	Nil	Nil	0·21	1·08	0·35	1·97	0·94
		Bhabhua ...	...	...	...	...	...	...	...	Nil	Nil	0·17	1·93	0·31	2·39	0·99
		Sasaram ...	...	...	...	...	...	...	0·16	1	0·16	0·41	0·54	0·51	2·98	1·64
		Arrah ...	...	...	...	...	...	...	...	Nil	Nil	?		?		?
		Mohanea ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	0·14	?
		Khiri ...	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	1·66	?
		Ageaon ...	...	...	...	...	...	...	...	N	Nil	?	1·88	?	1·88	?
		Ramagar ...	...	...	...	...	...	1·00	...	1	1·00	?	2·45	?	1·45	?
		Koath ...	...	...	...	...	...	...	...	Nil	Nil	?	0·56	?	0·86	?
		Sikroul ...	...	...	...	...	...	0·04	...	Nil	0·04	?	0·42	?	0·42	?
		Bassowan ...		...		...	...		...			?		?		?
		Monaharpur														
	Gaya ..	Aurangabad ..	...	...	...	...	...	...	...	Nil	Nil	0·39	2·14	0·51	2·68	1·81
		Gaya ...	...	...	...	...	...	...	...	Nil	Nil	0·31	1·28	0·47	2·31	1·84
		Nawadah ...	...	...	...	...	...	...	...	Nil	Nil	0·37	1·00	0·56	3·15	2·00
		Jahanabad ...	...	...	...	...	...	...	...	Nil	Nil	0·27	0·88	0·60	2·41	1·84
		Arwal	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	2·08	?
		Daudnagar ...	...	...	...	...	...	0·41	...	1	0·41	?	1·76	?	1·76	?
		Sherghati	...	...	...	...		...	...	Nil	Nil	?	0·65	?	0·65	?
		Rajauli ...										?		?		?
		Pakri Barawan										?		?		?
	Patna ...	Patna	...	...	...	...	...	0·14	...	1	0·14	0·52	0·90	0·59	0·96	2·19
		Dinapore ...	...	...	...	...	...	...	...	Nil	Nil	0·25	2·18	0·32	2·84	1·52
		Behar .	...	...	...	...	...	...	...	Nil	Nil	0·27	0·87	0·50	1·27	1·92
		Barh ..	...	...	...	...	...	...	...	Nil	Nil	0·30	2·31	0·54	3·17	1·90
		Bikram .	...	...	...	...	...	0·08	...	Nil	0·08	?	1·87	?	3·04	?
		Hilsa	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?		?
	Monghyr ..	Begusarai ...	...	...	...	...	...	...	...	Nil	Nil	0·53	1·98	0·80	2·09	2·08
		Monghyr ...	...	...	...	...	...	...	0·38	1	0·38	0·91	1·84	1·10	1·84	2·77
		Jamui	...	...	...	...	...	...	0·42	1	0·42	0·46	1·21	0·70	1·40	1·94
		Gogri	...	...	...	...	...	...	...	Nil	Nil	?	Nil	?	Nil	?
		Shaikpura .	...	...	...	...	...	...	...	Nil	Nil	?	1·10	?	1·10	?
		Chahai Bamda	...	...	...	...	1·59	...	0·87	2	2·46	?	3·99	?	5·85	?
	Sonthal Parganas.	Chupreon ...							0·11	1	0·11	1·20	0·40	1·79	4·29	4·37
		Rajmahal	...	...	...	...	...	...	0·30	1	0·30	0·89	2·62	1·71		3·42
		Godda	...	...	...	...	...	...	...	Nil	Nil	1·76	0·89	2·39	4·60	5·11
		Pakour ...	0·04	...	...	0·29	0·01	0·15	...	2	0·49	1·43	1·69	1·74	6·35	3·74
		Naya Dumka	...	...	...	...	0·15	...	...	1	0·15	1·05	2·44	1·41	7·21	3·10
		Deoghur	...	...	...	0·47	0·32	0·48	...	3	1·27	1·15	2 70	1·66	7·22	3·42
		Jamtara ...	...	...	...	...	0·39	...	...			?		?		?
		Belbodda ..	...	...	...	...	...	...	...			?		?		?
		Nanihat ...	...	...	...	...	...	...	...	Nil	Nil					
CHOTA NAGPUR.	Hazaribagh ...	Pachamba (Giridih).	...	...	...	0·54	0·15	0·06	...	2	0·75	1·08	1·40	1·45	4·74	2·87
		Hazaribagh	...	...	...	...	...	0·87	...	1	0·87	0·92	4·93	1·12	7·67	2·60
		Somtakura..										0·87		1·34		3·55
		Mahudi Hills										0·91		1·10		3·68
		Jhumra Hill										0·84		0·86		2·51
		Parhi .	...	...	...	...	...	0·83	...	1	0·83	?	3·76	?	6·99	?
		Chatra ...	...	...	...	...	...	...	...	Nil	Nil	?	2·71	?	3·72	?
		Karagdeha	...	...	...	...	...	0·07	0 67	1	0·74	?	2 19	?	2·42	?
		Ramgar ...	...	...	...	...	0·30	0·86	...	2	1·16	?	2·29	?	3·79	?
	Lohardaga	Lohardaga ...	...	...	...	...	...	0·18	0·06	1	0·24	0·41	0 58	0·53	0·95	2·60
		Ranchi ..	0·49	...	...	...	...	1·18	0·44	3	2·11	1·38	4·16	1·55	7·07	3·45
		Silli ...					0 90					?		?		?
	Palamau ...	Palamau (Daltanganj).	...	...	...	...	...	...	0·03	Nil	0·03	0·55	1·25	0·71	1·56	1·77
		Lalumath ..	0·06									?		?		?
		Husainabad	...	...	...	...	...	...	...	Nil	Nil	?	4·36	?	5·08	?
		Garhwa	...	...	...	...	...	...	...	Nil	Nil	?	1·85	?	1·35	?
	Singhbhum ..	Chaibassa										1·11		1·41		3·88
		Chakardharpur.	...	...	...	...	0·18	1·42	...	2	1·60	?	1·64	?	5·89	?
		Ghatsila	...	...	...	...	0·50	0·12	...	2	0·62	?	1·20	?	9·32	?
		Baharagura	0·09	...	...	...	0·41	0·10				?		?		?
		Gaikeira ...	...	...	...	...	...	...	...	Nil	Nil	?	0·60		8·98	
		Kalikapur ...	...	0·12	...	...	0·59	2·36	0·10	4	3·08	?	3·50		10·91	
	Manbhum ...	Purulia ...	...	...	...	0·21	0·27	0·10	...	3	0·58	1·17	1 08	1·41	7·48	3 27
		Gobindpur	...	...	...	0·24	0·05	0·18	...	2	0·47	1·33	0·69	1·59	6 31	2·70
		Raghunathpore.	0·19	0·29	...	...	0·83	...	...	3	1·31	?	1·96	?	6·42	?
		Barahabhum	0·17	...	...	...	0·03	1·70	...	2	2·20	?	2 50	?	9·65	?
		Jhalda .	...	...	0·26	...	0·24	...	0·02	2	0·52	?	1·65	?	5·78	
		Chas .	...	...	...	0·50	...	...	...	1	0·50	?	0·50	?	4·57	?
		Pandra ..	...	...	...	...	0·12	0·45	...	2	0·57	?	3 72	?	10·62	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall column are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inch of rain has fallen.

CALCUTTA, *the* 13*th June* 1893.

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 10TH JUNE 1893.

SETTLED weather has prevailed over the whole province throughout the week, if the occasional occurrence of local storms with rain be overlooked. These were fairly numerous in Lower Bengal in the early part of the week, and later in the northern districts.

On the first day, Sunday, the fourth, the area of lowest pressure lay along the foot of the hills, and isobars ran almost due east and west. Gradients were steeper than usual because of an excess of nearly a tenth of an inch in Orissa and the adjacent parts of South-West Bengal and Chota Nagpur, and a similar defect in North Bengal and North Bihar. A brisk rise commenced on the 5th in North Bengal and the defect there soon disappeared, after which a steady slow rise up to the last day of the week caused an excess of from ·1 inch to ·2 inch in the northern districts. In consequence of these changes the area of lowest pressure was forced to the west, and winds from being south-westerly at all stations, changed to south or south-east in Lower Bengal and east in North Bengal and Bihar. These directions are fairly normal for the season, and continued unchanged till the end of the week. With the commencement of easterly winds local storms became more general in East and North Bengal, and probably owing to the scattered rainfall brought by them temperature gradually fell. In the beginning of the week temperature was below the normal only in Orissa and Chota Nagpur, but the area of relatively low readings gradually extended, and by the end of the week included all districts.

Pressure.—After the steady rise of pressure in the northern districts the distribution became much more uniform over Bengal and the Bay than is usual in the early part of June. In the extreme south of the Bay pressure was very nearly normal, but excess gradually increased towards the north, where it was in places more than ·15 inch. The means for the week at the Bengal stations are all above the normal by amounts varying from ·05 inch to ·12 inch.

Temperature.—As stated above, temperature was generally above the normal at the beginning of the week, but owing to local storms readings fell below the normal except at a few stations in East Bengal and the west of Bihar. Coolest weather was in the south-western districts, and especially in Chota Nagpur. This is shown by the means for the large divisions. In Chota Nagpur mean defect is 3·8°, and in Orissa and South-West Bengal about 1°. In all the other districts except Assam there is excess; in South Bihar and North Bengal of about half a degree, and East Bengal and North Bihar of 1·7°.

Rainfall.—Showers fell occasionally in all districts, but the total falls for the week are below the normal in all districts. The showers occurred in the southern districts chiefly on the 4th and 5th or the first two days of the week, and in the north from the 6th to the 10th. The largest mean fall is 2·04 inches in North Bengal, and the only other over 1 inch is 1·12 inches in East Bengal. Chota Nagpur received on an average ·83 inch, North Bihar ·61 inch, South-West Bengal ·52 inch, Orissa ·25 inch and South Bihar ·16 inch.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 10th of June 1893:—

METEOROLOGICAL DIVISIONS.	TEMPERATURE.						RAINFALL.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th May 1893.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	97·1	71·6	91·0	79·7	85·4	−1·7	0·25	1·16	−0·91	0·57	1·48	−0·91	0·53	1·58	15·38	3·68
South-West Bengal ...	98·6	70·7	93·4	78·9	86·1	−1·0	0·52	2·08	−1·56	0·93	2·33	−1·39	0·76	2·78	10·18	5·33
North Bengal	97·1	72·2	91·6	76·7	84·2	+0·7	2·04	3·40	−1·36	2·18	2·86	−0·68	3·70	4·73	9·08	9·73
East Bengal	95·8	72·9	90·0	77·9	84·0	+1·7	1·12	3·96	−2·84	1·59	3·26	−1·67	3·22	5·35	15·21	9·45
North Bihar	103·8	68·8	98·6	78·8	88·7	+1·7	0·71	0·85	−0·14	0·56	1·10	−0·60	1·37	1·20	2·86	2·91
South Bihar	107·6	75·0	101·0	80·1	90·6	+0·4	0·16	0·64	−0·48	0·54	1·01	−0·47	1·56	0·89	3·16	2·34
Chota Nagpur	98·8*	65·4*	94·3*	74·5*	84·4*	−3·8*	0·72	0·96	−0·24	2·00	1·71	+0·29	1·22	1·19	5·87	2·99
Assam	94·1	70·3	88·4	75·0	81·7	−0·7										

* Daltonganj not included.

METEOROLOGICAL OFFICE, BENGAL,
The 13th June 1893.

C. LITTLE,
Offg. Meteorological Reporter to the Govt. of Bengal.

Abstract of the results of Meteorological Observations taken at the Alipore Observatory in the month of May 1893.

	Inches.	Date.	Hour.
The mean pressure of the month	29 628		
The average pressure of May from 24 years' registers ...	29 656		
The highest pressure in the month	29·886	9th	10
The lowest pressure in the month	28 979	26th	10
The range of pressure	0·907		
	Hours.		
The total number of hours of bright sunshine during the month	212·3		
The maximum possible number of hours of sunshine ...	408·3		
	⊖		
The mean temperature of the month	82·6		
The average temperature of May from 24 years' registers ...	86·1		
The highest temperature in the month	96·9	20th.	
The lowest temperature in the month	66·4	7th.	
The range of temperature during the month	30·5		
The mean daily range of temperature	13·9		
The greatest range of temperature in one day	20·1	1st.	
	Per cent.		
The mean humidity of the month	80		
The average humidity of May from 24 years' registers ...	73		
	Inches.		
The mean vapour tension of the month	0·885		
The average vapour tension of May from 9 years' registers ...	0·933		
The mean cloud proportion of the month	5·73		
The average cloud proportion of May from 16 years' registers ...	4·60		
The total rainfall of the month	17·11		
The total rainfall indicated by a Beckley's self-registering rain-gauge (mouth of the gauge about 52 feet above the ground)	16·34		
The average fall of May from 48 years' registers ...	5·40		
The greatest fall in 24 hours	6·15	26th.	
	Days.		
The number of rainy days in the month	14		
The average number of rainy days in May from 24 years' registers	13		
	⊖		
The mean maximum equilibrium temperature of solar radiation during the month	139·6		
The mean difference of sun and air temperatures	50·4		
The greatest sun temperature	159·0	21st.	
The greatest excess of sun over air temperature	63·3	14th.	
The mean temperature of the nocturnal radiation thermometer on woollen cloth	73·0		
The mean depression of the nocturnal radiation thermometer below the minimum air temperature at 4 feet above the ground	2 9		
The greatest depression of the nocturnal radiation thermometer below the minimum air temperature	5·0	15th.	
	Miles.		
The mean movement of the wind per day	137·6		
The greatest movement of the wind in one day	532·0	26th.	
The greatest movement of the wind in one hour	36·0	26th, 9 to 10 A.M.	

The number of hours with winds from each of the 8 points—

N. 9, N.E. 39, E. 121, S.E. 85, S. 161, S.W. 150, W. 52, N.W. 28, Calm 99.

The results of observations at the Alipore Observatory are not rigorously comparable with the registers of past years (at the Park Street Observatory). The barometer is about 3 feet higher at Alipore, and, other things being equal, reads therefore ·003 lower. The diurnal range of temperature is also greater at Alipore, and the mean temperature apparently about 0·5 higher; and, finally, the thermometer which furnished the record of temperature at the Surveyor-General's Office during 20 years and upwards is found to read 0·6 higher than the Kew standard thermometer, which is the standard of reference at the present Observatory.

J. H. GILLILAND,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA;
Calcutta, the 12th June 1893.

Abstract of the Results of the Barometric and Thermometric Observations taken at 10 a.m. at the Meteorological Office, Chowringhee, in the month of May 1893

	Inches.	Date.
The mean pressure at 10 A.M. during the month	29·677	
The mean temperature at 10 A.M. during the month	85°5	
The highest temperature during the month	98·0	20th and 21st.
The lowest temperature during the month	65·1	7th.
The absolute range of temperature during the month	32·9	
The mean daily range of temperature during the month ...	15·1	
The greatest range of temperature in one day during the month ...	21·9	7th.
	%	
The mean 10 A.M. humidity during the month	74	
	Inches.	
The mean 10 A.M. vapour tension during the month	·892	
The total rainfall of the month	16·64	
The greatest fall in 24 hours	5·47	26th.
The number of rainy days in the month	12	

J. H. GILLILAND,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 12th June 1893.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 4th to 10th June 1893.

Month.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature. Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Hygrometry. Vavour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	Rainfall, past 24 hours.
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
June ...	4th ...	29·677	86·6	94·0	14·9	79·1	90·1	84·8	1·088	81·8	79	Nil
,, ...	5th ...	·681	87·5	94·0	13·0	81·0	89·6	84·5	·941	77·4	79	...
,, ...	6th ...	·716	86·0	93·0	14·0	79·0	88·6	81·5	·981	78·6	73	...
,, ...	7th ...	·710	86·0	92·0	12·0	80·0	89·2	82·5	1·021	79·8	74	...
,, ...	8th ...	·734	86·4	93·0	13·2	79·8	89·6	82·0	·992	79·0	71	...
,, ...	9th .	·770	86·4	93·0	13·2	79·8	89·1	81·5	·975	78·4	71	...
,, ...	10th ...	·737	86·4	93·0	13·2	79·8	88·6	81·5	·981	78·6	73	...

	Inches.
The mean 10 A.M. pressure of the seven days	29·718
	°
The mean temperature of the seven days	86·5
The extreme variation of temperature	15·0
The maximum temperature	94·0
	%
The mean 10 A.M. relative humidity of the seven days	74
	Inches.
The total fall of rain from 4th to 10th June 1893	Nil

The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. GILLILAND,
For Meteorological Reporter to the Govt. of India.

METEOROLOGICAL OFFICE, INDIA,
The 12th June 1893.

Results of the Meteorological Observations taken at the Alipore Observatory from 4th to 10th June 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature.				Hygrometry.				Wind.		Rain.	Weather.
					Mean.	Maximum.	Range.	Minimum.	Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Prevailing direction.	Miles recorded.		
		°	•	Inches.	°	°	°	°	°	Inches	°	%			Inches.	
June	4th	149·1	7·8	29·624	86·3	91·5	13·1	78·4	82·4	1·059	81·0	84	SSW and SW ...	95	Nil	Partially cloudy, o.
,,	5th	149·8	8·4	·631	86·8	91·6	10·6	81·0	82·5	1·055	80·9	83	SSW and S ...	84	,,	Partially cloudy.
,,	6th	149·8	10·6	·655	85·6	90·3	11·1	79·2	81·0	0·998	79·2	82	SSE and SSW ...	94	,,	Chiefly clear.
,,	7th	148·1	6·7	648	85·8	89·8	10·4	79·4	81·0	·997	79·1	81	S and SSW ..	94	,,	Partially cloudy.
,,	8th	149·0	8·6	·674	86·1	90·1	9·9	80·2	80·8	·980	78·6	79	SSW and S ..	118	,,	Partially cloudy.
,,	9th	146·4	8·7	·711	86·1	90·9	10·8	80·1	80·1	·946	77·5	76	SSW and S ...	129	,,	Partially cloudy.
,,	10th	147·5	8·6	·667	85·2	90·5	10·5	80·0	79·3	·922	76·8	76	S by W and SSW	132	,,	Partially cloudy.

	Inches.
The mean pressure of the seven days	29·659
The average pressure of the corresponding period for 24 years, Surveyor-General's Office	29·574
	Hours.
The total number of hours of bright sunshine	59·4
The maximum possible number of hours of sunshine	93 9
	°
The mean temperature of the seven days	86·0
The average temperature of the corresponding period for 24 years, Surveyor-General's Office	86·0
The extreme variation of temperature	13·2
The maximum temperature	91·6
	Miles.
The highest velocity of the wind in one hour	11
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	80
The average relative humidity of the corresponding period for 24 years, Surveyor-General's Office	78
	Inches.
The total fall of rain from 4th to 10th June 1893	Nil
The average fall of the corresponding period for 24 years, Surveyor-General's Office	2·39
The total fall from 1st January to 10th June 1893	24·37
The average fall of the corresponding period for 24 years, Surveyor-General's Office	12·67

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph and from observations made at 6h, 10h, 16h, and 22h.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

o, overcast.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;
Calcutta, the 12th June 1893.

J. H. GILLILAND,
For Meteorological Reporter to the Govt. of India.

IRRIGATION DEPARTMENT, BENGAL.

Abstract statement showing Tollage on Canals in Bengal classed as Major Works for the month of March 1893, as compared with that of the corresponding month of the previous year.

Canals.	Tollage, 1892-93. During the month.			Tollage, 1892-93. To end of the month.			Tollage, 1891-92. During the month.			Tollage, 1891-92. To end of the month.		
Orissa Circle.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Taldanda Canal System	343	15	9	6,553	2	8	557	15	9	4,391	15	6
Kendrapara ditto	10,381	13	6	73,776	2	1	10,289	2	8	96,042	5	4
High Level, Range I	1,869	8	3	15,104	5	3	1,795	6	0	12,905	4	2
Ditto, „ II	396	0	3	3,028	9	0	531	6	3	3,026	11	3
Ditto, „ III	224	8	3	1,627	9	11	224	0	3	1,774	10	7
Jajpur Canal ...	33	7	3	286	14	9	48	0	0	285	12	6
Total Orissa Circle ...	13,249	5	3	1,00,376	11	8	13,445	14	11	1,18,426	11	4
South-Western Circle.												
Midnapore Canal ..	13,043	14	9	1,14,916	5	3	14,499	4	9	1,25,097	8	0
Hijili Tidal Canal ..	7,107	12	0	52,575	10	9	6,763	11	9	37,286	13	0
Total South-Western Circle	20,151	10	9	1,67,492	0	0	21,263	0	6	1,62,384	5	0
Sone Circle.												
Patna Canal System ...	2,668	1	3	20,963	10	0	3,136	7	6	25,454	12	6
Arrah ditto ...	2,487	11	3	18,196	7	9	2,512	9	6	21,047	10	6
Buxar ditto ...	1,569	8	9	10,869	9	9	1,306	7	0	10,788	15	9
Total Sone Circle ...	6,725	5	3	50,029	11	6	6,955	8	0	57,291	6	9
Grand Total ...	40,126	5	3	3,17,898	7	2	41,664	7	5	3,38,102	7	1

Government Transport Service.

Canal.	Tollage, 1892-93. During the month. Passengers.	Goods.	Total receipts.			Tollage, 1892-93. To end of the month. Passengers.	Goods.	Total receipts.			Tollage, 1891-92. During the month. Passengers.	Goods.	Total receipts.			Tollage, 1891-92. To end of the month. Passengers.	Goods.	Total receipts.		
Orissa Circle.	No.	Mds.	Rs.	A.	P.	No.	Mds.	Rs.	A.	P.	No.	Mds.	Rs.	A.	P.	No.	Mds.	Rs.	A.	P.
High Level ...	2,212	1,963	2,167	2	9	18,632	15,439	18,828	11	2	2,250	3,068	2,458	6	6	13,912	14,379	14,521	15	10
Total Orissa Circle	2,212	1,963	2,167	2	9	18,632	15,439	18,828	11	2	2,250	3,068	2,458	6	6	13,912	14,379	14,521	15	10

Total Navigation Receipts.

Canals.	Earnings, 1892-93. During the month.			Earnings, 1892-93. To end of the month.			Earnings, 1891-92. During the month.			Earnings, 1891-92. To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Orissa Canals ...	15,416	8	0	1,19,205	6	10	15,904	5	5	1,32,948	11	2
Midnapore Canal ...	13,043	14	9	1,14,916	5	3	14,499	4	9	1,25,097	8	0
Hijili Tidal Canal ...	7,107	12	0	52,575	10	9	6,763	11	9	37,286	13	0
Sone Canals ...	6,725	5	3	50,029	11	6	6,955	8	0	57,291	6	9
Total ...	42,293	8	0	3,36, 727	2	4	44,122	13	11	3,52,624	6	11

CALCUTTA,
The 13*th June* 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

IRRIGATION DEPARTMENT, BENGAL.

IRRIGATION OPERATIONS FOR THE OFFICIAL YEAR 1893-94.

Areas leased for irrigation up to end of April 1893.

Circle.	District.	Canal.	Estimated full discharge.	Average discharge in month.	Discharge utilised.	Approximate area of land irrigated during the year up to the end of the month.	Approximate area of land under irrigation up to the same date last year.	Details of areas leased: Five years, all crops.	Five years, kharif.	Annual leases: Kharif.	Rabi.	Sugarcane.	Bhadoi.	Hot-weather.	Total.	Grand Total.	Rainfall, 1893-94: During month.	Up to end of month.	Rainfall, 1892-93: During month.	Up to end of month.	Remarks.
			C. ft.	C. ft.	C. ft.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Inches.	Inches.	Inches.	Inches.	
Orissa	Cuttack	Taldanda, 1st reach	1,342	...	} ...	...	...	...	2,479	...	...	...	...	...	...	2,479	0·60	0·60	...	...	
		Ditto, 2nd "	566	...				...	2,700	...	...	...	...	...	...	2,700	{ 0·10	0·10	...	...	
		Machgaon	766	...	...	...	65										{ ...	...	...	...	
		Kendrapara	1,067	251	139	24,957	1,339	...	24,577	...	...	...	...	...	...	24,577	0·40	0·40	...	...	
		Gobri	372·82	42	15·30	48	52	...	769	...	...	...	...	...	...	769	0·82	0·82	...	...	
		Do. Extension	648	35	14·31	9	29	...	775	...	...	...	...	...	...	775	No	gauge.			
		Pattamundi	885	73	38·45	28	57	...	2,400	...	...	...	...	...	...	2,400	1·20	1·20	...	...	
		High Level, Range I	608	146·83	...	...	...	...	866	...	...	...	...	...	...	866	3·34	3·33	...	...	
		Ditto, ditto II	727·16	...	...	42	27	...	288	...	42	...	...	...	42	330	...	...	...	...	
		Jajpur Canal	700	...	...	...	...	...	1,381	...	...	...	...	...	...	1,381	...	...	...	...	
	Balasore	High Level, Range III	727·16	15·33	...	97	129	...	12,059	...	...	96	...	...	96	12,155	0·87	0·87	0·42	0·42	
		Total	...	...	...	25,181	1,689	...	48,294	...	42	96			138	48,432	...				
		Total of the corresponding period of last year	...	...	...	...	...	...	152,157	...	28	155	...	...	183	152,340	...	...	...	...	
South-Western.	Midnapore	Midnapore	1,411	11	...	...	...	...	48,537	...	...	...	...	...	...	48,537	1·90	1·90	1·68	1·68	8 days discharging.
		Panchkura	522	1	...	...	...	...	6,529	...	...	...	...	...	...	6,529	0·38	0·38	1·99	1·99	2 days discharging.
	Howrah	Tidal Reaches, Ranges I & II	...	...	...	...	...	...	763	...	...	...	...	...	...	763	...	...	...		
		Total	...	...	...	...	...	...	55,829	...	...	...	...	...	...	55,829	...	...	...	...	
		Total of the corresponding period of last year	...	...	...	...	...	...	66,772	...	...	...	...	...	...	66,772	...	...	...	...	
Sone	Shahabad	Western Main	4,342	1,121	21	126	762	17,479	...	...		...	...	137	137	17,616	} 0·06	0·06	...	...	
		Buxar	1,226	188	109	752	3,190	50,509	...	...	...	...	...	1,452	1,452	51,961					
		Arrah	2,000	794	531	7,717	9,000*	109,500	...	...	...	...	...	6,521	6,521	116,021	0·06	0·06	...	...	
	Patna and Gaya.	Eastern Main	} 1,466	266	108	{ 35	...	2,099	...	...	...	...	...	...	...	2,099	} 1·42	1·42	...	...	
		Patna				{ 1,580	...	55,941	...	...	...	...	...	1,340	1,340	57,281					
		Total	...	...	...	10,210	13,042	235,528	...	...	...	...	...	9,450	9,450	244,978	...	...	...	...	
		Total of the corresponding period of last year	...	...	...	...	...	190·206	...	...	...	...	...	11,055	11,055	201,261	...	...	...	...	
		Grand Total	...	...	...	35,391	14,731	235,528	104,123	...	42	96	...	9,450	9,588	349,239	...	...	...	...	
		Grand Total of the corresponding period of last year	...	...	...	...	...	190,206	218,929	...	28	155	...	11,055	11,238	420,373	...	...	...	...	

* Last year's return included by mistake 8,812 acres on account of sugarcane in five years' leases, which were not under irrigation until after the 25th June.

CALCUTTA,
The 12th June 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

IRRIGATION DEPARTMENT,—BENGAL.

Statement showing heights over mean sea-level and low-water in the Rivers Ganges, Bhagirathi, Jalangi, and Brahmaputra, for the month of May 1893.

Date.	River Ganges.																River Bhagirathi.		River Jalangi.		River Brahmaputra.	
	Mirzapur.		Benares.		Buxar.		Dinapore.		Monghyr.		Sahibganj.		Rampur Boalia.		Goalundo.		Berhampore.		Sarupganj.		Gowhatty.	
Distance. Miles.	From Allahabad ... 86		From Allahabad ... 134	From Mirzapur ... 48	From Benares 90		From Benares 177	From Buxar ... 87	From Benares 287	From Dinapore 110	From Benares 381	From Monghyr 94	From Benares 471	From Sahibganj ... 90	From Benares 591	From Rampur Boalia ... 120						
	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.	Height over zero.	Height over mean sea-level.
1st	2·00	208·22	0·00	196·80	0·42	169·47	6·90	141·13	Below zero. 0·25	101·60	Below zero. 4·33	63·67	Below zero. 0·46	41·54	6·92	15·86	2·42	36·16	4·33	8·63	7·83	156·59
2nd	2·00	208·22	Below zero. 0·04	196·76	0·42	169·47	6·80	141·03	0·29	101·56	4·42	63·58	0·50	41·50	6·75	15·69	2·50	36·24	3·67	7·97	7·79	156·55
3rd	2·00	208·22	0·04	196·76	0·42	169·47	6·70	140·93	0·21	101·64	4·33	63·67	0·52	41·48	6·33	15·27	2·54	36·28	3·83	8·13	10·10	158·86
4th	1·92	208·14	0·04	196·76	0·42	169·47	6·70	140·93	0·21	101·64	4·33	63·67	0·50	41·50	6·25	15·19	2·54	36·28	3·25	7·55	11·90	160·66
5th	1·92	208·14	0·04	196·76	0·42	169·47	6·75	140·98	0·25	101·60	4·33	63·67	0·44	41·56	6·17	15·11	2·58	36·28	3·00	7·30	11·70	160·46
6th	1·83	208·05	0·08	196·72	0·33	169·38	6·80	141·03	0·29	101·56	4·42	63·58	0·42	41·58	6·33	15·27	2·62	36·36	2·83	7·13	10·40	159·16
7th	1·92	208·14	0·12	196·68	0·33	169·38	6·85	141·08	0·33	101·52	4·42	63·58	0·39	41·61	6·67	15·61	2·83	36·57	2·83	7·13	8·90	157·66
8th	1·92	208·14	0·17	196·63	0·25	169·30	7·00	141·23	0·35	101·50	4·33	63·67	0·25	41·75	7·17	15·11	3·04	36·78	3·00	7·30	9·40	158·16
9th	1·83	208·05	0·21	196·59	0·25	169·30	7·10	141·33	0·42	101·43	4·33	63·67	0·23	41·77	7·25	16·19	3·25	36·99	3·25	7·55	7·10	155·86
10th	1·83	208·05	0·25	196·55	0·25	169·30	7·10	141·33	0·50	101·35	4·25	63·75	0·23	41·77	7·00	15·94	3·42	37·16	3·25	7·55	6·70	155·46
11th	1·83	208·05	0·29	196·51	0·25	169·30	7·10	141·33	0·54	101·31	4·25	63·75	0·25	41·75	5·50	15·44	3·67	37·41	3·25	7·55	6·60	155·36
12th	1·58	207·80	0·33	196·47	0·25	169·30	7·20	141·43	0·54	101·31	4·25	63·75	0·25	41·75	6·08	15·02	3·83	37·57	3·50	7·80	6·40	155·16
13th	1·50	207·72	0·50	196·30	0·17	169·22	7·40	141·63	0·58	101·27	4·25	63·75	0·23	41·77	5·75	14·69	4·00	37·74	3·67	7·97	6·30	155·06
14th	1·50	207·72	0·54	196·26	0·08	169·13	7·80	142·03	0·58	101·27	4·33	63·67	0·12	41·88	5·75	14·69	3·75	37·49	3·83	8·13	7·10	155·86
15th	1·50	207·72	0·58	196·22	0·08	169·13	7·90	142·13	1·00	100·85	4·33	63·67	0·08	41·92	5·75	14·69	3·50	37·24	3·83	8·13	6·90	155·66
16th	1·50	207·72	0·63	196·18	0·08	169·13	8·10	142·33	1·17	100·68	4·33	63·67	0·04	41·96	5·75	14·69	3·42	37·16	4·58	8·88	6·30	155·06
17th	1·50	207·72	0·67	196·13	0·08	169·13	8·10	142·33	1·33	100·52	4·42	63·58	Above zero. 0·02	42·02	5·75	14·69	3·42	37·16	3·00	7·30	4·60	153·36
18th	1·50	207·72	0·75	196·05	0·00	169·05	7·70	141·93	1·33	100·52	4·42	63·58	0·10	42·10	5·67	14·61	3·37	37·11	3·00	7·30	4·30	153·06
19th	1·50	207·72	0·83	195·97	Below zero. 0·08	168·97	7·60	141·83	1·43	100·43	4·33	63·67	0·21	42·21	5·50	14·44	3·29	37·01	3·50	7·80	4·29	153·05
20th	1·42	207·64	0·87	195·93	0·17	168·83	7·30	141·53	1·29	100·56	4·33	63·67	0·27	42·27	5·33	14·27	3·25	36·99	3·42	7·72	4·60	153·36
21st	1·42	207·64	0·87	195·93	0·25	168·80	7·20	141·43	1·25	100·60	4·33	63·67	0·31	42·31	5·00	13·94	3·21	36·95	3·42	7·72	4·80	153·56
22nd	1·42	207·64	0·87	195·93	0·33	168·72	7·20	141·43	0·92	100·93	4·42	63·58	0·35	42·35	5·00	13·94	3·17	36·91	3·33	7·63	5·30	154·06
23rd	1·33	207·55	0·92	195·88	0·33	168·72	7·10	141·33	0·83	101·02	4·42	63·58	0·35	42·35	5·25	14·19	3·12	36·86	3·00	7·30	5·50	154·26
24th	1·25	207·47	0·96	195·84	0·42	168·63	7·10	141·33	0·83	101·02	4·33	63·67	0·33	42·33	5·50	14·44	3·08	36·82	3·00	7·30	6·00	154·76
25th	1·25	207·47	1·00	195·80	0·42	168·63	7·05	141·28	Above zero. 0·96	102·81	4·33	63·67	0·31	42·31	6·00	14·94	3·04	36·78	3·00	7·30	6·40	155·16
26th	1·25	207·47	1·00	195·80	0·42	168·63	7·00	141·23	0·87	102·72	4·33	63·67	0·31	42·31	6·75	15·69	3·00	36·74	3·00	7·30	6·60	155·36
27th	1·33	207·55	1·00	195·80	0·42	168·73	7·20	141·43	0·79	102·64	4·25	63·75	0·44	42·44	7·50	16·44	3·12	36·86	5·50	9·80	6·70	155·46
28th	1·17	207·39	1·00	195·80	0·50	168·55	7·20	141·43	1·04	102·89	4·25	63·75	0·44	42·44	7·42	16·36	3·33	37·07	4·92	9·22	6·90	155·66
29th	1·08	207·30	1·00	195·80	0·50	168·55	7·70	141·93	1·17	103·02	4·25	63·75	0·50	42·50	6·75	15·69	3·50	37·24	5·25	9·55	7·40	155·16
30th	1·08	207·30	1·00	195·80	0·50	168·55	8·10	142·33	1·33	103·18	4·17	63·83	0·52	42·52	6·58	15·52	4·58	38·32	7·83	12·13	8·30	157·06
31st	1·00	207·22	1·04	195·76	0·67	168·38	8·90	143·13	1·67	103·52	4·17	63·83	0·54	42·54	6·58	15·52	5·00	38·74	8·42	12·72	8·90	157·66

CALCUTTA,
The 13th June 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 10th June, 1893, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 10th June 1893.			Week ending Saturday, the 11th June 1892.		
	Number of boats.	Weight of cargo.	Tollage.	Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs
Rice and paddy	207	33,225	503	203	99,600	1,682
Jute	8	2,750	47	11	6,110	59
Firewood	71	36,250	510	130	69,725	1,030
Other articles	715	1,70,125	2,349	727	2,29,030	3,406
Total ...	1,001	2,42,350	3,409	1,071	4,04,465	6,177

EAST INDIAN RAILWAY.

Statement of Goods Traffic in Staples carried during the five weeks ending 29th *April* 1893, *as compared with the same period of* 1892.

Staples.	1892.		1893.		Increase.		Decrease.	
	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.	Weight.	Freight.
	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.	Mds.	Rs.
Cotton, raw	68,504	50,534	53,879	41,671	...	...	14,625	8,863
Cotton twist and yarn—								
1.—European	10,134	10,198	5,928	4,878	...	...	4,206	5,320
2.—Indian	20,639	11,623	21,984	12,505	1,345	882	...	...
Cotton piece-goods—								
1.—European	2,09,703	2,43,659	1,14,567	1,13,643	...	...	95,136	1,30,016
2.—Indian	10,422	6,887	14,062	9,996	3,640	3,109	...	...
Drugs and chemicals—								
1.—Intoxicating other than opium	599	291	1,204	774	605	483	...	...
2.—Non-intoxicating	11,707	10,905	10,450	8,981	...	...	1,257	1,924
Dyes and tans—								
1.—Indigo	2,711	2,643	436	390	...	...	2,275	2,253
2.—Myrabolams	26,836	6,799	37,894	10,309	11,058	3,510	...	...
3.—Aniline dyes	204	246	1,054	493	850	247	...	...
4.—Cutch	2,698	1,134	2,582	1,188	...	54	116	...
5.—Paints and colours	16,677	4,501	21,996	4,372	5,319	...	...	129
6.—Others	5,230	2,373	3,464	2,478	...	105	1,766	...
Grains—								
1.—Wheat	17,52,044	5,42,344	3,99,515	1,45,782	...	...	13,52,529	3,96,562
2.—Rice	7,02,154	1,18,213	6,75,612	1,06,082	...	...	26,542	12,131
3.—Jawar and bajra	20,570	3,066	41,506	3,248	20,936	182	...	...
4.—Gram	1,59,019	42,082	1,37,191	47,614	...	5,532	21,828	...
5.—Indigo seed	24,691	7,514	26,234	6,747	1,543	...	...	767
6.—Seeds other than oil-seeds	55,611	22,911	49,725	27,444	...	4,533	5,886	...
7.—Others	3,77,796	93,764	3,25,445	79,063	...	...	52,351	14,701
Hides and skins—								
1.—Hides of cattle	39,672	26,490	55,431	33,081	15,759	6,591	...	...
2.—Skins of sheep, &c.	19,336	12,632	21,833	9,886	2,497	...	...	2,746
Horns	2,177	1,318	1,321	1,011	...	...	856	307
Jute—								
1.—Raw	18,457	6,258	36,609	11,498	18,152	5,240	...	...
2.—Gunny bags and cloth	2,19,454	1,15,046	2,04,250	1,10,015	...	...	15,204	5,031
Lac—								
1.—Stick	11,876	4,097	6,663	3,866	...	...	5,213	231
2.—Shell lac	15,154	12,430	14,744	11,554	...	...	410	876
Leather—								
1.—Unmanufactured	1,670	3,084	2,397	4,793	727	1,709	...	...
2.—Manufactured	5,093	5,622	5,240	6,701	147	1,079	...	...
Liquors—								
1.—Beer	9,241	5,705	10,167	5,096	926	...	...	609
2.—Wines	3,183	5,418	4,110	6,026	927	608	...	...
3.—Spirits	2,277	3,128	1,605	1,985	...	...	672	1,143
Metals—								
1.—Copper, unwrought	6,409	8,347	3,480	4,023	...	...	2,929	4,324
2.—Brass, unwrought	5,164	3,354	3,726	1,708	...	...	1,438	1,646
3.—Brass and copper, wrought	16,517	7,982	15,074	7,478	...	...	1,443	504
4.—Iron	1,84,655	89,578	2,58,468	1,52,835	73,813	63,257	...	...
5.—Tin	3,742	3,165	4,802	3,673	1,060	508	...	...
6.—Others	13,662	9,916	11,571	8,405	...	...	2,091	1,511
Oils—								
1.—Castor	4,871	1,610	5,232	1,263	361	...	...	347
2.—Kerosine	66,904	29,057	90,442	45,503	23,538	16,446	...	...
3.—Others	10,862	4,916	11,442	4,663	580	...	...	253
Oil-seeds—								
1.—Linseed	13,02,385	4,62,115	12,45,078	4,07,554	...	...	57,307	54,561
2.—Rape and mustard	6,04,327	1,77,704	12,02,938	2,36,517	5,98,611	58,813	...	...
3.—Til or jinjili	16,327	5,039	15,622	3,672	...	...	705	1,367
4.—Castor	1,68,287	50,897	1,55,065	43,704	...	...	13,222	7,193
5.—Poppy	81,922	25,906	1,29,240	39,752	47,318	13,846	...	...
6.—Others	9,318	1,827	18,902	3,613	9,584	1,786	...	...
Opium	24,131	10,092	21,323	10,791	...	699	1,808	...
Paper and pasteboard	10,831	6,717	12,292	8,745	1,461	2,028	...	...
Provisions—								
1.—Ghee	33,233	23,876	37,503	28,254	4,270	4,378	...	...
2.—Dried fruits and nuts	27,797	23,438	39,077	27,681	11,280	4,243	...	...
3.—Cocoanuts	6,872	2,884	9,292	2,341	2,420	...	...	543
4.—Turmeric	20,430	11,886	19,524	12,974	...	1,088	906	...
5.—Others	68,903	29,124	74,279	28,121	5,376	...	...	1,003
Salt	6,54,241	1,28,546	6,24,344	92,873	...	...	29,897	35,673
Saltpetre, &c.—								
1.—Saltpetre	98,227	41,210	75,896	29,658	...	...	22,331	11,552
2.—Borax	4,356	3,405	4,377	3,515	21	110	...	...
3.—Other saline substances	46,094	13,218	25,279	6,984	...	...	20,815	6,234
Silk, raw—								
1.—Foreign	4	13	...	...	...	...	4	13
2.—Indian	1,626	1,081	3,952	1,967	2,326	886	...	...
Silk piece-goods—								
1.—Foreign	7	14	10	34	3	20	...	...
2.—Indian	357	381	547	539	190	158	...	...
Spices—								
1.—Pepper	5,840	5,619	3,617	3,284	...	...	2,223	2,335
2.—Other	31,331	17,309	43,266	34,334	11,935	17,025	...	...
Sugar—								
1.—Drained	42,306	17,224	32,675	11,128	...	...	9,631	6,096
2.—Undrained	6,72,656	1,13,071	6,43,537	1,45,654	...	32,583	29,119	...
Stone and lime	4,01,455	45,682	5,05,623	76,497	1,04,168	30,815	...	...
Tea—								
1.—Foreign	...	...	...	...	...	...	...	...
2.—Indian	654	664	936	543	282	...	...	121
Timber, &c.—								
1.—Timber	1,73,825	27,615	1,17,967	21,515	...	...	55,858	6,100
2.—Firewood	42,360	4,611	67,198	6,044	24,838	1,433	...	...
Tobacco	1,45,552	63,452	2,15,411	1,01,188	69,859	37,736	...	...
Umbrellas	3,172	4,767	2,262	2,063	...	...	910	2,704
Wool—								
1.—Raw	4,023	3,623	2,053	1,422	...	...	1,970	2,201
2.—Piece-goods—								
a.—European	557	686	275	237	...	...	282	449
b.—Indian	1,921	1,864	1,883	2,382	...	518	38	...
3.—Shawls	7	35	...	...	...	...	7	35
All other articles of merchandise	5,35,066	2,38,701	9,81,602	3,09,756	4,46,536	71,055	...	...
Total ...	93,78,725	31,05,156	90,47,180	27,68,077	...	...	3,31,545	3,37,079
Military stores	22,512	30,838	23,177	22,964	665	...	...	7,874
Coal—								
1.—For public	45,29,239	6,61,755	53,94,033	7,96,178	8,64,794	1,34,423	...	...
2.— " Railway	6,25,598	73,481	6,67,713	80,087	42,115	6,606	...	...
Railway Materials—								
1.—For construction and revenue	10,33,812	57,487	9,98,813	41,001	...	...	34,999	16,486
Live-stock	...	7,595	...	6,799	...	...	...	796
Total ...	1,55,39,886	39,35,812	1,61,30,916	37,15,096	5,41,030	...	...	2,20,716

T. SIMPSON, *Assistant Auditor.*

TRAFFIC AUDIT OFFICE, GOODS DIVISION, JAMALPUR, *the 7th June* 1893.

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 3rd June 1893, on 1,610⅓ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	312,528	2,87,248 1 0	30,58,875 0	7,59,913 6 0	20,858 7 0	10,68,019 14 0	73,805	130,669¾	204,474½
Or per mile of railway	......	178 5 9	......	471 13 7	12 15 3	663 2 7	......	......	......
For previous 21 weeks of half-year	6,146,341	67,01,488 8 0	6,47,70,629 20	1,47,50,218 9 9	4,28,781 5 0	2,18,80,488 6 0	1,622,961¾	2,485,065½	4,108,027½
Total for 22 weeks ...	6,458,869	69,88,736 9 0	6,78,29,504 20	1,55,10,131 15 0	4,49,639 12 0	2,29,48,508 4 0	1,696,766¾	2,615,735¾	4,312,502
Comparison.									
Total for corresponding week of previous year	297,707½	2,67,082 1 2	34,47,190 20	8,12,760 15 4	20,621 11 2	11,00,464 11 8	73,871	145,450	219,321
Per mile of railway corresponding week of previous year ..	......	165 13 5	......	504 10 7	12 12 11	683 4 11	......	......	......
Total for corresponding 22⅞ weeks of previous year	6,541,212	69,29,587 0 1	6,74,00,677 0	1,63,92,290 0 11	4,45,373 3 10	2,37,67,250 4 10	1,721,256	2,706,344	4,427,600

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 3rd June 1893, on 22¼ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ..	*18,051	*4,416 8 0	5,352 20	207 14 0	6 0 0	4,630 6 0	855	113	968
Or per mile of railway	......	198 7 11	......	9 5 6	0 4 3	208 1 8	......	......	......
For previous 21 weeks of half-year	†494,944	†1,27,028 5 0	‡2,47,467 30	‡8,493 1 0	§246 0 0	1,35,767 6 0	18,756	2,216	20,972
Total for 22 weeks .	502,995	1,31,444 13 0	2,52,820 10	8,700 15 0	252 0 0	1,40,397 12 0	19,611	2,329	21,940
Comparison.									
Total for corresponding week of previous year	20,854	5,439 15 8	10,068 0	429 12 0	13 8 0	5,383 3 8	862	144	1,006
Per mile of railway corresponding week of previous year	......	244 7 11	......	19 5 1	0 9 8	264 6 8	.....	.....	......
Total for corresponding 22⅞ weeks of previous year ...	503,370	1,29,800 14 6	4,19,753 30	13,438 14 3	262 11 6	1,43,502 8 3	19,739	2,602	22,341

* Decrease is chiefly in booking from Tarkessur.
† Added number of passengers 1,440 and Rs. 627 }
‡ Deducted Mds. 18 and „ 7 } on account of difference between the approximate and audited figures for the week ended 29th April 1893.
§ Ditto „ 10 }

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 3rd June 1893, on 161⅗ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	18,550	12,286 9 0	57,866 10	8,924 6 0	58 0 0	21,272 15 0	6,060	2,682	8,742
Or per mile of railway	.....	76 2 0	......	55 5 1	0 5 9	131 12 10	......	......	......
For previous 21 weeks of half-year	*398,592	*2,97,110 4 0	†14,33,907 20	†1,89,886 6 0	‡1,069 0 0	4,88,065 10 0	118,944¾	69,307	188,251¾
Total for 22 weeks ...	417,142	3,09,396 13 0	14,91,773 30	1,98,814 12 0	1,127 0 0	5,09,338 9 0	125,004¾	71,989	196,993¾
Comparison.									
Total for corresponding week of previous year	16,406½	11,398 6 9	36,844 10	8,004 15 0	46 3 3	19,449 9 0	6,551	2,417	8,968
Per mile of railway corresponding week of previous year .	.....	70 9 11	......	49 9 7	0 4 7	120 8 1	......	......	......
Total for corresponding 22⅞ weeks of previous year	875,221½	2,92,988 3 0	9,70,339 10	1,82,570 4 2	1,588 15 3	4,77,147 6 5	140,762	49,157	189,919

* Added number of passengers 629 and { Rs. 669 }
† Do. Mds. 1,393 and { „ 1,444 } on account of difference between the approximate and audited figures for the week ended 29th April 1893.
‡ Deducted { „ 7 }

EASTERN BENGAL STATE RAILWAY.

(Including N. B., Dacca, K.-D., and Assam-Bihar Sections.)

Approximate Return of Traffic for week ended 3rd June 1893, on 777 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	202,962	83,980 0 0	4,82,694 0	78,550 0 0	10,720 0 0	1,73,250 0 0	27,746	24,244	51,990
Or per mile of railway	261	108 0 0	621 0	101 0 0	†1 0 0	210 0 0	......	......	......
For previous 21 weeks of half-year *	3,770,050	18,10,435 0 0	1,53,65,395 0	19,62,480 0 0	3,37,626 0 0	41,10,541 0 0	596,326	597,550	1,193,876
Total for 22 weeks ...	3,973,012	18,94,415 0 0	1,58,48,089 0	20,41,030 0 0	3,48,346 0 0	42,83,791 0 0	624,072	621,794	1,245,866
Comparison.									
Total for corresponding week of previous year ...	205,256	83,857 0 0	4,47,895 0	75,166 0 0	12,368 0 0	1,71,391 0 0	30,926	22,694	53,620
Per mile of railway corresponding week of previous year ...	2:4	108 0 0	576 0	97 0 0	†1 0 0	206 0 0	......	......	......
Total to corresponding date of previous year	3,747,888	18,20,124 0 0	1,32,75,137 0	17,55,574 0 0	3,10,676 0 0	38,95,374 0 0	607,953	639,089	1,247,042

* Audited up to week ending 1st April 1893.
† Excluding steamer earnings.

BENGAL CENTRAL RAILWAY.

Approximate Return of Traffic for the week ended 3rd June 1893, on 125 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ..	35,602	9,570 0 0	42,177 0	2,730 0 0	60 0 0	12,360 0 0	3,525	2,147	5,672
Or per mile of railway ...	285	77 0 0	337 0	22 0 0	......	99 0 0	......	......	......
For previous 21 weeks of half-year*	663,426	2,32,880 0 0	14,18,425 0	87,230 0 0	2,555 0 0	3,22,665 0 0	77,209	41,925	119,224
Total for 22 weeks ...	699,028	2,42,450 0 0	14,60,602 0	89,960 0 0	2,615 0 0	3,35,025 0 0	80,824	44,072	124,896
Comparison.									
Total for corresponding week of previous year	40,762	(a)15,132 0 0	40,312 0	2,997 0 0	43 0 0	18,177 0 0	3,756	1,916	5,672
Per mile of railway corresponding week of previous year ...	326	121 0 0	394 0	24 0 0	......	145 0 0	......	......	......
Total to corresponding date of previous year	671,202	2,38,955 0 0	13,59 773 0	81,668 0 0	2,003 0 0	3,24,626 0 0	81,556	44,871	126,427

* Audited up to week ending 1st April 1893.
(a) Due to Dushohara Ganges bathing festival taken place in this week. In the current year the festival took place during week ending 27th May 1893.

DACCA STATE RAILWAY.

Approximate Return of Traffic for the week ended 3rd June 1892 on 86 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	15,613	4,590 0 0	8,451 0	560 0 0	100 0 0	5,550 0 0	2,487	737	3,224
Or per mile of railway	182	54 0 0	98 0	10 0 0	1 0 0	65 0 0	......	......	......
For previous 21 weeks of half-year*	379,520	1,16,879 0 0	3,19,218 0	29,492 0 0	3,839 0 0	1,50,210 0 0	52,236	15,716	67,951
Total for 22 weeks ...	395,133	1,21,469 0 0	327,669 0	30,352 0 0	3,939 0 0	1,55,760 0 0	54,723	16,452	71,175
Comparison.									
Total for corresponding week of previous year	16,163	4 902 0 0	10,570 0	844 0 0	69 0 0	5,815 0 0	2,487	737	3,224
Per mile of railway corresponding week of previous year	188	57 0 0	123 0	10 0 0	1 0 0	68 0 0	......	......	.....
Total to corresponding date of previous year	371,342	1,19,470 0 0	3,48,402 0	22,212 0 0	3,573 0 0	1,45,255 0 0	55,586	16,216	71,802

* Audited up to week ending 1st April 1893.

BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE RAILWAY.)

Approximate return of traffic for the week ending 3rd June 1893, on 756 miles open

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
otal traffic for the week on 756 miles open	100,780	39,660	5,30,230	68,750	11,760	1,20,170	12,919	20,396	33,315
r per mile of railway	133·31	52·46	701·36	90·94	15·56	158·41	......	......	......
or previous 21 weeks of half-year*	1,106,027	8,95,913	10,097,767	14,71,306	2,69,488	26,36,707	286,774	407,098	693,872
Total for 22 weeks ...	2,206,807	9,35,573	10,627,997	15,40,056	2,81,248	27,56,877	299,693	427,494	727,187
COMPARISON.									
'otal for corresponding week of previous year on 755 miles open	92,874	37,036	530,165	70,917	13,630	1,21,583	13,351	24,553	[illegible],904
'er mile of corresponding week of previous year	123·01	49·06	702·21	93·93	18·05	161·04	......	......	......
'otal to corresponding date of previous year	2,125,210	9,30,472	9,033,004	13,66,891	3,07,421	26,04,784	269,897	473,555	743,352

* Includes audited figures up to 15th April 1893.

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[REGISTERED No. 29.]

No. 25 of 1893.



SUPPLEMENT TO

The Calcutta Gazette.

WEDNESDAY, JUNE 21, 1893.

OFFICIAL PAPERS.

Non-Subscribers to the GAZETTE *may receive the* SUPPLEMENT *separately on payment of Six Rupees per annum if delivered in Calcutta, or Twelve Rupees if sent by Post.*

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RESOLUTION ON THE ANNUAL REPORT OF THE ROYAL BOTANIC GARDEN, CALCUTTA, FOR THE YEAR 1892-93.

FINANCIAL DEPARTMENT—MISCELLANEOUS.

Darjeeling, the 13th June 1893.

RESOLUTION No. 2875Mis.

READ—

The Annual Report of the Royal Botanic Garden, Calcutta, for the year 1892-93.

The Report for the year 1891-92, and the Government Resolution thereon.

THE report, which is one of considerable interest, shows that a steady advance was made during the year in improving the garden both as a scientific centre and as a pleasant resort for the public. At the commencement of the year the season was abnormally dry, and although this had the effect of destroying a number of palms and other out-door plants, these losses were repaired to a great extent before the cold season began. The herbarium continues to receive special attention; more than 15,000 specimens were added to it during the year, among which may be mentioned a large collection of plants from the Royal Herbarium at Kew and the several herbaria in Europe, as well as from Melbourne, Poona, Singapore, Pahang and other States in the Straits Settlements, North Borneo, Penang, Perak, Dehra Dun, Peshawur, Manipur, Assam,

and Egypt. To the contributors of these specimens, including Dr. Cooke, Messrs. Ridley, Haviland, Curtis, Wray, Gamble, Clarke, Sconce-Elliott, and Sir Henry Collett, the thanks of Government are due. Arrangements were also made through the direct agency of the garden officials for continuing the work of collection in Assam, Burma, and the Andaman Islands. Furthermore, Mr. Gammie (Junior), of the Government Cinchona Plantation, was specially deputed under the orders of Government to make a botanical exploration of the less known parts of Sikkim and the Tibetan frontier: the results of his exploration will be embodied in a special report which is in course of preparation. The fourth volume of the Garden Annals was in preparation, and will be published in the current year. The preparation of the fifth volume is also in progress. Both Dr. King and Dr. Prain contributed valuable papers on botanical subjects to Scientific Societies in Bengal and Bombay.

2. The Lloyd Botanic Garden in Darjeeling suffered slightly from hail.

3. The Lieutenant-Governor's thanks are again due to Dr. King for his efficient management of the garden, and to Dr. Prain, the Curator of the Herbarium, who officiated for him during his absence on furlough for seven months.

ORDER.—Ordered that a copy of this Resolution and of the Report be submitted to the Government India, in the Revenue and Agricultural Department, for information.

Ordered also that a copy of this Resolution be forwarded to the Superintendent, Royal Botanic Garden, for information.

By order of the Lieutenant-Governor of Bengal,

J. A. BOURDILLON,

Offg. Secretary to the Government of Bengal.

No. 16G., dated Sibpur, near Calcutta, the 11th May 1893.

From—BRIGADE-SURGEON LIEUTENANT-COLONEL G. KING, M.B., F.R.S., C.I.E., Superintendent, Royal Botanic Garden, Calcutta,

To—The Secretary to the Government of Bengal, Financial Department.

I HAVE the honour to submit herewith the one hundred and sixth Annual Report of the Royal Botanic Garden.

ANNUAL REPORT OF THE ROYAL BOTANIC GARDEN, CALCUTTA, FOR THE YEAR 1892-93.

WHEN the year opened, the garden was suffering from one of the severest droughts which has been experienced for many years. This drought had caused the death of a number of outdoor plants, and especially of palms, and had affected the orchids so that the show of bloom (in spite of the increased number of plants) was the poorest known for years. The drought continued during the months of April and May; and until the monsoon broke it was necessary to employ a very large proportion of the staff of coolies in carrying water. Although dry, the latter part of the hot season had, however, rather a moderate temperature, and the rainy season was favourable; so that the effects of the six months of extreme dryness had been to a great extent recovered from before the cold season began. The latter was the pleasantest which has been experienced in Calcutta within the memory of the oldest inhabitant, and it was in consequence a particularly favourable one for the annuals which form so attractive a feature in the garden during February and March. The expenditure of labour in watering during April, May and June interfered a good deal with the completion of the programme for road-making which had been laid out for the year. A great deal, however, was accomplished in the improvement and remetalling of the avenues in the Palmetum. The roads are no doubt the weak feature in the garden at present, and much remains to be done to bring those

in the central part of it into really good condition. Were mere remetalling all that had to be done, the task would be a simple one; but, owing to the changes of level which were caused by throwing the garden into undulations while it was in process of being laid out afresh some years ago, the levels of many of the older roads must now be altered, and the earthwork which has thus in most cases to precede remetalling adds greatly to the cost of, and lengthens the time taken to effect, the improvements. Towards the end of the year an additional grant of Rs. 5,000 was made for garden improvements, and this was spent chiefly in burning jhamma for road metal to be used during the current year, and in providing bricks for building huts for the garden coolies who have for years past been very badly housed. Although the river did but little visible injury to the bank during the year, it was discovered, when the rainy season had ended, that at one point considerable erosion has occurred, and that the previously sloping bank near the pumping station has been scooped out into a deep hole. I fear there may be serious mischief at this point before long. The conservatories continue to be in a satisfactory condition, the plants in them having suffered comparatively little from the drought of the early part of the year. During the year the collection of aquatic birds on the lake near the orchid house was increased by a gift of water-fowl from Mr. Thiselton Dyer, C.M.G., F.R.S., Director of the Royal Garden, Kew.

2. *Economic plants.*—The usual amount of attention was given to the cultivation and distribution of plants of economic interest. As many as possible of the plant producing sisal hemp (*Agave rigida*, var, *sisalana*) were distributed during the year. The plants thus distributed were obtained from America through the good offices of the Director of Kew. Large numbers of the large-leaved mahogany were issued for planting in avenues in cantonments and civil stations. Rheea plants were also issued as asked for. The interest in rheea cultivation is of a very flickering sort, and at present it has almost died out in the neighbourhood of Calcutta. Plants of the cola-nut tree (*Cola acuminata*) were given out as far as the limited stock permitted. I regret to say that all my efforts to introduce the cultivation of the Japanese paper mulberry have failed. A small plantation is, however, kept up to meet any future demand. As the Japanese mulberry yields a most beautiful fibre, which is naturally so white that it requires very little beaching, it seems a pity that no wealthy landowner has taken up its cultivation on a large scale.

3. *Herbarium.*—Work in the Herbarium went on as usual during the year, botanical references having been answered and plants named for correspondents in increased numbers. Specimens to the number of 15,750 were received from various sources, while 8,787 specimens (all carefully named) were issued to various botanical institutions throughout the world. The plants thus issued belonged largely to families of which either Dr. Prain or myself have recently made particular studies. Foremost amongst the institutions to whom this Herbarium is indebted for contributions during the year is the Royal Herbarium at Kew, the Director of which contributed 2,200 specimens. Next in numbers is the collection of Western Indian species received from Dr. T. Cooke, C.I.E., Principal of the College of Science, Poona. Dr. Cooke's contribution (which contained 1,559 specimens) is a peculiarly acceptable one, as heretofore the flora of Western India had been but poorly represented here. To Mr. H. N. Ridley, Director of the Botanic Garden, Singapore, we are indebted for interesting collections (numbering 1,424 specimens) from Pahang and other States under the protection of the Government of the Straits Settlements. Mr. G. D. Haviland sent no less than 1,144 specimens from North Borneo; while smaller collections were received from Mr. Curtis, Forest Department, Penang (269 specimens); Mr. L. Wray, junior, of the Government Museum, Perak (221 specimens); Mr. J. S. Gamble, Director of the Forest School, Dehra Dun (195); Sir Henry Collett, K.C.B., Peshawar (76). Mr. C. B. Clarke, late of the Indian Educational Department, to whom the Herbarium is already deeply beholden, continued his generous contributions by sending during the year 606 specimens collected by himself, chiefly in the jungles of Manipur and Assam. Mr. Scott-Elliot, a gentleman who has travelled much in the interests of Botany, sent as a contribution from Egypt 121 plants. The Directors of Herbaria in Europe contributed as follows:—Imperial Garden,

Berlin, 849 specimens; Herbarium Imperial Botanic Garden, Vienna, 600 specimens; Imperial Garden, St. Petersburg, 218; Royal Garden, Leiden, 24; while from the University of Melbourne there were received 417 specimens. The recipients of named plants distributed from the Herbarium during the year are to a great extent the same as the donors. A full list of them will be found in the sixth appendix to this report.

4. *Botanical collection.*—Through the direct agency of the officers attached to this Garden the following were received:—

Mr. R. Pantling, orchids of Sikkim	1,500
Mr. G. Gammie, from Independent Sikkim ...	1,021
E. H. Man, Esq., C.I.E., Andamans collections ...	867
Dr. Prain, from North Bengal	68
Native Collectors, Botanical Survey of Burma ...	1,064
Ditto ditto ditto of Assam ...	852

The collections made by Mr. Gammie were the result of a botanical excursion to some of the less known parts of Independent Sikkim and of the Tibetan frontier, on which he was specially deputed with the sanction of Government. They contain many rare plants of much interest. Mr. Gammie was absent for four months. His first excursion extended through the Singalelah Range to its origin in Kinchinjunga. In the vicinity of Kinchinjunga itself Mr. Gammie was, on account of the great inclemency of the weather, able to remain only a few days. He next travelled across Sikkim to Tumloong, from whence he followed up the Tista to Chungtam. From thence Mr. Gammie explored the Lachung valley as far as the Donkia La, which was the northern limit of his travels. He spent two months in forming collections in this valley, and then ascended to Thanka La, and also to Ghora La at the head of the Sebu valley, one of the few tracts in this region which Sir Joseph Hooker was unable to visit during his sojourn in the Eastern Himalaya in 1849-50. From Lachung Mr. Gammie returned to Tumloong; and from thence he traversed the Chola range, visiting the Cho-la, Yak-la, and Zey-lap-la passes. He returned to the cinchona plantation by the military road from Gnatong to the Tista bridge. Mr. Pantling's collections consisted exclusively of orchids, of many of which he has prepared most admirable drawings which I trust it may some day be possible to publish. The collections from the Andamans have been made by two Burmese, who have worked under the supervision of Mr. E. H. Man, C.I.E., whose efforts to help in the exploration of these islands have been most disinterested and laborious, and to whom this garden is very deeply indebted. Native collectors were sent as usual to Assam and Burma, and they brought back fairly good collections of common plants. Owing to my absence on furlough during seven months of the year, no botanical tour was made either by Dr. Prain or myself.

5. *Publications.*—During the year Dr. Prain contributed to the journal of the Bombay Natural History Society a paper on the botany of the Laccadives, founded on a collection of plants made in these islands by Dr. A. Alcock, Surgeon Naturalist to the Indian Marine surveying ship *Investigator*. He also contributed to the Journal of the Asiatic Society of Bengal a paper on the Flora of Narcondam and Barren Island, based on collections made in these islands by himself two years ago. In the same journal Dr. Prain published accounts of a new species of *Mezoneuron* and of two new species of *Pedicularis*. In the Annals of Botany a paper appeared by him on the synonymy of *Anthocoma flavescens;* while in Hooker's *Icones plantarum* he published descriptions and figures of three new species of plants. The fourth volume of the Garden Annals was under preparation during the year, but it will not be ready for publication until the current year. Considerable progress was also made in the preparation of the fifth volume. A paper giving a detailed systematic account of all the members of the natural family of *Anonaceæ* indigenous to British India was published by myself in the Journal of Asiatic Society of Bengal.

6. *Library.*—A few books were purchased and a number were rebound. The whole library was gone over and carefully poisoned with a solution in alcohol of corrosive sublimate, which our experience shows to be by far the best preventive of the ravages of the book maggot.

7. *Interchange of plants and seeds.*—The distribution lists are attached as appendices to this report. They show a total of 13,585 plants and 1,061 packets of seeds received, and of 43,619 plants and 5,072 packets of seeds sent out during the year.

8. *Lloyd Botanic Garden, Darjeeling.*—This branch institution was for the first nine months of the year under the charge of Mr. W. A. Kennedy, and during the remaining three (while Mr. Kennedy was on privilege leave) Mr. G. A. Gammie acted as its Curator. The garden escaped locusts, but suffered slightly from hail.

9. The budget allotments both of the Calcutta and of the Darjeeling gardens were spent almost to the full; as was also a supplementary grant of Rs. 5,000 given for improvements in the former. The estimated revenue for the Lloyd Botanic Garden, Darjeeling, was Rs. 900, and that for the Royal Botanic Garden Calcutta was Rs. 1,000; total Rs. 1,900. This total sum of Rs. 1,900 was revised by the Accountant-General, and raised by that officer to Rs. 2,000, which sum was accepted by Government as estimated revenue for the two gardens for 1892-93. The actual realizations were, for the Darjeeling garden Rs. 785 and for the Calcutta garden Rs. 1,618; total Rs. 2,403.

10. I was absent in Europe on furlough during seven months of the year, and my duties were performed during my absence by Dr. D. Prain. Mr. R. L. Proudlock was Curator, and Mr. G. T. Lane, Assistant Curator of the Calcutta garden during the year. And they as well as Messrs. W. A. Kennedy and G. Gammie in the Darjeeling garden carried on their respective duties to the satisfaction both of Dr. Prain and myself. The head-writer, Babu G. C. Datta, and the office and garden staff have also worked well.

11. Details of the receipts and of the distribution of seeds, plants, and Herbarium specimens will be found in the six tabular returns which are sent as appendices to this report.

RESOLUTION ON THE BUDGET ESTIMATES OF THE COMMISSIONERS OF THE PORT OF CALCUTTA, FOR THE YEAR 1893-94.

No. 1471Marine.

GOVERNMENT OF BENGAL, MARINE DEPARTMENT.

Dated Calcutta, the 15th June 1893.

RESOLUTION.

READ—

A letter No. 3682, dated the 30th March 1893, from the Vice-Chairman of the Commissioners of the Port of Calcutta, submitting for sanction the budget estimates of the Commissioners for the year 1893-94.

A general summary of the budget estimates submitted by the Commissioners is subjoined:—

REVENUE ACCOUNTS.		Estimate for 1893-94.	Estimate for 1892-93.
Receipts.		Rs.	Rs.
Part I.—Jetties	...	11,84,250	12,34,250
„ II.—Inland Vessels' Wharves	..	4,59,000	4,40,000
„ III.—Strand Bank Lands	...	1,68,815	1,70,015
„ IV.—Port or Harbour Master's Department	...	5,07,597	4,96,791
„ VI.—Tramway	...	3,00,000	3,00,000
„ VII.—Port Approaches	...	8,000	6,000
„ VII.—Port dues	...	4,75,000	......
Total	...	31,02,662	26,47,056
„ VIII.—Kidderpore Docks	...	83,000	8,09,000
Special Toll*	...	8,50,000	......
Total	...	40,35,662	34,56,056
Expenditure.			
Part I.—Jetties	...	9,74,914	9,29,852
„ II.—Inland Vessels' Wharves	..	3,85,810	3,84,363
„ III.—Strand Bank Lands	...	98,913	99,539
„ IV.—Port or Harbour Master's Department	...	5,13,352	5,31,224
„ VI.—Tramway	...	2,35,682	2,18,317
„ VII.—Port Approaches	...	4,84,652	4,79,638
Total	...	26,93,323	26,42,933
„ VIII.—Kidderpore Docks	...	13,64,898	10,50,012
Total	...	40,58,221	36,92,945

		Rs.
*Estimated balance on 1st April 1893	...	4,43,030

2. The Kidderpore Docks have not at present been utilized to any extent by the Shipping Companies, and a difficulty has consequently arisen in connection with their working. The subject is receiving the careful consideration of the Government and the Commissioners. The budget estimate as submitted includes a sum which will admit of measures being taken to maintain the water level by pumping, and to keep the gates and sluices in working order, and the machinery and works generally from deteriorating, and in such a state that the graving dock can be used when required. With regard to the Traffic Establishment, provision has been made up to the end of May.

RECEIPTS.

3. PART I.—*Jetties.*—The receipts are taken at Rs. 50,000 less than those of 1892-93. The decrease is due to the general depression in trade. The actual decrease is estimated at Rs. 1,10,000, but an increase is expected in the Petroleum Wharf and Tea Warehouses.

* Not shown in the budget.

4. PART II.—*Inland Vessels' Wharves.*—The receipts are taken at Rs. 19,000 over last year's estimate. The increase is based on actuals.

5. PART IV.—*Port or Harbour Master's Department.*—During the current year the probable receipts from mooring hire were reduced by Rs. 45,000, as it was anticipated that the opening of the docks would take vessels out of the stream. This anticipation not having been realised, the estimated receipts during 1893-94 have been raised to Rs. 2,50,000. As there are reductions on the receipts under certain other heads, the net increase amounts to Rs. 10,806.

6. PART VII.—*Port Approaches.*—The receipts are taken Rs. 2,000 over those of last year's estimate.

7. PART VII.—*Port Dues.*—These are shown in the budget under the head Port approaches, and are expected to produce Rs. 4,75,000.

8. PART VIII.—*Kidderpore Docks.*—The receipts are estimated as follows:—

	Rs.
Receipts from graving dock	75,000
Rent and miscellaneous	2,000
Import	......
Export	......
Dock dues	......
Proportion of receipts for towing vessels by hopper-barges ...	6,000
Total ...	83,000

This shows a decrease of Rs. 7,26,000, as compared with the estimate sanctioned last year. The decrease is due to the fact that the docks have not, as already explained in paragraph 2, been used to the extent which was anticipated when the estimate for last year was sanctioned.

9. The special toll under sections 108 and 109 of the Act is not shown in the Commissioner's budget, but it has been ascertained that the receipts will probably amount to Rs. 8,50,000.

EXPENDITURE.

10. PART I.—*Jetties.*—The estimated expenditure amounts to Rs. 9,74,914 as against Rs. 9,29,852 in 1892-93. The principal items under which there has been an increase are given in the following statement:—

Particulars.	Increase in expenditure.	
	Rs.	
Proportion of Establishment, Working Expenses and repairs to dredgers	13,807	over last year's estimate.
Proportion of salaries of Engineering Establishment	6,602	ditto ditto
Repairs to Jetties, Sheds, Tramway & Compound	46,700	ditto ditto
Working Expenses	7,578	ditto ditto

The increase under the head "Repairs" is due to the provisions for metalling jetty yard, renewing decayed beams and planks on jetty head, and improving the lines in the jetty yard.

11. PART II.—*Inland Vessels' Wharves.*—There is an increase of Rs. 12,087 under this head. Of this sum, Rs. 4,963 is provided under the head "Proportion of Establishment, Working Expenses, and Repairs to Dredgers," Rs. 3,301 under "Proportion of Engineering Establishment," and Rs. 1,445 under "Proportion of Salaries of Traffic Department."

There is a decrease of Rs. 9,200 under the head "Repairs" and of Rs. 1,440 under the head "Working Expenses," the nett increase being Rs. 1,447.

12. PART IV.—*Port or Harbour Master's Department.*—There is, as compared with last year, a decrease of Rs. 17,872 in this estimate. This is due to a decrease of Rs. 11,494 under the head "Proportion of Salaries—Control," and of Rs. 20,220 under "Renewal of Block." There has been several small increases under the various other heads, thus making a net decrease of Rs. 17,872.

13. PART VI.—*Tramway.*—Under the head "Proportion of Salaries of Engineering Establishment" a new provision of Rs. 6,420 has been made. There is an increase of Rs. 2,890 under the head "Proportion of Salaries of Traffic Department," of Rs. 2,188 under the head "Salaries," and of Rs. 5,086 under

the head "Working Expenses." There is a small decrease under two other items, the net increase being Rs. 17,365.

14. PART VII.—*Port Approaches.*—There is an increase of Rs. 5,014 under this head, as compared with the last year's estimate. The principal items of increase are "Proportion of Municipal Taxes and Repairs to Dockyard" and "Working Expenses." Under the first head there is an increase of Rs. 1,001, and under the second of Rs. 3,350.

15. PART VIII.—*Kidderpore Docks.*—The estimated expenditure on the Kidderpore Docks is shown below:—

	Rs.
Proportion of Salaries—Control	26,369
Ditto of Dredger Expenses	26,534
Ditto of Engineering Establishment	19,257
Ditto of Municipal Taxes and Repairs to Dockyard ...	4,820
Ditto of Salaries of Traffic Department	5,745
Salaries of Establishment	22,000
Working Expenses	1,25,173
Interest on Dock loan	11,35,000
Total ...	13,64,898

In this estimate Rs. 22,000 have been included providing for the traffic establishment required for the Docks for two months. The question as to the establishment required for the remainder of the year has been reserved for future consideration.

16. The estimated expenditure on the Kidderpore Docks is thus Rs. 12,81,898 in excess of the receipts, and to make up the deficit the special toll estimated to produce Rs. 8,50,000 has been imposed. As mentioned in paragraph 2 of the Resolution, the Commissioners are considering whether it is not possible to attract traffic to the Docks and so to diminish the heavy drain on the port resources caused by the excess of working expenses over the receipts which, apart from the graving dock, are taken as practically nil.

17. Subject to the remarks contained in the foregoing paragraphs, the Lieutenant-Governor, in pursuance of the powers vested in him by section 71 of the Calcutta Port Act, 1890, approves the estimate of income and expenditure of the Commissioners for the year 1893-94.

By order of the Lieutenant-Governor of Bengal,

C. W. ODLING,

Secretary to the Government of Bengal.

ADMINISTRATION REPORT OF THE BENGAL METEOROLOGICAL DEPARTMENT FOR THE YEAR 1892-93.

No. 2337Agri.

THE following report is published for general information.

By order of the Lieutenant-Governor of Bengal,

H. H. RISLEY,

The 15*th June* 1893. *Secretary to the Govt. of Bengal.*

IT has been explained in previous reports that the Government of Bengal has decided that the ordinary Administration Report of the Meteorological Department shall be only a brief summary of the more important facts of each year, but that in every third year the report shall be exhaustive, and shall deal not only with the facts of the year of the report, but with the triennial period ending with that year. The last full report was for the period 1887—90, and two brief reports have since been issued in 1891 and 1892, and hence the present report will be a summary of the work for the three years 1890—93.

During the official year just closed the Department was in my charge, and I was also in charge of the Department for the previous two years, except for a period from April 9th to November 26th, 1890, when I was absent on furlough and when Mr. C. Little officiated for me. The changes in the administration of the Department during the year 1892-93 have been small, and have not involved any alteration in the principles of its working, and they have consisted practically entirely in the gradual development and extension of the system, which has now been introduced for some time, with a view of making it more perfect and more generally useful. Indeed, the same statement may be made with reference to the working for the previous two years also, and no radical changes have been introduced throughout the triennial period.

Observatories.

The number of meteorological observatories submitting reports to the Bengal Meteorological Department on the 31st of March 1893 was 68, or two less than the number at the close of the previous year. This decrease of two observatories was due to the fact that the observer at the voluntary observatory at Kalimpong has declined to work any longer without being paid, and hence the work at that station has been temporarily suspended, though the instruments, shed, etc., are still at Kalimpong. Also in the case of Fort Tregear the observatory, instruments, etc., were destroyed by fire during the year 1891, and the observatory has been closed either temporarily or permanently. On the other hand, on the creation of the new district of Palamau in Chota Nagpur it was decided to commence a meteorological observatory at the head-quarters station of Daltonganj, and hence during the year a new shed was built there and instruments supplied to it, and indeed at the close of the year all the necessary arrangements had been made for this observing station, and observations from it will commence early in the year 1893-94. Thus, it will be seen, there has been little practical diminution in the number of meteorological stations in the province, but that if another voluntary observer can be secured for Kalimpong, the number of observatories will be the same as before, and for the reason that Daltonganj will be a fully equipped observatory, while Fort Tregear was only partially equipped, there will be really a distinct gain.

In connection with this subject it may be remarked that for several years there had been an observatory at Pedong on the Sikkim frontier which had sent in its observations direct to the Meteorological Reporter to the Government of India, and that during the year as Father Desgodins, who was the voluntary observer there, was under orders to proceed to Hong-Kong, arrangements

were made to transfer the instruments to Guntok in Sikkim, under the superintendence of the Political Officer of Sikkim, and when the new observatory is started it will probably be placed under the Bengal Meteorological Department. Father Desgodins by his most accurate and painstaking work at Pedong, which has now extended over a good many years, has laid the Department under a great obligation to him.

The following table will show the names and distribution of the observatories sending in reports to the Bengal Meteorological Office at the close of the year 1892-93:—

1st class observatory.	2nd class observatories.	3rd class observatories.		Voluntary observatories.	Other observatories reporting to the Department, but not under direct control of the Department.
Bengal. Alipore.*	Assam. Dhubri. Sibsagar. Silchar. Bengal. Berhampore. Burdwan. Chittagong. Cuttack. Dacca. Darbhanga. Darjeeling. False Point. Hazaribagh. Patna. Saugor Island. Burmah. Akyab	Bengal. Arrah. Balasore. Bankura. Barisal. Bhagalpur. Bogra. Buxar. Chaibassa. Chapra. Comilla. Dehri. Dinajpur. Faridpur Gaya. Jalpaiguri. Jessore. Krishnagar. Malda. Midnapore.	Bengal (continued). Motihari. Muzaffarpur. Mymensingh. Naya Dumka. Noakhali. Puri. Purnea. Rampur Boalia. Ranchi. Raniganj. Rangpur. Sirajganj. Burmah Tavoy. Madras. Coconada. Cuddalore. Gopalpur. Madras (Port Office). Nellore. Pamban.	Assam. Tura. Bengal. Demagri Gnatong. Lungleh. Shortts' Island. Madras. Vizagapatam.†	Burmah. Bassein. Diamond Island. Moulmein. Rangoon. Ceylon. Galle. Trincomallee. Madras. Masulipatam. Negapatam.

* Under the direct control of the Meteorological Reporter to the Government of India.
† This observatory is not under the control of this Department. It is under the direction of Mr. J. V. Juggarow of Vizagapatam.

In order that it may be seen that the number of observatories working under the Bengal Meteorological Reporter is well maintained, the following table is appended showing the number of observatories working in connection with the Bengal Office in each of the past three years:—

1890-91.		1891-92.		1892-93.	
1st Class Imperial ...	1	1st Class Imperial ...	1	1st Class Imperial ...	1
2nd " " ...	15	2nd " " ...	15	2nd " " ...	15
3rd " " ...	31	3rd " " ...	38	3rd " " ...	38
Voluntary	6	Voluntary	8*	Voluntary " ...	6*
Other stations reporting for the storm-warning service only ...	16*	Other stations reporting for the storm-warning service only ...	8	Other stations reporting for the storm-warning service only	8
Total ...	69	Total ...	70	Total ...	68

* This number includes Vizagapatam.

Work at Meteorological Observatories in 1892-93.

The standard of work at the observatories generally throughout the year has been good, though in a few cases the reverse has been the case, and some stations have done exceedingly badly. So far, however, as can be judged, the quality of the work in 1892-93 has been about equal to, but probably not superior to, that of former years. The two methods by which the character of the work carried on at the observatories is judged, are, first, by the critical examination and comparison of the observations taken at each station with those at neighbouring stations, and when the various observations taken daily throughout Bengal are reduced and charted, the accuracy of this method of comparison or check is very great. The second method of judging of an observatory is naturally by visits of inspection, which are generally arranged so that the observers are quite unaware of the probability of the inspection,

This enables the Inspector to see the observatory in its normal working condition without any previous preparation on the part of the observer, and from this the Inspector can at once judge of the nature of the work which is being sent in from the observatory. In the following remarks both these methods of judgment are kept in view, but the results of the inspections are also separately described later on.

First class observatory.—The only observatory of this class is at Calcutta (Alipore). It is not under the Bengal Meteorological Department at all, but is under the control of the India Reporter, and is under the direct charge of the Second Assistant to the Meteorological Reporter to the Government of India, who is stationed at Calcutta throughout the year. The observations made at the Alipore Observatory are, however, supplied daily to the Bengal Reporter, and have been, throughout the year under review, of a high order of accuracy. As, however, the observatory is not under the control of the Bengal Department, its working cannot be criticized or reviewed.

Second class observatories.—There are fifteen second class observatories under the Bengal Reporter, but of these three are in Assam and one in Burma, and they are, therefore, somewhat difficult to inspect from Bengal. Of the remaining eleven in Bengal, five were visited during the year, namely, Bankipore, Darjeeling, Darbhanga, False Point, and Hazaribagh. The work at these observatories can therefore be tested by both the methods previously described.

In the case of the Bankipore or Patna Observatory, which was visited twice during the year, the instruments were found in good order, and throughout the year the observer has sent in excellent observations. The Darjeeling Observatory was also found to be in good order, and for the greater part of the year sent in very careful and good observations. For a short period, during the absence of the regular observer on leave, the work was not very trustworthy, as the officiating observer was either somewhat careless or he did not thoroughly understand his work. Darbhanga, when visited, was found to be only in fair condition. The observations sent in from Darbhanga throughout the year have been good, and hence this station is now working fairly satisfactorily, and is in great contrast to its condition as described in 1890-91. In the year 1891-92 a decided improvement had taken place in this observatory, and the improvement has not only been maintained in 1892-93, but its condition in this year has been much better than in either of the two previous years. A visit was paid to False Point in April 1892, and the observatory was found to be in most excellent order, and its condition reflected great credit on both Mr. Sparkes, the superintendent, and on Mr. Naylor, the observer. The observations during the year have also been most carefully and accurately made, and the only point on which perhaps a little more care ought to be taken is in the accurate framing of the weather telegrams. It is highly satisfactory to find that the False Point Observatory is kept up to such a high standard, for this forms one of the most important stations in the working of the Storm Signal Service. Hazaribagh was visited in March 1893, and was also found in very good order. Throughout the whole year the observer at this station has done excellent work, and his observations are always very reliable.

The condition of the remaining six second class observatories in Bengal, of the three in Assam and one in Burma, can only be judged by the critical examination of the observations sent in, as it was found impossible to visit them. Taking the Bengal stations first, Berhampore has well maintained the reputation gained in previous years of being one of the most trustworthy stations in the province, and throughout the year the observations submitted by Babu Mahendra Nath Roy have been extremely accurate. The same may also be stated of Burdwan, which is one of the most satisfactory observatories in Bengal, and the observer, Babu Mokhoda Prosad Roy Chowdhury, takes the greatest care in his work, and his observations are most trustworthy. The observatory at Chittagong, on the other hand, has not been so satisfactory, and for a considerable portion of the year inaccurate observations were frequently submitted, and altogether the observatory gave a good deal of trouble. Indeed, for the last three years the Chittagong observatory has been in an unsatisfactory condition. In 1890-91 and 1891-92 more mistakes were made by the observer at Chittagong than at almost any other observatory in Bengal, and careless work was again submitted in the earlier part of this year. During the later months of 1892-93,

however, a new observer has taken charge of the Chittagong Observatory, and since his arrival the accuracy of the work has greatly increased, and the observatory appeared at the close of the year to have again been in satisfactory condition. The observations sent in from Cuttack during the year have been good, though not of the exceptional accuracy of some of the other stations. Dacca has sent in particularly good observations throughout the year, and its condition has been, so far as can be judged, excellent. In the case of Saugor Island, which is, again, one of the most important stations in the working of the Storm Signal Service, scarcely a single error has been detected throughout the year, and this observatory continues to maintain its position as one of the three or four most satisfactory observatories in Bengal. On every occasion when extra observations are required during stormy or suspicious weather, they are sent in most promptly, and in consideration of the large amount of extra work which is thrown on this observatory, an allowance of Rs. 15 a month was granted to a signaller in the Saugor Island Telegraph Office for helping in the meteorological work. This allowance was granted from 1st June 1892.

In the case of the three Assam stations, Dhubri has continued to send in very accurate observations throughout the year, and the observatory has maintained its previous reputation. In the case of Sibsagar, however, which was formerly one of the most satisfactory stations in the province, there has been a great falling off. So far as can be judged without a visit of inspection, the observer there now appears to be extremely careless in his work, for his observations neither agree with those of the other stations in Assam made at the same time, nor do they at all agree with observations made under similar circumstances at Sibsagar for many previous years. It also appears probable that the barometer and perhaps other instruments have been allowed to get out of order; and during the year a new barometer was sent to that station, and comparative sets of observations with three barometers were allowed to go on for some months. Up to the present time, however, the exact cause of these errors has not been ascertained, and it is believed they are mainly due to the want of attention and to the carelessness of the present observer. The condition of the Silchar Observatory has been fairly good throughout the year, and the observations generally sent in have been accurate.

For some years the observers at Sibsagar and Silchar have been paid small monthly allowances for taking observations of earthquakes. The seismographs, however, which were provided by the advice of the Geological Department, have not answered their purposes at all satisfactorily, and they practically never record earthquake shocks even when unusually severe. Hence the allowances for the charge of these instruments were withdrawn towards the close of the year.

In the case of the Akyab Observatory in Burmah, the observations which have been sent in throughout the year have been fairly accurate, and, so far as can be judged, the observatory is in very good condition.

Third class observatories (including the observatories at the coast ports in the Bay of Bengal, directly under the Bengal Reporter, and one or two others reporting for the Storm Signal Service).—Twenty of the observatories under this head were visited during the year, and of these fourteen were in the province of Bengal and six were on the coast of Madras, at stations which report observations in connection with the Storm Signal Service. Taking up, first, the case of the observatories that were visited, Barisal Observatory in previous years had been in charge of a subordinate in the Public Works Department; but as the office of that department in the station was closed, the observatory was transferred to the signaller attached to the local post and telegraph office. In May 1892 the station was visited to complete the removal of the instruments to the post office, and on the inspection the instruments and observatory generally were found to be in very bad condition. The observations sent in, too, from Barisal were very carelessly made almost throughout the year. Buxar when visited was found to be in excellent order, and throughout the year the observations have been very accurate. Chaibassa was in good condition when visited; but the barometer had gone out of order, and hence the observations submitted from this station were untrustworthy, to a great extent probably, from the defect in the barometer. Chapra was found in excellent condition, and the observations sent in have been accurate for practically the whole year.

Dinajpur when visited was in fair order, and the observations sent in have only been of tolerable quality. Gaya was visited and was, as has been the case in previous years, not in satisfactory order, and the observer is still careless in his work and sends in poor observations. It has been found necessary to change the site of the Gaya observatory, as a new masonry erection over a well has been built close to the thermometer shed and rain-gauge, and the exposure of the thermometers and rain-gauge had been thus entirely altered, and in the case of the rain-gauge it was quite overshadowed by the new building, so that it was absolutely impossible for rain coming from certain directions to get to the gauge at all. Jalpaiguri at the time of inspection was in moderate order only, and a good many mistakes have also been made in the observations sent in. Jessore when visited was, on the whole, in good condition, and the observations sent in during the year have been accurate. Krishnagar Observatory was in excellent condition when inspected, and the observer, Babu Peari Lal Ghosh, has sent in very accurate observations. Motihari was generally in very good order, but the observations sent in were only fairly accurate. Muzaffarpur, as in the case of previous inspections, was found in bad order when visited, and the observer, Babu Jogendra Chandra Chatterjee, takes apparently no interest whatever in his work. His observations have also been decidedly inaccurate throughout the year. He was fined Rs. 5 for his carelessness and for the bad condition in which he has kept the observatory. Noakhali when inspected was in fair order, but the observations sent in were very unreliable, and it was found that the observer did not take his observations at the correct time. Hence the old observer was dismissed and a new man appointed on probation. Purnea has given great trouble during the greater part of the year, and the observer was one of the most incompetent, and the observatory generally was about the worst in the whole of Bengal. The man was fined, and his pay was finally stopped for two months; but it was only when a new observer was appointed to the station that the observations became at all reliable. Rangpur when visited was found in moderately good order only, but on the whole the observations sent in during the year have been satisfactory.

In the case of the six stations on the Madras coast which were visited during the year, Coconada was found in most excellent order, and has sent in most accurate observations throughout the year. The condition of the observatory reflected great credit on the superintendent, Captain Wickes, and on the observer, Mr. C. Gaëtane. Cuddalore was in fair order only, and the observations recorded have been of moderate accuracy. Gopalpur has sent in very accurate observations in almost all cases. The observatory at Madras stationed at the Port Office, was also in very good order when inspected, and the observations have been also accurate, and the same is the case with Nellore which was visited by the Madras Meteorological Reporter.

In the case of Vizagapatam, a visit was paid to that station in April 1892; but the observatory being a voluntary one entirely unconnected with the Department, it was not inspected in the ordinary way, but the Reporter was courteously shown over it by the proprietor, Mr. Narsingrow. It is much to be regretted that since this visit Mr. Narsingrow has died rather suddenly; but the observatory is still being maintained and carried on by his son Mr. Juggarow. By the death of Mr. Narsingrow a loss has been created, for Mr. Narsingrow had for many years done most excellent voluntary work in meteorological matters in connection with the Meteorological Department.

The other observatories were not able to be visited during the year 1892-93, and hence it is only possible to judge of their condition by the observations sent in. Excellent observations have been submitted by Bogra, Gnatong, Midnapore, Naya Dumka, Pamban, and Tavoy; good work has been submitted by Arrah, Balasore, Bankura, Bassein, Comilla, Malda, Mymensingh, Rampur Boalia, Ranchi, and Sirajganj. Rather indifferent work, with a considerable number of mistakes, has been submitted from Puri; while very bad and untrustworthy work has been sent in from Dehri and Faridpur.

Raniganj Observatory, on the whole, has not worked satisfactorily throughout the year, and at present it is in temporary charge of the nazir of the Subdivisional Officer's Court. The subordinate of the Medical Department who had formerly charge of the Raniganj Observatory, gave absolutely no satisfaction, and at the request of the Medical Department he was relieved of the work. Up to the present time, however, it has not been found possible to make

satisfactory permanent arrangements. When inspected in March 1892, the Raniganj Observatory was found in fair order.

In the case of Dehri, which has now been sending in bad work for the past three years, the fact was reported to the Bengal Government, and it was suggested that the medical subordinate at that station, who is the meteorological observer, should be removed to some other station, and this is about to be carried out.

Owing, also, to the abolition of the Dacca Division of the Public Works Department during the year, the observatories at Faridpur and Mymensingh, which were formerly superintended by officers of that Department, had to be transferred—at Faridpur to the superintendence of the District Engineer, and at Mymensingh to the superintendence of the Chairman of the District Board.

Voluntary observatories.—The work done at the voluntary observatories is generally reviewed separately; but in the case of the most important of them, Vizagapatam, it has already been referred to. Gnatong, which was at first a voluntary observatory, is now paid, and has also been discussed. In the case of Shortts' Island, the observer, Mr. Tasker, continues to send in most valuable observations, particularly in the case of stormy weather, and he was awarded Rs. 60 during the year from the Storm Observation Fund by the Meteorological Reporter to the Government of India for his excellent work. In the case of the other three voluntary observatories, Tura, Demagiri, and Lungleh, the observations which have been sent in have been of comparatively little value, as they appear to be generally very carelessly taken.

While considering the subject of the work done at the observatories, it will be desirable to mention that the system by which inward-bound vessels passing Saugor Island telegraph to the Calcutta office the meteorological observations taken daily on board the Pilot vessels at the Sandheads by means of a single hoist of four flags, has continued to answer very satisfactorily, and the code devised for this purpose is working very well. The number of such telegrams received during the year was 343. It will, however, be seen that there would be many days in the year on which the observations from the Pilot brigs as sent in this way would not reach the Meteorological Office. Hence special post-card forms were prepared during the year, and one of these is filled up daily on board the Pilot brigs with the day's observations, and these are despatched to Calcutta by the first inward-bound steamer after the observations are made. These, therefore, serve not only to complete the record of the observations made at the Sandheads, but the post-cards also serve as a check on the accuracy of the telegraphic messages which are received.

In addition, too, Mr. Marshall, the special Pilot of the British India steamers running between Calcutta and Rangoon, has favoured the Department throughout the year, by telegraphing to Calcutta from Rangoon a description of the weather experienced on the voyage. These telegrams have been sent for the greater part of the year by a code which was, in the first instance, prepared for telegraphing the description of the weather in the Bay from the Calcutta office to Rangoon, Madras, etc. A brief reference to this code was made in the Administration Report for 1889-90, and it is again referred to later on under the head of the daily reports. The thanks of the Meteorological Department are due to Mr. Marshall for his valuable aid.

During the year under review also the Hon'ble J. L. Mackay, of Messrs. Mackinnon, Mackenzie and Company, the managing partner of the British India Steam Navigation Company, suggested that the captains of their vessels navigating the Bay of Bengal would be willing to aid the Department by telegraphing the nature of the weather they had experienced on their reaching port. The offer was gratefully accepted; and the code referred to in the last paragraph was taken as the basis to work on. It was then specially modified to meet the circumstances of such voyages; and the system was then introduced in January 1893. In the case of vessels reaching such ports as Madras, Calingapatam, Gopalpur, Rangoon, etc., after having passed across the Bay of Bengal, the captain of the vessel telegraphs to the Calcutta office a complete description of the weather he has experienced, one or two code words being sufficient to describe the weather on each day of observation. In the case, too, of a vessel reaching Calcutta, similar information is supplied to the Meteorological Office, but by specially prepared post-cards instead of by telegraph. This system has now been in force for several months, and has worked very smoothly

and successfully, and very valuable information is thus received. The Meteorological Department is thus very much indebted to Mr. Mackay for his help in this matter.

Mr. Mackay has also further favoured the Department during the year by the great assistance he gave during a tour of inspection by the Bengal Reporter, and also on another tour by the India Reporter. It will be seen under the head of the inspection of observatories that during the year I inspected most of the observatories on the west coast of the Bay which report in connection with the Storm Signal Service, and it was only by the great courtesy of Mr. Mackay and of Captain Phillips of the S.S. *Chindwara* that I was able to visit all these observatories when travelling up the Bay in the same steamer, every facility being given, under Mr. Mackay's orders, for the landing at each port where there is a meteorological observatory and for the inspection required. In this way also Mr. Mackay has again conferred a great favour on the Meteorological Department.

Names of observers.

In connection with the previous criticism of the work sent in from the various observatories, a table is given below showing the names of the observers at all the observatories in Bengal, and for the sake of comparison the table has been completed for the triennial period. In this table also the allowance drawn by each observer is stated, and from the last column can be seen the exact class of work done at each observatory, *i.e.*, whether only one observation at 8 A.M. is taken daily, as indicated by "A," or whether three sets of observations at 8 A.M., 10 A.M., and 4 P.M. are taken, as indicated by the letter "B," etc. A complete statement of the work at the observatories is therefore indicated in the last column of this table:—

Personnel of observatories in Bengal and Assam during the years 1890-91, 1891-92, *and* 1892-93.

Station.	1890-91.		1891-92.		1892-93.		Nature of observations taken.
	Name of observer.	Allowance	Name of observer.	Allowance.	Name of observer.	Allowance.	
Second Class.		Rs.		Rs.		Rs.	
Akyab ...	J. J. Brown ...	23	J. J. Brown ...	23	J. J. Brown ...	23	B C.
Berhapore ...	Mohendra Nath Roy	18	Mohendra Nath Roy	18	Mohendra Nath Roy	18	B.
Burdwan ...	Mokhoda Prosad Chowdhury.	18	Mokhoda Prosad Chowdhury.	18	Mokhoda Prosad Chowdhury. Poorna Chunder Mukerjee. Jogesh Chunder Chowdhury.	18	B.
Chittagong ...	W. Tacher ... A. R. W. Scott ... C. R. Ferguson ...	27	C. R. Ferguson ...	27	C. R. Ferguson ... C. La Porte ...	27	B C D.
Cuttack ...	F. J. Bennet ...	18	F. J. Bennet ...	18	F. J. Bennet ... S. J. Young ...	18	B.
Dacca ...	R. H. Peters ... E. O. Daugherty ...	18	E. O. Daugherty ...	18	E. O. Daugherty ...	18	B.
Darjeeling ...	C. Stewart ... P. K. Vaughan ... E. W. Hannah ... From 1st January 1891.	25 22	E. W. Hannah ... P. Shattock ...	22	P. Shattock ... P. Merza ...	22	B D G.*
Darbhanga ...	Jogin Chunder Banerjee.	10	Jogin Chunder Banerjee.	10	Jogin Chunder Banerjee. Deo Kumar Lall ...	10	A.
Dhubri ...	Akhoy Kumar Sen ... From 1st January 1891.	25 22	Ahoy Kumar Sen ...	22	Akhoy Kumar Sen ...	22	B D G.*
False Point ...	J. London ... W. B. Sparkes ...	23	W. B. Sparkes ... E. Naylor ...	23	E. Naylor ... W. B. Sparkes ...	23	B C.
Hazaribagh ...	Nathoo Lall ... From 1st January 1891.	21 18	Nathoo Lall ...	18	Nathoo Lall ...	18	B G.*
Patna ...	Surjan Singh ...	18	Surjan Singh ...	18	Surjan Singh ...	18	B.

STATION.	1890-91.		1891-92.		1892-93.		Nature of observations taken.
	Name of observer.	Allowance.	Name of observer.	Allowance.	Name of observer.	Allowance.	
Second Class—concluded.		Rs.		Rs.	*Observer.*	Rs.	
Saugor Island ...	J. A. Thomas ... E. T. Chamarette ...	30	R. H. Peters ... J. A. Thomas ...	30	J. A. Thomas ... T. W. DeSouza ...	30	B C D G.
					Assistant Observer.		
					T. W. DeSouza ... From 1st June 1892. D. H. Joachin.	15	(Special case.)
Sibsagar ...	Dandadhar Datta Barua.	25	Dandadhar Datta Barua.	25	Dandadhar Datta Barua.	25	B F G.* (Special case.)
					Abinash Chunder Chatterjee. From 16th November 1892.	18	B.
Silchar ...	Ramesh Chunder Bhadra.	20	Ramesh Chunder Bhadra.	20	Ramesh Chunder Bhadra.	20	B F.
					From 1st March 1893	18	B.
Third Class.							
Arrah ...	E. H. Nelthropp ... C. T. Jelly ...	10	C. T. Jelly ... Ramkissen ...	10	Ramkissen ...	10	A.
Balasore ...	Radha Mohan Dass Abinash Chunder Ghosh.	15	Abinash Chunder Ghosh.	15	Abinash Chunder Ghosh.	15	A C.
Bankura ...	Bhoyrab Nath Chatterjee.	10	Bhoyrab Nath Chatterjee.	10	Bhoyrab Nath Chatterjee.	10	A.
Bhagalpur ...	Bhukta Lall Misser...	10	Bhukta Lall Misser...	10	Bhukta Lall Misser... Fida Hossain ...	10	A.
Bogra ...	Gangadhar Barik ...	10	Gangadhar Barik ... Nibaran Chunder Mozumdar.	10	Gangadhar Barik ...	10	A.
Barisal ...	Kedar Nath Roy ...	15	Kedar Nath Roy ... Nibaran Chunder Das.	15	Nibaran Chunder Das.	15	A C.
Buxar ...	Baikanta Nath Guha	10	Baikanta Nath Guha	10	Baikanta Nath Guha Ganga Prosanna Chatterjee.	10	A.
Chapra ...	K. C. Dass ... J. A. G. Robertson...	10	J. A. McPhail ...	10	J. A. McPhail ... E. D. Penning ...	10	A.
Chaibassa ...	Moti Lall Sircar ... Aghore Nath Ghosh	10	Moti Lall Sircar ... Sochindra Nath Ghosh.	10	Moti Lall Sircar ... Gopi Mohun Roy ... Aghore Nath Ghosh	10	A.
Comilla ...	Sheikh Abdas Samed Anukul Chundra Roy	10	Anukal Chundra Roy Bireshwar Ghosh	10	Bireshwar Ghosh ...	10	A.
Coconada ...	C. Gaëtane ...	15	C. Gaëtane ...	15	C. Gaëtane ...	15	A.C.
Cuddalore ...	K. Subramanya Iyer from 1st March 1889.	15	K. Subramanya Iyer S. Saminatha Iyer P. M. Nutaraja Iyer	15	K. Subramanya Iyer	15	A.C.
Dehri ...	Peary Lall Sen ... Kali Prosanna Kumar.	10	Kali Prosanna Kumar Gopal Chunder Basu Lalit Mohun Laha Kali Prosanna Ghosal Purna Chunder Dass	10	Purna Chunder Dass Purbutty Churn Bhattacharjee.	10	A.
Dinajpur ...	Abdul Aziz Khan ... Modhusudan Roy	10	Abdul Aziz Khan ...	10	Abdul Aziz Khan ... Saidar Rahman	10	A.
Faridpur ...	Naresh Chunder Mazumdar.	10	Naresh Chunder Mazumdar. Goluck Chunder Dass Umesh Chunder Acharjee.	10	Naresh Chunder Mazumdar.	10	A.
Gaya ...	Mokunda Lall ...	10	Mokunda Lall ...	10	Mokunda Lall ...	10	A.
Gopalpur ...	J. Narain Moorty Naidu. Appalanarasimhun Vankaturamaniah F. V. Ramanaish	15	J. Narain Moorty Naidu. G. Appalanarasimhun Naidu. Purushottum Chowdhree.	15	J. Narainmurti Naidu	15	A.C.
Jessore ...	Paresh Nath Roy Chowdhury. Suresh Chunder Roy	10	Paresh Nath Roy Chowdhury.	10	Paresh Nath Roy Chowdhry. Suresh Chunder Roy Chowdhury. Tarack Chunder Basu	10	A.
Jalpaiguri ...	Banka Behary Ghosh Bidhu Bhusan Ghosh	10	Banka Behary Ghosh Bidhu Bhusan Ghosh Durga Churn Sen Nanda Lall Mukerjee F. M. Bower ...	10	F. M. Bower ... Bidhu Bhusan Ghosh Durga Churn Sen ...	10	A.

STATION.	1890-91. Name of observer.	1890-91. Allowance.	1891-92. Name of observer.	1891-92. Allowance.	1892-93. Name of observer.	1892-93. Allowance.	Nature of observations taken.
Third Class— concluded.		Rs.		Rs.		Rs.	
Krishnagar ...	Peari Lall Ghosh ...	10	Peari Lall Ghosh ...	10	Peari Lall Ghosh ...	10	A.
Madras (Port Office).	J. R. Gonsalvez ... E. D'Rozario ...	10	J. R. Gonsalvez ...	10	J. R. Gonsalvez ... E. Brown ...	10	A.
Malda ...	Modhusudan Das ...	10	Modhusudan Das ...	10	Modhusudan Dass ...	10	A.
Midnapore ...	Mohendra Nath Seal	10	Mohendra Nath Seal	10	Mohendra Nath Seal	10	A.
Motihari ...	Mohadev Pershad ... Sandogar Ram ...	10	Mohadev Pershad ...	10	Mohadev Pershad ... Shyama Churn ...	10	A.
Muzaffarpur ...	Jogendra Chunder Chatterji from 4th April 1890.	10	Jogendra Chunder Chatterji.	10	Jogendra Chunder Chatterji.	10	A.
Mymensingh ...	Subal Chunder Saha	10	Subal Chunder Saha	10	Subal Chunder Saha Baroda Kanta Guha	10	A.
Nellore ...	D. Conn ...	15	D. Conn ...	15	D. Conn ...	15	A C.
Noakhali ...	Gopal Chunder Paul	10	Gopal Chunder Paul	10	Gopal Chunder Paul Jagat Chunder Chuckerbutty. Purna Chunder Sen	10	A.
Naya Dumka ...	Dwarka Nath Mukerji	10	Dwarka Nath Mukerji	10	Dwarka Nath Mukerji.	10	A.
Puri ...	M. Francis ...	15	M. Francis ...	15	M. Francis ...	15	A C.
Purnea ...	Ayodhoya Nath Sen	10	Ayodhoya Nath Sen Kali Das Mozumdar	10	Ayodhoya Nath Sen Hera Lall Mukerji Jogobindu Gupta ...	10	A.
Pamban ...	N. Senthenchi Pillai from January 1891.	15	N. Senthenchi Pillai	15	N. Senthenchi Pillai	15	A C.
Rampur Boalia	Baroda Prosad Basu Shib Ram Banerji ...	10	Shib Ram Banerji ...	10	Shib Ram Banerji Charu Chunder Mittra Bhusan Moni Dutta	10	A.
Ranchi ...	Sashadhar Mukerji Paresh Nath Mittra	10	Sashadhar Mukerji	10	Sashadhar Mukerji Ashwini Kanta Mukerji.	10	A.
Raniganj ...	Radha Raman Ghosh Kailas Chunder Sen Deno Nath Sanyal	10	Deno Nath Sanyal ... Jadub Krishna Sen Gopal Chunder Basu Kashi Nath Ghosh ...	10	Kashi Nath Ghosh... Benode Behary Ghosal Purna Chunder Dass Babu Ram Ash ...	10	A.
Rangpur ...	Bepin Chunder Mittra.	10	Bepin Chunder Mittra.	10	Bepin Chunder Mittra.	10	A.
Sirajganj ...	Hera Lall Seal ...	10	Hera Lall Seal ... G. C. Banerji ...	10	Hera Lall Seal ... D. N. Bhuttacharya...	10	A.
Tavoy ...	J. Carr ...	15	J. Carr ...	15	J. Carr ...	15	A C.
Demagiri ...	K. N. Kumar ... Girish Chunder Bhar	Voluntary.	Girish Chunder Bhar	Voluntary.	Girish Chunder Bhar B. N. Choudhury ... H. C. Dey Nando Kishore Lall.	Voluntary.	E.
Gnatong ...	M. M. Apcar ...	Do.	M. M. Apcar ...	Do.	M. M. Apcar ...	Do.	E up to September 1892. A from October 1892.
Fort Tregear ...	Name not known ...	Do.	Name not known ...	Do.	Observatory destroyed by fire.	Do.	E. Observations commenced from 10th June 1890 and closed from February 1891.
Kalimpong ...	Ditto ...	Do.	Ditto ...	Do.	Name not known ...	Do.	A. Observations commenced from 1st April 1891, and now temporarily closed from June 1892.
Lungleh ...	From 9th July 1889	Do.	Ditto ...	Do.	Ditto ...	Do.	E.
Shortt's Island ...	W. Tasker ...	Do.	W. Tasker ...	Do.	W. Tasker ...	Do.	
Tura ...	A. Nyem ...	Do.	A. Nyem ... Moni Ram Das ...	Do.	A. Nyem ...	Do.	E.

* Solar and grass radiation observations discontinued from 1st January 1891.

			Rs.
A.—	Observers	who take 8 A.M. observations	... 10
B.—	Ditto	ditto 8 A.M., 10 A.M. and 4 P.M. observations	... 18
C.—	Ditto	ditto storm observations for storm forecasting	... 5
D.—	Ditto	who are in charge of automatic wind instruments	... 4
E.—	Ditto	temperature, wind and rainfall only ...	Voluntary.
F.—	Ditto	in charge of seismographs	... 2
G.—	Ditto	who take special observations of sun thermometers	... 3

In order, also, that it may be seen at a glance what has been the character of the work at the various observatories working in connection with this Department for the past three years, the following table has been prepared, and the work in each year has been classed under the four headings of "very good," "good," "moderate," and "very bad." It will be seen that such observatories as Berhampore, Burdwan, Coconada, Dhubri, Hazaribagh, and Saugor Island have been in the front rank throughout the three years, with such observatories as Akyab, Bogra, Buxar, False Point, Gopalpur, Jessore, Krishnagar, Midnapore, Naya Dumka, Nellore, Pamban, Patna, and Silchar running them very close; while, on the other hand, the observatories at the following stations have been very bad or bad almost throughout the three years:—Chaibassa, Chittagong, Comilla, Dehri, Faridpur, Gaya, Muzaffarpur, Noakhali, Purnea, and Raniganj:—

Table showing the general character of each observatory and of the work sent in from it during the triennial period 1890—93.

Name of Observatory.	1890-91.	1891-92.	1892-93.
Akyab	Very good ...	Very good ...	Good.
Arrah	Moderate ...	Good ...	Do.
Balasore	Very bad ...	Do. ...	Do.
Bankura	Moderate ...	Very good ...	Do.
Barisal	Bad ...	Very bad ...	Very bad.
Berhampore ...	Very good ...	Very good ..	Very good.
Bhagalpur	Good ...	Ditto ...	Good.
Bogra	Do. ...	Ditto ...	Very good.
Burdwan	Very good ...	Ditto ...	Ditto.
Buxar	Good ...	Ditto ...	Ditto.
Chaibassa ...	Moderate ...	Very bad ...	Bad.
Chapra	Ditto ...	Very good ...	Very good.
Chittagong	Very bad ...	Moderate ...	Moderate.
Coconada	Very good ...	Very good ...	Very good.
Comilla	Very bad ...	Very bad ...	Good.
Cuddalore	Good ...	Good ...	Moderate.
Cuttack	Do. ...	Do. ...	Good.
Dacca	Moderate ...	Moderate ...	Very good.
Darbhanga ...	Extremely bad	Ditto ...	Fairly good.
Darjeeling	Good ...	Good ...	Good.
Dehri	Bad ...	Very bad ...	Very bad.
Dhubri	Very good ...	Very good ...	Very good.
Dinajpur	Moderate ...	Moderate ...	Moderate.
False Point ...	Ditto ...	Very good ...	Very good.
Faridpur	Ditto ...	Moderate ...	Very bad.
Gaya	Bad ...	Ditto ...	Moderate.
Gnatong	......	......	Very good.
Gopalpur	Very good ...	Good ...	Ditto.
Hazaribagh ...	Ditto ...	Very good ...	Ditto.
Jalpaiguri	Moderate ...	Moderate ...	Moderate.
Jessore	Good ...	Very good ...	Very good.
Krishnagar	Do. ...	Ditto ...	Ditto.
Madras (Port Office) ...	Do. ...	Ditto ...	Good.
Malda	Do. ...	Good ...	Do.
Midnapore ...	Moderate ...	Very good ...	Very good.
Motihari	Good ...	Ditto ...	Good.
Muzaffarpur ...	Very bad ...	Moderate ...	Moderate.
Mymensingh ...	Good ...	Very good ...	Good.
Naya Dumka ...	Do. ...	Ditto ...	Very good.
Nellore	Do. ...	Ditto ...	Ditto.
Noakhali	Bad ...	Very bad ...	Very bad.
Pamban	Good ...	Very good ...	Very good.
Patna	Very good ...	Ditto ...	Good.
Puri	Very bad ...	Good ...	Moderate.
Purnea	Good ...	Very bad ...	Very bad.
Rampur Boalia ...	Do. ...	Very good ...	Good.
Ranchi	Do. ...	Bad ...	Do.

Name of Observatory.	1890-91.	1891-92.	1892-93.
Rangpur	Moderate ...	Good ...	Good.
Raniganj	Ditto ...	Very bad ...	Very bad.
Saugor Island ...	Very good ...	Very good ...	Very good.
Sibsagar	Ditto ...	Ditto ...	Very bad.
Silchar	Ditto ...	Ditto ...	Good.
Sirajganj	Good ...	Good ...	Do.
Tavoy	Do. ...	Do. ...	Very good.
Vizagapatam ...	Very good ...	Very good ...	Ditto.

Inspection of observatories.

The following observatories were inspected during the year 1892-93:—

Bankipore (twice).
Barisal.
Buxar,
Chaibassa.
Chapra.
Coconada.
Cuddalore.
Darjeeling.
Dinajpur.
Darbhanga.
False Point.
Gopalpur.
Gaya.
Hazaribagh.
Jalpaiguri.
Jessore.
Krishnagar.
Madras (Port Office).
Motihari.
Muzaffarpur.
Nellore.
Noakhali.
Purnea.
Rangpur.
Vizagapatam.

Of these, two were inspected by Lala Hem Raj, the Personal Assistant to the Meteorological Reporter to the Government of India, viz.—

Chaibassa and *Purnea ;*

three by Mr. Gilliland, the then Officiating Assistant Meteorological Reporter to the Government of India, viz.—

Noakhali, | *Barisal,* | *Jessore;*

one by Miss Pogson, Meteorological Reporter to the Government of Madras, viz., *Nellore;*
six by Mr. Little, Assistant Meteorological Reporter to the Government of India, viz.—

Patna, *Muzaffarpur,* | *Motihari,* *Hazaribagh,* | *Chapra,* *Darbhanga,*

and the rest by myself.

The following is the result of inspection of the observatories. They are arranged according to the class of observatory, *i.e.*, into second class and third class, and also alphabetically.

Second class.—*Bankipore* was visited by me on the 31st October 1892. At the time of my inspection I found the bulbs of the wet bulb hygrometer and the wet minimum thermometer almost dry. This was due to observer's not using a sufficient number of threads and to his not keeping the water bottles full of water. In other respects the observatory was in a satisfactory condition. It was again inspected by Mr. Little, Assistant Meteorological Reporter to the Government of India, on the 18th March 1893. He remarks:—"The observer is well able to do the work, and seemed to be very reliable. I examined the clerk of the medical school who takes the readings when required. He also knew how to read the instruments accurately."

Darjeeling was inspected by me in October 1892, when the observatory was found in a satisfactory condition. A large number of comparative readings of the observatory barometer and the standard taken from Calcutta showed that the correction of the observatory instrument has slightly changed, having decreased from +·022″ to +·013″.

Darbhanga was inspected by Mr. Little in March 1893, when he found the observatory in good order.

False Point was inspected by me in April 1892. The instruments were all in good condition. Mr. Sparkes, the Lighthouse-keeper, takes great interest in the meteorological work. Mr. Naylor, the observer, understands his work well, and takes the observations quickly and accurately. The observatory is an excellent one for forecasting purposes. The only drawbacks are the slightly defective exposure of the wind instruments to north-east and the distance of the lighthouse (where the observatory is situated) from the sea, which renders it practically impossible to give the condition of the sea.

Hazaribagh was inspected by Mr. Little on 14th and 15th March 1893. He found the instruments all in good order. The observer was punctual in taking his observations, and seemed thoroughly able to do the work required of him.

Third class.—*Barisal* was visited by Mr. Gilliland (the then Officiating Assistant Meteorological Reporter to the Government of India) in May 1892. The primary object of the inspection was the removal of the barometer from a godown belonging to the Public Works Department. The barometer was removed to a room of the local post-office. The observer, who is a signaller of the Barisal Post-office, was also thoroughly trained. At the time of Mr. Gilliland's inspection, the observatory was found to be in a very bad condition. The instruments were found all dirty and neglected, and the bulb of the wet bulb thermometer thickly encrusted in dust. Grass had grown up all round the rain-gauge to a height of 6 inches to 8 inches above the top, and some of the blades were found actually overhanging the mouth of the rain-gauge.

Buxar was visited by me on the 31st October 1892, when the observatory was found to be in a very satisfactory condition. The observatory keeps up its good reputation under the observer, Babu Baikanta Nath Guha.

Chaibassa was visited by the Personal Assistant to the Meteorological Reporter to the Government of India on 21st January 1893. The chief object of the visit was to ascertain the cause of persistent discrepancies found in the barometric readings reported by the observer. The comparative readings which the Personal Assistant took of the observatory barometer and the standard instrument taken from Calcutta, disclosed the fact that the correction of the observatory barometer had changed considerably. The former correction was —·005″, while it had changed to +·015″, *i.e.*, a difference of ·020″ had taken place.

Chapra was visited by Mr. Little on 20th and 21st March 1893. The instruments were all found in good condition. The observer could read the barometer accurately but slowly.

Coconada was visited by me in April 1892. This was the first time that this observatory was visited by an officer of the Meteorological Department since its establishment in 1880. The observatory is situated at the Port Office, about ¾ mile from the sea, and there are only a few single-storied buildings and trees between the sea and the Port Office. The site is a good one. The barometer is suspended in the Port Officer's room in very good light. It was clean, perpendicular and in good condition. The shed instruments were all clean and in good condition. The wind instruments are on a mast and platform to the north and east of the Port Office. The anemometer is placed on the highest part of the erection, and the wind vane is to the west of the anemometer. The observer is sharp and intelligent, and does his work quickly and accurately. He keeps the observatory and the instruments in excellent order, and I was much pleased both with the observatory and with the observer. Captain Wickes, the Port Officer, takes the greatest possible interest in the work of the observatory, and hence keeps it in excellent condition. There is telephonic communication with the lighthouse, and by this the state of the sea, which is reported in the weather telegrams, is ascertained daily.

Cuddalore was visited by me on the 14th April 1892. The barometer is placed in the sorting room of the post and telegraph office in a cage; but it is in bad light, and it is very difficult to read it correctly. The mercury in the cistern was very much oxidized, and the whole scale for reading the instrument was almost black with oxidation. The instrument was therefore changed by another barometer. The thermometer shed, which is outside the postal and telegraph office, is surrounded on all sides by high trees, and hence the

exposure is by no means satisfactory. The wind instruments are placed on the roof of the post-office, but the position is not at at all satisfactory, as there are high trees on all sides (except to the west). The exposure of the wind instruments and the thermometer shed is hence very objectionable. The condition of the wet bulb hygrometer and the wet minimum thermometer was far from satisfactory, as the muslin and thread were dirty and the bulbs were encrusted. The tube of the funnel of the rain-gauge was found almost choked up. The observer, though careless in several respects, was found to be intelligent, and seemed to understand his work well.

Dinajpur was visited by me on the 21st October 1892, when I found the instruments in good condition except the dry minimum thermometer, which had a deposit of one degree of spirit in the upper part of the tube. The observer was found to have finished his 8 A.M. observations considerably before 8 o'clock, probably soon after 7-30 A.M. The observer was severely reprimanded for this want of punctuality. The correction of the barometer was found to have changed from +·009″ to +·018,″ and this new correction was adopted from 1st January 1893.

Gaya was visited by me on the 30th October 1892. The barometer was found out of the perpendicular and the thread and muslin attached to the bulbs of the wet bulb thermometer appeared not to have been changed for a considerable time. A small new pucka erection—the Grierson memorial well—has been built to the east of the observatory at about 15 yards distance, thus affecting the exposure of the shed to a very large extent. Another site was selected in consultation with the Civil Surgeon, Gaya, and arrangements made to remove the shed to the new site as soon as possible. The position of the rain-gauge also was extremely bad, and it was arranged to remove it to another site.

Gopalpur.—An attempt was made to visit this observatory on the 22nd April 1892. On arrival at Gopalpur the surf was running very high, and it was quite impossible to land the standard barometer in safety. Hence the inspection could not be made.

Gopalpur itself is almost entirely on the seashore. About 20 or 30 miles inland there is a range of rather high hills which extend perhaps 30 or 40 miles to the north of the station, when they appear to cease. The height of these hills, I should think, is at least 4,000 feet in parts, and they would form an obstacle in the path of a storm, and would probably tend to deflect it northwards.

The position of the observatory and of the anemometer could be seen from the steamer. The anemometer is at the end of the pier and has a splendid exposure, and the observations at this station ought to give early and reliable indications of any bad weather in the Bay by the change of wind direction and by wind velocity, &c.

Jessore was visited by Mr. Gilliland on 28th May 1892. With the exception of the dry minimum thermometer, which had a small deposit of spirit behind the brass fastener at the end of the tube, all the instruments were in fairly good condition. The regular observer was on leave, and the officiating man was examined by Mr. Gilliland and found to be intelligent, punctual, and to know his work well.

Jalpaiguri was visited by me on the 7th October 1892. The instruments were all in good condition. The wind vane, however, was wrongly fixed, as the north pointer was about 15° to the west of true north. This defect has since been remedied.

Krishnagar was visited by me on the 6th October 1892, when the observatory was found to be in a very good condition. The wind vane was found to have become utterly useless, and was replaced by a new one sent from Calcutta.

Madras (Port Office) was visited by me on the 11th, 12th, and 13th April 1892. The barometer is in a pucka room of the Port Office on the third storey. The thermometer cage is under a wooden-roofed verandah, freely exposed to the sea-breeze. The wind instruments are on a staging above the barometer room, and are therefore at a very considerable elevation above the ground. The instruments which are in use at the observatory were found to be in good order and very clean. The observer is sharp and reads his instruments accurately

and quickly. The Officiating Port Officer, Captain Creagh, takes great interest in the work of the observatory.

Muzaffarpur was visited by Mr. Little on 23rd March 1893. He remarks:—"The dry thermometers were in good order. The thread and pieces of cloth of the wet thermometers were dirty and no doubt partially dry when the observer began to take the readings. As I approached the shed, he poured some of the water from the bottles over the bulbs, and almost immediately took the readings. The bottles were dirty, the water being discoloured by green fungus, and the bulbs were encrusted. The anemometer seemed to be in want of oil. There was no receiving bottle within the rain-gauge. A bottle that the observer said had been sent with the instruments must have been intended for the rain-gauge. I put it in." As the result of this inspection, the observer was fined Rs. 5 for his want of attention to the work.

Motihari was visited by Mr. Little on the 22nd March 1893. The bulb of the wet bulb thermometer was slightly encrusted. The wind vane is old and was found to be useless. Everything else was in good order.

Nellore was visited on the 6th, 7th, and 8th August 1892 by the Meteorological Reporter to the Government of Madras. The barometer was found defective and was changed by another. Miss Pogson thus speaks of the observer:—"Mr. Conn, the Telegraph Master, reads and takes his observations most carefully and accurately, and is, in my opinion, one of the best and most conscientious observers. The general condition of the observatory was most satisfactory and highly creditable to Mr. Conn."

Noakhali was visited by Mr. Gilliland on the 24th May 1892, when he found all the instruments (except the anemometer) in good order. When taken to pieces the anemometer was found perfectly clean, but the horizontal shaft was not fixed true in its bearings, and the upper brass cylinder enclosing the vertical steel rod which carries the cups, was not quite vertical. The defects were remedied. The observer was taking his time from the telegraph office clock, which was about 30 minutes fast.

Purnea was visited by the Personal Assistant to the Meteorological Reporter to the Government of India. He remarks:—"The jail hospital assistant does the work of observation. He had never had any proper training in the work, and was hence reading the barometer and anemometer by erroneous methods. The columns of the spirit thermometers were broken into fragments and the observer, although aware of the defects, did not know how to rectify them." The observations of this observatory were very unsatisfactory for some time past, and the result of the inspection shows that the erroneous readings were due to the ignorance of the observer as to the proper method of reading the instruments.

Rangpur was visited by me on 22nd October 1892. The condition of the anemometer was extremely bad, as it was not oiled for more than 11 months. The dial plate was loose and the shot was firmly fixed on the cup by hardened oil. The bulb of the wet bulb thermometer at its bottom was badly encrusted. The bottle was only half full of water, and the muslin and thread were dirty, as they had not been changed for some time. His method of measuring rainfall was also incorrect. The observatory was therefore in a very bad condition when inspected.

The following table will show the observatories which have been inspected in each of the three years 1890—93. Twenty-five visits of inspection were made in the year 1890-91; in the following year twenty-three visits of inspection only could actually be made, one of them being made by the Madras Reporter; and in 1892-93, twenty-six inspections were made, as indicated previously. The number of inspections made is certainly not so large as is desirable, but, as pointed out in previous Administration Reports, it is practically impossible to do more than is done. The Bengal Reporter, who is mainly responsible for inspecting the Bengal stations, is also responsible for warning the ports all round the Bay of Bengal of the occurrence of storms throughout the year, and hence he can only leave Calcutta during the brief intervals when severe storms are not expected. In addition to this the Bengal Meteorological Reporter is only a

the college vacation, and further only during the parts of the vacation when weather is fairly settled in the Bay of Bengal:—

	Stations inspected.	1890-91.	1891-92.	1892-93.
1	Arrah	6th and 7th December 1890.	27th October 1891 ...	......
2	Bankipore ...	4th April and 2nd December 1890.	Ditto ...	31st October 1892 and 18th March 1893.
3	Bankura ...	......	16th March 1892 ...	......
4	Barisal ...	......	......	26th May 1892.
5	Berhampore ...	......	17th August 1891 ...	......
6	Bhagalpur ...	21st and 22nd November 1890.	26th May and 15th August 1891.	......
7	Bogra ...	13th November 1890 ...	......	......
8	Buxar ...	8th December 1890 ...	5th October 1891 ...	31st October 1892.
9	Chaibassa ...	......	30th August 1891 ...	21st January 1893.
10	Chapra ...	30th November 1890 ...	13th August 1891 and 18th March 1892.	20th and 21st March 1893.
11	Coconada ...	......	......	20th April 1892.
12	Cuddalore ...	24th February 1891 ...	6th March 1892 ...	14th April 1892.
13	Cuttack ...	......	22nd August 1891 ...	......
14	Darjeeling ...	......	22nd to 25th April 1891	10th to 16th October 1892.
15	Dehri ...	......	26th October 1891 ...	......
16	Dinajpur ...	11th November 1890 ...	......	21st October 1892.
17	Darbhanga ...	24th and 25th November 1890.	14th August 1891 and 20th March 1892.	24th March 1893.
18	False Point ...	30th December 1890 ...	......	23rd and 24th April 1892.
19	Gopalpur ...	2nd to 9th January 1891	......	22nd April 1892.
20	Gaya ...	4th April and 3rd and 4th December 1890.	16th March 1892 ...	30th October 1892.
21	Hazaribagh ...	......	......	14th and 15th March 1893.
22	Jalpaiguri ...	......	......	7th October 1892.
23	Jessore ...	5th November 1890 ...	......	28th May 1892.
24	Kalimpong ...	...	28th April 1891 ...	......
25	Krishnagar ...	6th and 7th November 1890.	......	6th October 1892.
26	Madras (Port Office)	......	......	11th, 12th, and 13th April 1892.
27	Malda ...	......	21st August 1891 ...	......
28	Motihari ...	28th November 1890 ...	...	22nd March 1893.
29	Muzaffarpur ...	2nd and 3rd April and 25th and 27th November 1890.	19th March 1892 ...	23rd March 1893.
30	Nellore ...	26th and 27th March 1891	......	6th, 7th, and 8th August 1892.
31	Noakhali ...	......	......	24th May 1892.
32	Puri ...	1st January 1891 ...	......	......
33	Purnea ...	19th November 1890 ...	......	27th January 1893.
34	Rampur Boalia ...	16th and 17th November 1890.	......	......
35	Ranchi ...	......	4th May 1891 ...	......
36	Raniganj ...	5th April 1890 ...	2nd October 1891 and 16th March 1892.	......
37	Rangpur ...	10th November 1890 ...	......	22nd October 1892.
38	Vizagapatam ...	......	......	21st April 1892.

Under the circumstances explained previously it will be seen that the work of observatory inspection by the Bengal Reporter is attended with considerable difficulty. Hence it is necessary to state that, during the triennial period under review, the observatories in the following table, which are under the direct control of the Bengal Meteorological Reporter, have not been inspected. Of these observatories, Chittagong, Comilla, Faridpur, and Sibsagar are in urgent need of inspection:—

List of observatories that could not be inspected during the past three years.

Akyab.	Saugor Island.	Tavoy.
Balasore.	Faridpur.	Pamban.
Burdwan.	Midnapore.	Dhubri.
Chittagong.	Mymensingh.	Sibsagar.
Comilla.	Naya Dumka.	Silchar.
Dacca.	Sirajganj.	

Instruments issued.

The number of instruments broken or allowed to get out of order may be looked on as a test of the care with which an observer does his work. Hence a table is appended

below showing the various instrumemts which have been issued to all the observatories undér the control of the Bengal Reporter during the past three years :—

List of instruments issued to the Observatories in Bengal and Assam during 1890-91, 1891-92, *and* 1892-93.

	Barometer.	Hygrometers.		Maximum thermometer.	Minimum thermometer.		Anemometer.	Wind vane.	Rain-gauge.	Measure glass.	Clock.	Lantern.	Barometer cage.	Lens.	Thermometer cage.	Sand glass.	Watch.
		Dry.	Wet.		Dry.	Wet.											
Akyab					B.												
Arrah					B.												
Balasore								C.		C.		A.C.					
Bankura	B.																
Berhampore			B.			B.		B.		B.							
Bhagalpur																	A.
Bogra				C.	A.									A.			A.
Burdwan	A.				C.		C.										
Barisal			A.									C.	C.	C.			C.
Buxar	A.			C.			A.B.	B.					A.				
Chittagong				A.	2A.			A.		C.		C.		C.		2C.	
Chapra	B.				B.												
Chaibassa	B.												B.				C.
Coconada	A.			B.	C.		B.		C.		B.	C.			A.		
Comilla																	B.
Cuddalore	C.									A.			B.			A.	
Cuttack	C.			C.					B.	B.							
Dácca	A.C.								B.	B.							
Darjeeling						C.			B.	B.C.							
Dehri							B.	B.	B.								
Demagiri									A.	A.							
Dhubri										C.							
Dinajpur					A.		A.						C.				
Darbhánga		B.	C.	B.	A.C.												
False Point	A.						B.C.										
Fort Tregear		A.	A.	A.	2A.		A.	A.	A.	A.							
Faridpur										C.							
Gaya	C.					A.											
Gopalpore								A.	A.	A.					A.		B.C.
Gnatong	2B.			B.			C.	C.		A.						C.	
Hazaribagh		B.	B.	B.	B.	B.											
Jessore	A.			A.C.					C.	A.C.			A.				A.C.
Jalpaiguri					A.		C.	A.									
Kalimpong*	A.B.	A.	A.	A.	A.			A.							A.		
Krishnagar				A.	A.			C.		A.C.							A.C.
Lungleh					C.												
Madras (Port Office) ...																	
Malda	B.			C.	C.			B.		B.							
Midnapore			B.														
Motihari		A.	A.														
Muzaffarpur*	*A.*	*A.*	*A.*	*A.*B.	*A.*	*A.*	*A.*	*A.*	*A.*	A.*A.*			*A.*	*A.*	*A.*		A.
Mymensingh*																	2C.
Nellore	A.B.C.											C.					
Noakhali							C.										A.
Naya Dumka																	A.C.
Patna				B.C.						B.							
Pamban*	A.	A.	A.	A.	A.	A.	A.	A.	A.	A.B.		B.	A.	A.	A.	A.	A.C.
Puri	B.						B.	A.B.					B.		B.	B.C.	
Purnea		A.	A.		A.	A.C.	C.	C.	A.	A.							A.C.
Rampore Boalia				C.			C.	C.									
Ranchi							C.			C.							
Raniganj	A.			C.					C.								
Rangpur							A.	C.									
Saugor Island												B.				A.	
Sirajganj									C.	C.							
Sibsagar	C.																A.B.
Silchar							C.			A.C.				C.		C.	C.
Shortts' Island					A.		A.B.		C.			C.					
Tura					A.												
Tavoy																	

A.—1890-91. | B.—1891-92. | C.—1892-93.

A.—Instruments supplied during 1889-90, but observatory started from 1890-91; hence this is shown in this return.

* New equipment.

Rainfall stations.

A large amount of attention has been paid to the rainfall-recording stations in Bengal during the past year with a view of improving the registration and of filling up gaps which had previously existed.

The following new stations were started during 1892-93:—

District.	Station.
Cuttack	Pal Labara.
Midnapore	Panskura.
Chittagong	Kodala. Fenoa. Mirsarai. Chandpur.

District.	Station.
Backergunge	Daulat Khan.
Monghyr	Chakai Bamda. Chapraon.
Dumka	* Belbodda.

The total number of rainfall stations in Bengal on the 31st March 1893, was 276.

Considering the number of stations which record rainfall only, the following figures will show the steady increase which has taken place in their number during the past six years:—

Year.	Stations.	Year.	Stations.
1887-88	250	1890-91	257
1888-89	255	1891-92	267
1889-90	258	1892-93	276

It was stated in the Administration Report for 1891-92 that a system of inspection of rain-gauge stations had been introduced, under which various District Officers, Magistrates, Deputy Magistrates, Civil Surgeons, etc., when on tour in their districts inspect the rain-gauges and report the results of the inspections in form in which definite questions have to be replied to direct to the Meteorological Office. During the year 1892-93, 58 rain-gauge stations have thus been inspected, and in the majority of cases the rain-gauges have been found in good order. In other cases defective instruments were found, which have been changed, and in some the exposure of the sites of the rain-gauges was bad, and these have also been changed. In addition, too, during the past year, the officer in charge of each rain-gauge in the province was required to fill in the answers to a considerable series of carefully prepared questions as to the dimensions of the rain-gauge and the accuracy of its measurements and of the measuring glass used with it, and also questions dealing with the site and exposure of the instrument. A rather large number of defective instruments and of extremely bad exposure of rain-gauges are thus brought to light, and in all cases, as far as possible, these defects have been remedied, and it is hoped that the registration of rainfall is now on a satisfactory footing.

The daily and weekly rainfall returns have been received from these very numerous stations with very commendable punctuality throughout the year, and, so far as can be judged by the critical examination of the figures sent in, the statistics are in almost all cases fairly accurate and reliable.

Departmental reports.

On the whole there has been no practical change in the nature of the reports issued during the past year from those in former years. These reports consist of those issued daily, weekly, monthly, and yearly, and of certain special reports.

Daily reports.—Two daily reports are issued by this office—the first, which deals with the meteorology of the Bay area only, is published daily throughout the year, Sundays and holidays included. This report contains the 8 A.M. observations made at twenty-eight stations round the Bay, and it is lithographed and consists of a chart representing the Bay area with isobars, &c., the reduced observations received from the twenty-eight stations, and also a brief report as to the character of the weather. The report is lithographed in the Meteorological Office, and is issued daily at about 10-45 A.M. Absolutely no change has been made in this report during the past year, and it was issued to thirty subscribers paying Rs. 6 per quarter, and to forty-seven Government officers without charge. There was a small balance of Rs. 429-15-0 in connection with the fund on account of this report at the close of the offical year (1892-93).

This report is maintained specially with reference to the working of the Storm Signal Service, and it is on these observations that the storm forecasting work is carried on. After the report has been written, special telegrams are

* Mohagama was abolished and Belbodda started in its place.

dispatched to the various ports describing the weather in the Bay on that day at 8 A.M. Two classes of messages are sent; first, by means of a specially prepared code, the general weather conditions, the wind direction and velocity, the state of the sea, and the changes in barometric pressure are telegraphed for each of eight sections into which the Bay has been divided, to such ports as Rangoon, Madras, Negapatam, and Coconada throughout the year, and to Akyab and Chittagong also during certain seasons of the year. In the case of Chittagong, which is newly added to this list, the Port Commissioners of that place asked to be supplied with this information from 15th of May to 15th November in each year, and the Commissioners obtained the sanction of the Government of Bengal to defray the cost of the telegrams from the port funds. The first of these telegrams sent to Chittagong was despatched on November 3rd, 1892.

This code was modified and improved very considerably during the year, and by the modification much fuller information can be given than was previously the case. The code is indeed now working very satisfactorily.

Further weather information is also sent by telegram immediately after the preparation of the daily report to certain stations. This information is sent by a new code which was described in the previous Administration Report, and is used to communicate weather information to ships at a distance from the shore. Each flag in the commercial code of flags has been given a distinctive meteorological meaning, and the Bay has been divided for the purpose of this code into four sections, and by telegraphing the designation of four flags or by hoisting four flags at any signal station, any passing vessel within view of these flags is able to ascertain the state of the weather in each of the four sections of the Bay. Telegrams giving this information are now daily sent to Saugor Island, Madras, and Rangoon. The first use of this code was made at Saugor Island on 1st May 1892, and since that date every vessel which passes out to sea is supplied by the flag signals with a knowledge of the weather conditions of the whole of the Bay. If the vessel passes out at about 11 A.M. or later, it receives a statement of the weather in the Bay on the same day at 8 A.M.; but if the vessel is proceeding to sea before 11 A.M., the information provided will have reference to the previous day. At first this plan was tried experimentally for six months, but it gave so much satisfaction to the commanders of vessels, pilots, etc., that it has, with the usual courtesy of the Telegraph Department, been made a permanency. In order, also, to carry out this system, the Port Commissioners of Calcutta provided the four sets of flags required for the signalling purpose at Saugor Island, and also from the 1st of April 1893 they will pay an allowance of Re. 1 per month to each of the five menial servants or khalasis at Saugor Island who are engaged in the duty of hoisting the flags to the passing vessels. This system of flag signalling has proved most successful.

The second daily report deals with the province of Bengal and Assam, and this was published during the past year from 24th April to 12th November. The only changes made in this report were two in number. In the first place advantage was taken of the opening of a telegraph office at Naya Dumka to add this station to those already included in the report. In addition, too, when Gnatong was converted from a voluntary station to a regular paid observatory, the daily observations were ordered to be telegraphed to Simla for the India Weather Report and to Calcutta for inclusion in the Bengal Report. The first telegram was sent in on 1st October 1892. This report, therefore, now includes daily telegraphic observations from one of the highest telegraphic and meteorological stations in the world.

During 1892 this daily report was circulated to 16 subscribers, each paying Rs. 2-8 per month, and also to 106 Government officials, who receive the report free of charge. It was mentioned in the last Administration Report that, at the request of the Calcutta Chamber of Commerce, a scheme had been submitted to that body for improving the daily report issued by this office by, to a great extent, amalgamating the two daily reports above described, and by providing certain additional information for the tea and indigo districts. It appears, however, that the proposal did not meet with approval, for up to the present time the Chamber has taken no further action in the matter, and has indeed not expressed its opinion on the scheme at all.

In the case of the weekly and monthly reports published in the *Calcutta Gazette* and of the Annual Report on the Meteorology of Bengal published in the Bengal Administration Report, there have been no changes to record, except that Gnatong has been added to the list of reporting stations; and in the case of these reports, and also of the two daily reports, they have been printed and published at the required dates and periods, without any failure whatever, throughout the whole year.

A summary of the meteorological condition during the monsoon season of 1892 was also published in the *Calcutta Gazette*, and monthly charts, representing the various rainfall statistics throughout the monsoon season, have been submitted to Government and furnished to the Sanitary Commissioner.

Storm signals.—The working of the system of storm signals has remained quite unaltered during the past year and, indeed, during the triennial period the only change introduced was the extension of the storm-warning system to Narayanganj in November 1891. The signals selected for that port are similar to those in use at Chittagong and at the Orissa ports, and these significations were arranged to be also almost similar in character.

The year 1892 was on the whole not a stormy one, and there was only one very severe storm and one rather severe storm. The first was noticeable as forming in the extreme north-west angle of the Bay in the first ten days of June, and for becoming rather rapidly of great severity though small in diameter. It first advanced in a northerly direction, and it at one time appeared probable that it would advance direct up the Hooghly to Calcutta; but it changed its direction to the north-west or west on nearing the land, and struck the coast about midway between Saugor Island and Balasore. It then recurved and veered rapidly away in a west-north-westerly direction. It gave a small storm wave on the Balasore coast.

The second storm of note occurred in October, and was also decidedly severe though small. It was remarkable for the great rapidity with which it crossed from the east to the west of the Bay, the average velocity equalling about 18 miles an hour. It struck the coast near Coconada, and it was also remarkable for the almost complete absence of any indication of its approach towards the west coast of the Bay.

The other storms occurring during the year were generally of minor importance.

The dates of the principal storms and barometric depressions occurring during the year are given in the first of the two following tables, and the action taken in the matter of issuing storm warnings and hoisting storm signals is indicated in the second of these tables:—

Table giving a brief statement of the storms which affected the Bay of Bengal coasts during the year 1892.

No. of storm.	Period of depression or storm.	Character of storm.	Coast affected.
1	May 24th to 26th ...	Two feeble depressions forming, one north of the Andaman Sea, and the second off Orissa coast; both disappearing on reaching the coast.	Burma coast and Orissa coast, r pectively.
2	June 7th to 11th ...	Small storm formed off South Orissa coast, moving northwards and intensifying rapidly into a severe cyclone in the north-west angle of the Bay. It reached the land between Saugor Island and Balasore.	Bengal and Orissa coasts.
3	July 4th to 10th ...	Small storm forming off the Ganjam coast, intensifying moderately and advancing north-westward, crossing the coast near Balasore on the 10th.	Orissa coast.
4	August 24th and 25th and 28th to 31st.	Slight to moderate depression forming off the west coast of Bay, crossed the coast near Puri.	Ditto.
5	September 9th to 10th ...	Small storm formed off the Orissa coast, crossed the coast south of False Point on the 9th.	Ditto.

No. of storm.	Period of depression or storm.	Character of storm.	Coast affected.
6	September 21st to 22nd ...	Small storm formed in centre of Bay, moving slowly westwards, passed inland between Coconada and Masulipatam on the 21st.	Madras coast.
7	October 16th to 17th ...	Shallow depression overlying centre and south of Bay, moving towards Madras coast; crossed coast near Nellore on the 17th.	Ditto.
8	Do. 18th to 20th ...	Small but severe storm forming probably in Andaman Sea near Burma coast, marching westwards rapidly towards the Circars coast near Coconada on the 20th.	Burma and Madras coast.
9	Do. 27th to 29th ...	Moderate barometric depression advancing to west coast in west-north-west direction, intensifying slowly, reaching the coast between Nellore and Masulipatam.	Madras coast.
10	November 28th to December 3rd.	Barometric depression in centre of south of the Bay, advanced towards the west coast, but filled up before it reached the land.	South Madras coast.

Table showing the action taken by the Calcutta Meteorological Office in warning the coasts affected by the storms enumerated in the previous table.

Storm number.	Hoisting of Storm Signals.			Warning of Ports by Cautionary Telegrams.	
	Ports ordered to hoist signals.	When hoisted.	When lowered.	Ports warned by cautionary telegrams.	Time and date of despatch of cautionary telegrams.
1				Madras, Rangoon, Negapatam, Bassein, Coconada, Moulmein.	10-13 A.M. of 24th; 10-40 A.M. of 25th; 10-2 A.M. of 26th May.
				Tavoy ...	10-22 A.M. of 24th; 10-35 A.M. of 25th; 10-6 A.M. of 26th May.
				Akyab ...	10-40 A.M. of 25th; 10-2 A.M. of 26th May.
2	Budge Budge ...	8-55 A.M. of 8th June	1 P.M. of 10th June	Gopalpur, Bimlipatam, Vizagapatam, Coconada, Masulipatam, Negapatam, Rangoon.	10-30 A.M. of 7th; 10-35 A.M. of 8th; 10-9 A.M. of 9th; 10-45 A.M. of 10th; 10-23 A.M. of 11th June.
	Saugor Island ...	9-40 " of 8th "	1-20 " of 10th "		
	Mud Point ...	9-40 " of 8th "	1-30 " of 10th "		
	Diamond Harbour	9-40 " of 8th "	1-30 " of 10th "	Balasore, Puri	10-30 A.M. of 7th; 9-3 A.M. of 8th; 10-54 A.M. of 10th; 10-35 A.M. of 11th June.
	False Point ...	10 " of 8th "	4-15 " of 10th "		
	Chandbali ..	10 " of 8th "	2-0 " of 10th "	Chandbali, False Point.	10-30 A.M. of 7th; 8-58 A.M. of 8th; 10-45 A.M. of 10th; 10-23 A.M. of 11th June.
	Calcutta ...	10-45 " of 8th "	1-55 " of 10th "		
	Puri	11 " of 8th "	11-45 " of 10th "	Chittagong, Akyab.	10-9 A.M. of 9th; 10-45 A.M. of 10th; 10-23 A.M. of 11th June.
	Balasore ...	11-30 " of 8th "	3-0 " of 10th "		
				Madras ..	11 A.M. of 7th; 10-30 A.M. of 8th; 10-19 A.M. of 9th; 10-57 A.M. of 10th; 10-35 A.M. of 11th June.
3				Coconada, Akyab.	10-16 A.M. of 4th; 10-15 A.M. of 5th; 10-32 A.M. of 6th; 9-52 A.M. of 7th July.
	Chandbali ...	11-10 " of 6th July	10-55 A.M. of 7th July	Negapatam ...	10-16 A.M. of 4th; 10-32 A.M. of 6th; 9-52 A.M. of 7th July.
	False Point ...	11-50 " of 6th "	11-30 " of 7th "	Bimlipatam, Vizagapatam, Gopalpur, Masulipatam.	10-15 A.M. of 5th; 10-32 A.M. of 6th; 9-52 A.M. of 7th July.
	Puri	11-40 " of 6th "	11-32 " of 7th "		
	Balasore ...	4-10 P.M. of 6th "	2-0 P.M. of 7th "	Madras ...	10-22 A.M. of 4th; 10-34 A.M. of 5th; 10-40 A.M. of 6th; 10 A.M. of 7th July.
				Rangoon ...	10-16 A.M. of 4th: 10-15 A.M. of 5th: 10-31 A.M. of 6th; 9-52 A.M. of 7th July.
				False Point, Chandbali.	9-42 A.M. of 7th.
				Balasore, Puri ...	9-45 A.M. of 7th.
4				Bimlipatam, Vizagapatam, Coconada, Masulipatam.	10-12 A.M. of 24th; 10-0 A.M. of 25th August.
				Madras ...	10-20 A.M. of 24th; 10-5 A.M. of 25th August.
5	Budge Budge ...	9-45 A.M. of 9th September	4-40 A.M. of 10th Sept.	Madras ...	10-14 A.M. of 9th; 10-35 A.M. of 10th September.
	Saugor Island ...	9-55 " of 9th "	4-11 " of 10th "		
	Mud Point ...	9-55 " of 9th "	4-23 " of 10th "	Gopalpur ...	10-12 A.M. of 9th; 10-26 A.M. of 10th September.
	Diamond Harbour	10-15 " of 9th "	4-20 " of 10th "		
	Chandbali ..	10-30 " of 9th "	10-40 " of 10th "	Balasore, Puri ...	10-30 A.M. of 9th; 9-47 A.M. of 10th September.
	Calcutta ..	11-0 " of 9th "	5-45 " of 10th "		
	Puri ...	11-4 " of 9th "	11-20 " of 10th "	Chandbali ...	10-32 A.M. of 9th; 9-45 A.M. of 10th September.
	Balasore ...	11-30 " of 9th "	12-15 P.M. of 10th "		
	False Point ...	Noon of 9th "	10-30 A.M. of 10th "	False Point ...	9-15 A.M. of 9th; 9-40 A.M. of 10th September.

Storm number.	Hoisting of Storm Signals.			Warning of ports by cautionary telegrams.	
	Ports ordered to hoist signals.	When hoisted.	When lowered.	Ports warned by cautionary telegrams.	Time and date of despatch of cautionary telegrams.
6				Gopalpur, Bimlipatam, Vizagapatam, Coconada, Masulipatam.	10-0 A.M. of 21st; 10-7 A.M. of 22nd September.
				Madras ...	10-45 A.M. of 21st; 10-19 A.M. of 22nd September.
7				Vizagapatam, Coconada, Masulipatam.	10-40 A.M. of 16th; 10-35 A.M. of 17th October.
				Madras ...	10-40 A.M. of 16th; 10-32 A.M. of 17th October.
8				Rangoon ...	10-25 A.M. of 18th; 9-50 A.M. of 19th October.
	Saugor Island ...	12-50 P.M. of 18th October	3-53 P.M. of 20th October	Bassein, Moulmein.	9-50 A.M. of 19th October.
	Budge-Budge ...	12-55 ,, of 18th ,,	4-24 ,, of 20th ,,	False Point, Chandbali.	10-5 A.M. of 19th; 10-40 A.M. of 20th October.
	Mud Point ...	12-55 ,, of 18th ,,	3-55 ,, of 20th ,,	Balasore, Puri ...	10-15 A.M. of 19th; 10-35 A.M. of 20th October.
	Calcutta ...	1-0 ,, of 18th ,,	4-45 ,, of 20th ,,	Gopalpur, Bimlipatam, Vizagapatam, Masulipatam.	3-18 A.M. and 10-30 A.M. of 20th October.
	Diamond Harbour	1-3 ,, of 18th ,,	4-15 ,, of 20th ,,	Coconada ...	3-25 A.M. and 10-30 A.M. of 20th October.
				Madras ...	3-30 A.M. and 10-30 A.M. of 20th October.
9				Gopalpur, Bimlipatam, Vizagapatam, Coconada, Masulipatam, Negapatam.	9-45 A.M. and 10-0 P.M. of 28th; 10-5 A.M. of 29th October.
				Madras ...	9-50 A.M. of 28th; 10-10 A.M. of 29th October.
10				Bimlipatam, Vizagapatam, Coconada, Masulipatam, Negapatam, Pamban, Tuticorin, Akyab.	10-24 A.M. of 2nd; 10-20 A.M. of 3rd December.
				Madras ...	10-32 A.M. of 2nd; 10-28 A.M. of 3rd December.

Office establishment.

The Meteorological Office staff has remained practically unchanged throughout the year. The Head-clerk, Babu Fanindra Mohan Basu, has continued to superintend the office in a most efficient manner, and under his able superintendence the office has worked very smoothly and very efficiently, and this has enabled the numerous reports, returns, maps, etc., published by this Department to be issued punctually and with great regularity throughout the year.

METEOROLOGICAL OFFICE;
CALCUTTA,
The 25th April 1893.

ALEX. PEDLER, F.R.S., F.I.C., F.C.S.,
Meteorological Reporter to the Government of Bengal.

REPORT ON THE CALCUTTA MEDICAL INSTITUTIONS FOR THE YEAR 1892.

MUNICIPAL DEPARTMENT—MEDICAL.

No. 2089Medl.

Calcutta, the 19th June 1893.

RESOLUTION.

READ—

The Report on the Calcutta Medical Institutions for the year 1892.

Read also—

The Report for the year 1891 and the Resolution recorded upon it.

During the year 1892 the public health was slightly better in the town of Calcutta and the amalgamated area than in the previous year, which was one of unusual mortality throughout the province; the general death-rate in those two areas having been 27·1 and 34·8 respectively, against 27·9 and 39·4 in 1891. In Calcutta the number of deaths from cholera, bowel-complaints, and fever show a decrease, while those from small-pox and other causes show a slight increase. In the amalgamated area also cholera, fever, and small-pox appear to have been less prevalent, but mortality from bowel-complaints and other causes was greater than in the previous year. In Howrah the recorded death-rate has risen from 18·29 to 23·68, the increase being distributed over all the heads except small-pox and other causes. The deaths from cholera and fever increased by 281 and 369 respectively, the number of deaths from cholera having been greater than in any of the previous ten years.

2. The following table shows the number of indoor and outdoor patients treated in all the hospitals and dispensaries of the metropolis during the past two years :—

Name of Institution.	1891. Indoor. Number treated.	1891. Indoor. Daily average.	1891. Indoor. Number of beds available.	1891. Outdoor. Number treated.	1891. Outdoor. Daily average.	1891. Total number of patients treated, both indoor and outdoor.	1891. Total number of deaths among indoor patients.	1891. Percentage of deaths on total number of indoor patients treated.	1892. Indoor. Number treated.	1892. Indoor. Daily average.	1892. Indoor. Number of beds available.	1892. Outdoor. Number treated.	1892. Outdoor. Daily average.	1892. Total number of patients treated, both indoor and outdoor.	1892. Total number of deaths among indoor patients.	1892. Percentage of deaths among total number of indoor patients treated.
Medical College Hospital.	6,803	371·77	449	56,227	407·36	63,030	632	10·07	7,054	400·79	449	54,660	394·11	61,714	744	11·41
Presidency General Hospital.	2,928	144·63	233	...	...	2,928	127	4·33	3,498	168·11	238	......	......	3,498	120	3·43
Campbell Hospital ...	9,088	427·08	588	...	...	9,088	1,711	18·82	8,551	445·23	588	11,470	90·46	20,021	1,687	19·72
Police Hospital ...	2,468	95·62	175	...	...	2,468	24	·97	2,045	88·36	175	......	...	2,045	20	·97
Mayo Native Hospital	1,884	82·2	105	28,700	181·4	30,584	295	15·65	1,756	80·7	105	27,508	174·8	29,264	228	12·97
Chandney Hospital ...	391	12·89	12	42,998	384·98	43,389	10	2·55	421	13·92	12	44,947	344·86	45,368	10	2·37
Park Street Dispensary	...	...	...	29,901	206·3	29,901	...	...	...	...	...	28,847	186·7	28,847	......	......
Chitpur Street Dispensary.	...	...	...	22,262	172·4	22,262	...	...	...	...	...	20,621	154·8	20,621	......	......
Sukea's Street Dispensary.	...	...	...	18,589	150·80	18,589	...	...	...	...	...	18,485	151·55	18,485	......	......
Bhowanipur Dispensary.	...	...	...	10,884	83·26	10,884	...	...	...	...	...	9,737	85·49	9,737	......	......
Total ...	23,562	1,134·19	1,567	209,561	1,586·50	233,123	2,799	12·15	23,325	1,197·11	1,567	216,275	1,582·77	239,600	2,809	12·32
Howrah General Hospital.	1,756	71·48	109	10,257	85·48	12,013	371	21·12	1,886	79·18	108	10,497	88·28	12,383	332	17·60
GRAND TOTAL ...	25,318	1,205·67	1,676	219,818	1,671·98	245,136	3,170	12·78	25,211	1,276·29	1,675	226,772	1,671·05	251,983	3,141	12·72

The total number of outdoor patients treated is larger by 6,954 than in 1891. The increase is said to be due to the opening of an outdoor dispensary attached to the Campbell Hospital, in which no less than 11,470 patients were treated. There has been a falling off in the number of in-door patients which was insignificant everywhere except in the Campbell Hospital, where the numbers receded from 9,088 to 8,551 owing to the opening of the out-door dispensary mentioned above. In the Police and the Mayo Hospitals there was a decrease of 423 and 128 respectively. All the other institutions, however, received a larger number of in-patients than in the previous year.

3. Of the total number of persons treated during the year, 154,492 were adult males, 37,707 adult females, and 59,784 children, against 153,705, 34,678, and 56,753 respectively in 1891. The statistics according to race show that there was an increase of all classes of patients except Hindus. The increase of European patients is said to be due chiefly to the increased population of the port, brought about by the stagnation of trade and the large number of vessels detained in the river, and to the popularity of the out-door department of the Eden Hospital. The number of Hindu patients decreased in all the hospitals except Howrah, the total falling off being 3,155; but the year 1891 showed an advance of 7,297 upon the figures of 1890, and the fluctuation in 1892 is probably fortuitous.

4. The rate of mortality among the inmates of the medical institutions was practically the same as in several past years, viz., 12·7 per cent. The death-rate as usual was highest in the Campbell and Howrah Hospitals, where pauper and moribund cases are sent for treatment. The death-rate among children was lower than that among adults which is 60 per cent. higher than the average rate of English Hospitals.

5. There was a slight increase in the small-pox cases treated in the hospitals, the numbers being 35 against 21 in the previous year. All of these cases were admitted in the Campbell Hospital and 10 of them proved fatal. This the Inspector-General of Civil Hospitals thinks is indicative of the absence of protection by vaccination in at least half the number of cases. In order to afford grounds for further conclusions, the Lieutenant-Governor desires that the number of patients who can be seen by their marks to have been vaccinated, or inoculated, or to have had small-pox, and the proportion of deaths among them, should be stated in future reports. Results so remarkable have been obtained from observation of an outbreak of small-pox in the Dacca Jail during 1892, that His Honour desires that particular attention should be given to recording the past medical history of small-pox patients, and the previous efforts, if any, made to protect them. Seven hundred and nine persons were admitted to hospital during 1892 suffering from cholera, which in 425 cases proved fatal, giving a ratio of nearly 60 per cent. The mortality among European patients treated for this disease was higher in the General Hospital than in that attached to the Medical College. The Lieutenant-Governor is glad to find that there were no cases of cholera among the patients in the Presidency General and the Campbell Hospitals, but the Medical College and the Howrah General Hospitals did not enjoy this immunity, 6 and 4 cases respectively having occurred in those institutions. These cases are said to have been due chiefly to contaminated food obtained by the patients from outside the Hospital. There was a considerable decrease in the admissions for dysentery and diarrhœa, but the mortality shows a higher percentage. Malarial fever also was responsible for fewer admissions than in the previous year, though it is by far the most common disease in the Lower Provinces. The number of cases of venereal disease rose from 11,886 to 13,072. The Inspector-General of Civil Hospitals remarks that the "statistics of the Presidency General Hospital are significant of the greater prevalence of syphilis in the quarters frequented by European sailors." The figures produced in the report, however, show that the increase is slight, and there is a decrease in cases of secondary syphilis compared with the average of the last five years. The admissions for leprosy fell from 134 to 94, of whom all but six were received in the Campbell Hospital. Dr. Pilcher objects to the treatment of lepers in the same ward with other patients, chiefly, it is understood, on account of the loathsomeness of the disease, for the danger of contagion according to the conclusions of the Leprosy Commission is very small, and he suggests that, when the new Leper Asylum is opened, they should not be admitted to the hospitals. If, however, the hospitals were closed to them, and they were all forced into the Leper Asylum, the accommodation which it is proposed to provide in that institution would be quite insufficient. The total number of cases of enteric and remittent fever treated in all the hospitals during the year was 12 and 1,215 respectively against 26 and 1,188, the corresponding figures of the previous year. Of the 12 cases of enteric fever, 6 are shown as having occurred in the Medical College Hospital, 5 in the Presidency General Hospital, and 1 in the Howrah General Hospital. The

absence of this disease from the institutions, where only native patients are received, is noticeable, especially in connexion with the belief entertained by some that the natives of this country are to a great extent free from this disease. But Dr. Pilcher remarks that this does not set aside the conviction of many careful European and Native observers that enteric fever often attacks natives of this country. The difficulty of distinguishing it from remittent fever renders any definite opinion on this subject at present impossible. The Surgeon-General with the Government of India recently enjoined extreme care in the diagnosis of the disease, in the hope that some day the key to the difference between the two diseases may be found.

6. The total number of major operations performed in all the institutions shows an increase of 1,182. The increase is said to be due in a great measure to a common class of operations (tapping for hydrocele) which have hitherto been classed at the Medical College Hospital as minor operations having under recent orders been included under this head. It is satisfactory to notice the general reduction in the percentage of death after operation from 4·5 to 3·78, and the fact that in the Howrah General Hospital it fell from 8·23 to 3·01. This result is said to be due to the care and thoroughness with which the details of antiseptic surgery have been carried out. The number of dental operations performed was 2,362 against 2,275. There was a considerable increase in the number of Europeans who sought relief for dental diseases, while the number of Eurasians fell from 894 to 760. This result hardly bears out the remarks made in paragraph 45 of the report for 1891, that the teeth of mixed are more prone to decay than those of unmixed races.

7. In the Eden Hospital 1,609 women and children were treated against 1,811 in the previous year. Of these, 832 were Europeans, 746 Hindus or Mussulmans, and 31 belonged to other classes. The daily average attendance of Europeans shows the large decrease of 33 per cent. The reduction in the number of admissions of European and native patients is attributed by Dr. Joubert to the opening of the out-door department. There were 28 deaths among Europeans and 67 among natives, as compared with 32 and 65 of the previous year. The number of confinement cases rose from 501 to 542, the mortality among this class of cases being 26 against 21 in 1891. The number of cases of septicæmia also rose from 24 to 31, giving a percentage of 5·7 on confinements as against 4·7 in 1891: of these 21 proved fatal. These figures show that the precautions reported as having been taken against the occurrence of this disease have unfortunately not had much effect, and the Lieutenant-Governor would again dwell on the necessity of using all possible means to minimize the chance of its appearance or extension in the hospital. His Honour has already suggested that isolation is the best way of treating it, and if funds can be provided, the necessary steps will be taken to erect a separate ward for the treatment of this disease.

8. The steady increase in the number of out-patients treated in the Shama Churn Law Eye Infirmary points to the growing popularity of the Institution. The principal operations performed were extraction of lens, iridectomy and excision of the eye-ball. The operations for cataract were successful in 61 per cent. of the cases which compares unfavourably with the results in the Howrah Hospital, where the operations were successful in 87 per cent. of the cases treated.

9. In the Ezra Hospital, which is intended chiefly for the sick of the Jewish persuasion, 1,555 out-patients and 350 in-patients were treated, the daily average attendance being 10·6 and 16·91 respectively against 12·63 and 16·73 in 1891. These low figures hardly bear out the Inspector-General's remarks that the Institution has fulfilled the beneficent object of its founder.

10. The nursing arrangements of the Medical College and General Hospitals continue to work satisfactorily: grateful testimony to the efficiency and skill of the nurses is frequently received, and the Lieutenant-Governor desires to place on record his appreciation of the good work done by them. Two trained European nurses have been employed in the Howrah General Hospital, but they are not connected with the Hospital Nurses' Institution. Fourteen pupil nurses and eight pupil dhais passed out of the Eden Hospital.

11. The invested capital belonging to the hospitals remains the same as in 1891, viz., Rs. 5,83,000, of which more than half belongs to the Mayo Institu-

tions. The following statement shows the income and expenditure of the metropolitan hospitals during the past two years :—

	1891.	1892.
Income.	Rs.	Rs.
Opening balance	16,289	17,020
From Government	3,21,845	3,15,296
Local Funds	67,527	33,441
Municipal "	34,621	35,522
Interest on investments... ...	27,993	26,813
Sale of securities ...	4,173	10,000
Receipts from paying patients ...	......	47,675
Miscellaneous receipts	......	1,622
Subscriptions—		
Europeans	12,319	11,819
Natives	11,696	1,371
	1,58,329	1,68,263
Total ...	4,96,463	5,00,579
Expenditure.		
On Establishment	1,86,736	1,92,969
" bazar medicine	4,216	5,389
" European "	23,708	31,039
" Diet	1,12,221	1,28,717
" Miscellaneous charges ...	75,786	78,100
" Buildings and repairs ...	66,776	36,842
Invested during the year ...	10,000	10,714
	4,79,443	4,83,770
Closing balance ...	17,020	16,809
Total ...	4,96,463	5,00,579

The receipts from paying patients and the miscellaneous receipts are this year shown separately for the first time, which accounts for the apparent falling-off in receipts from Local Funds.

The total income excluding the opening balance amounted to Rs. 4,83,559 against Rs. 4,80,174, and the total expenditure excluding the amount invested was Rs. 4,73,056, which exceeded the amount expended in 1891 by Rs. 3,613. The increase was distributed over all the heads of expenditure except repairs and buildings. The cost to Government shows a reduction of Rs. 6,549, while the receipts from local sources increased by Rs. 9,934, chiefly owing to larger receipts from the Port Dues Fund and from paying patients. In the Medical College Hospital the cost of diet increased by Rs. 5,070-4-11, which is said to be due to higher rates and larger issues of diet. The average cost of the daily diet was annas 7-2¾ for Europeans, and annas 3-3⅚ for natives.

12. In the Resolution on the report for 1891, the Lieutenant-Governor commented on the variations in the cost of diet at the different hospitals, and on the absence of any explanation of the fact. The matter has not been lost sight of during the year past, and it has been shown that the circumstances of the different institutions vary so materially that uniformity in the matter of average expense is very difficult to attain. In the Presidency General Hospital the patients are all Europeans, and a considerable number are paying patients. In the Howrah General Hospital and in the Medical College Hospital both Europeans and natives are treated. In these circumstances, it will be sufficient to publish side by side the average cost of diet of European and native patients at each institution, and the Lieutenant-Governor relies on the Inspector-General to keep the expenditure under this and other heads to the lowest point compatible with complete efficiency. There has been an advance in the cost of

native diet everywhere, and in that of European diet at the Medical College Hospital only.

	Europeans.		Natives.	
	1891.	1892.	1891.	1892.
	A. P.	A. P.	A. P.	A. P.
Medical College Hospital ...	6 9¾	7 2¾	3 1¾	3 3⅚
Presidency General " ...	8 9	8 9	......	......
Campbell " ...	......	9 1⅘	2 3½	2 6½
Police " ...	......	......	2 4	2 6
Mayo Native } Chandney } " ...	......	......	3 7	3 8⅕
Howrah General " ...	8 6	8 6	2 3	3 2

13. In the Medical College Hospital a new latrine block has been erected, and improved arrangements have been made for the supply of drinking water. Two rooms were constructed for the Registrar's office and the Medical officer's board-room, and other minor improvements have been effected. All of them were much needed, and the Lieutenant-Governor is glad that they have been carried out.

14. The existing provision for meeting the medical wants of the town has more than once been declared to be insufficient by the Local Government, and this opinion was endorsed by the Government of India in July 1892. Accordingly, after the close of the year under review, a Committee was appointed to report on the necessity for providing further accommodation and the localities where it should be afforded. They have suggested the establishment of a hospital at Bhowanipur, and four out-door dispensaries in Wards Nos. 3, 19, 20, and 22 respectively: their proposals have received the full assent of Government, and the difficulty of providing funds for the work alone retards is commencement.

15. The report brings into striking prominence the insignificant extent to which the medical charities of Calcutta are supported by voluntary contributions. Out of a total income of rather more than five lakhs of rupees, as much as Rs. 3,15,000 were contributed by Government, while the subscriptions from Europeans and Natives aggregated only Rs. 11,818 and Rs. 1,371 respectively. In other words, out of every Rs. 100 spent in 1892 on the Medical Institutions of Calcutta, the proportion voluntarily contributed by those whose countrymen form 81 per cent. of the patients treated was less than five annas. The Lieutenant-Governor would be glad to see part of the great stream of native charity turned into this most useful channel.

16. The thanks of the Lieutenant-Governor are due to Surgeon-Colonel Pilcher for a clear and concise report, and for the promptitude with which it has been submitted.

By order of the Lieutenant-Governor of Bengal,

J. A. BOURDILLON,

Offg. Secretary to the Government of Bengal.

Rainfall, Weather, and State and Prospects of the Crops.

Statement showing Rainfall, Weather, and State and Prospects of the Crops in the different districts of Bengal, as reported to Government, during the week ending the 17th June 1893.

	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL.					
BURDWAN DIVN.	1	Burdwan	June 17, '93	2·73	Weather—hot with occasional heavy showers. Cultivation of *aus* and jute going on. *Aman* being sown. Fodder and water sufficient. Prices of common rice:— Srs. Burdwan ... 10 to 13; Kalna ... 10 to 13; Katwa ... 12½; Raniganj ... 12½ } per rupee.
	2	Bankura	„ 17, '93	3·70	Weather—cloudy and rainy. Sowing still going on. Transplantation has commenced in places. Fodder and water sufficient. Price of rice 11 seers per rupee both at Sadar and Vishnupur.
	3	Birbhum	„ 17, '93	4·23	Weather—cloudy and rainy. The heavy rain has retarded sowing to some extent. Fodder and water plentiful. Price of rice 12 to 14½ seers per rupee.
	4	Midnapore	„ 17, '93	2·44	Weather—showery. Prospects of crops fairly good. Prices of common rice:— Srs. Sadar ... 11; Contai ... 13; Tamluk ... 10; Ghatal ... 10 to 11 } per rupee.
	5	Hooghly	„ 17, '93	2·51	Apparently the rains have broken. There is rain daily, and the weather is gradually growing cooler. Jute, *aus* and sugarcane doing very well. Transplantation of *aman* is likely to be very early this year, and is said to have already commenced in places. Prices of common rice:— Srs. Sadar ... 10 to 11; Serampore ... 10 to 11½; Jahanabad ... 10 to 12½ } per rupee.
	6	Howrah	„ 17, '93	2·19	Weather—wet and fairly cool. Rains have commenced. Ploughing and paddy sowings going on. Condition of cattle good. Fodder and water-supply ample. Price of rice 10 to 11 seers per rupee.
PRESIDENCY DIVN.	7	24-Parganas	„ 17, '93	1·39	Weather—seasonable, cloudy and hot by turns with showers of rain. The rain has been general throughout the district, heaviest in the south. It has done good to the crops on high lands. Ploughing and sowing greatly retarded in the Diamond Harbour subdivision owing to excessive rain. Condition of cattle good. Supply of fodder and water sufficient. Price of common rice varies from 11½ to 13½ seers per rupee.
	8	Nadia	„ 17, '93	3·31	Weather—hot between showers. Prospects of all crops good. Prices stationary. Fodder and water sufficient.
	9	Khulna	„ 17, '93	1·60	Weather—bright and hot in the early part of the week; cloudy towards the end. Cultivation of *aus* and *aman* in full swing. Coarse rice selling at 10¾ to 13 seers per rupee. Fodder and water for cattle sufficient.
	10	Jessore	„ 17, '93	1·68	Weather—seasonable. Cultivation of *aus* and *aman* going on. Young paddy and jute plants looking well. *Til* being harvested. Fodder and water plentiful. Prices stationary.
	11	Murshidabad	„ 17, '93	5·41	Weather—hot and generally cloudy with occasional heavy showers. Harvesting of *boro* paddy finished and that of indigo has commenced. Sugarcane, *mulberry* and *bhadoi* are promising. Common rice sells at 11 seers per rupee. Fodder available for cattle. Condition of cattle generally good.

Division	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BENGAL—*concld.*					
CHITTAGONG DIVN.	12	Chittagong	...	...	Report not received.
	13	Noakhali	...	...	Report not received.
	14	Tippera	June 17, '93	1·86	Weather—variable: at times hot and steamy, at others cool with wind and rain. Harvesting of *til* nearly finished. Sowing of paddy going on. Condition of *aman* paddy and jute promising.
	15	Chittagong Hill Tracts.	...	...	Report not received.
DACCA DIVN.	16	Dacca	„ 17, '93	0·55	Weather—hot. Prospects of standing crops good. Fodder available. No cattle-disease. Common rice selling at from 9 to 12 seers per rupee.
	17	Faridpur	„ 17, '93	0·77	Weather—hot. Standing crops doing well. Sowings nearly completed. Common rice sells at 11 seers per rupee. Cattle get fodder, but cattle-disease prevails in two thanas of Madaripur.
	18	Backergunge	„ 17, '93	2·62	Weather—seasonable. State and prospects of crops fair. Common rice selling at from 9 to 12 seers per rupee. Fodder and water sufficient.
	19	Mymensingh	„ 17, '93	4·56	Weather—cloudy and hot with occasional rain. Rivers rising. Prospects of *aus* and jute good. Lands are being cultivated for sowing *rowa* paddy. Common rice sells at from 11 to 13 seers per rupee. Health of cattle good. Fodder available.
RAJSHAHI DIVN.	20	Dinajpur	„ 17, '93	5·53	Weather—hot and rainy. Rain daily. Standing crops doing well. Ploughing for *haimanti* in progress. Jute and *bhadoi* have been sown to the extent of 16 annas. Price of rice at Sadar 12 seers per rupee; that at Thakurgaon 11 to 13 seers. Cattle continue to be in good condition. Fodder and drinking water plentiful.
	21	Rajshahi	„ 17, '93	4·05	Weather—very rainy and sometimes very hot. There has been too much rain. It rains every day. Paddy in the lowest lands is being much injured. Where low lands have not been sown early, they must remain fallow this year owing to submersion. Jute and sugarcane are flourishing. There is no cattle-disease. Fodder and water are plentiful. Price of rice varies from 11 to 13½ seers per rupee.
	22	Rangpur	„ 17, '93	9·30	Weather—cloudy with heavy rain in the early part of the week. Low land *aus* is being harvested. Prospect continues favourable. Prices steady.
	23	Bogra	„ 17, '93	4·10	Weather—unsettled with heavy showers. Cultivation of *aman* goes on. Prospects unaltered. Common rice sells at 12 seers per rupee. Fodder and water sufficient.
	24	Pabna	„ 17, '93	1·47	Weather—hot and showery at times. Prospects of standing crops on high lands continue good. During his recent tour in Sara outpost *elaka* the Collector discovered that about 2 annas of the paddy land there could not be sown with *aus* and that the *aus* on 2 annas of the low land has been damaged by continual rainfall. Price of common rice at Pabna 11¼ seers per rupee and Rs. 4 to Rs. 5 per maund at Sirajganj. Fodder and water-supply sufficient.
	25	Darjeeling	„ 17, '93	2·10	Weather—*In hills*:—Cloudy sky. Misty and showery off and on. *In Terai*:—Cool with constant and heavy rain. *In the hills*:—*Bhutta* and *bhadoi* paddy coming up well. Potato plants flowering. *Phaphur, chota marua, kangni* and *shama* progressing favourably. Lands being prepared for *aghani* paddy. *In the Terai*:—State and prospects of crops good. Prices of coarse rice:— Srs. Hills ... ... 10 } per rupee. Terai ... ... 11 } per rupee.
	25	Jalpaiguri	„ 17, '93	4·24	Weather—cool and cloudy. Prospects of *bhadoi* and jute favourable. Common rice sells at 11½ seers per rupee. Fodder and water-supply sufficient. No cattle-disease reported.

	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR.					
BHAGALPUR DIVN.	27	Monghyr	June 17, '93	1·99	Weather—cloudy with occasional showers. *Makai* and *marua* thriving well. Rain has done good to standing crops. Indigo doing well. Plenty of fodder and water. Prices of common rice :— Srs. Sadar ... ... 13 to 15; Begusarai ... ... 14; Jamui ... ... 13½ } per rupee.
	28	Bhagalpur	„ 17, '93	1·82	Weather—cool and cloudy. The rains appear to have broken yesterday (16th). Prospects favourable. Sowings of *makai* are nearly complete. Price of common rice 13 seers 14 chitaks per rupee.
	29	Purnea	„ 17, '93	2·54	Weather—monsoon weather; fairly cool. Farming operations forward. Weeding of *bhadoi* in progress. State of *bhadoi* and of *aghani* seedlings very satisfactory. Fodder and water abundant. Price of rice remains at 12 seers per rupee at Purnea and Kishanganj, but has increased from 16 to 15 seers per rupee at Araria.
	30	Malda	„ 17, '93	4·36	Weather—cloudy with occasional heavy showers. Rainy season has commenced. Harvesting of *boro* rice completed. *Bhadoi* rice coming into ear. The seasonable rainfall has improved the prospect of *bhadoi* crops. Indigo is being cut in some places; the outturn is expected to be better than last year. Common rice selling at from 11 to 14½ seers per rupee. Supply of fodder sufficient.
	31	Sonthal Parganas	„ 17, 93	5	Weather—cool and rainy. The rains appear to have set in. Ploughing, sowing and planting of all crops going on. *Boro* harvest being completed. Price of rice 10½ to 13 seers per rupee. Fodder and water ample.
PATNA DIVISION.	32	Patna	„ 17, '93	1·36	Weather—cool and occasionally cloudy. Rain has benefited sownig of *bhadoi* crops. *Makai* is being sown and has germinated in some places. Transplantation of *marua* has commenced in Bihar subdivision. Sugarcane looks well. Swarms of locusts were seen in the Bihar subdivision on the 13th instant, but no damage was done. Prices of common rice :— Srs. Patna ... ... 15; Barh ... ... 13½; Bihar ... ... 17; Dinapore ... ... 12½ } per rupee.
	33	Gaya	„ 17, 93	1·65	Weather—unsettled monsoon weather during latter part of week; very hot and humid before that. *Bhadoi* crops and paddy being sown, and transplanting of *marua* millet begun. Sugarcane very promising. Prices generally stationary. Water and fodder-supply ample. Three straggling flights of locusts passed over the district, but did very little damage.
	34	Shahabad	„ 17, '93	0·63	Weather—cloudy with occasional sunshine and cool. Ploughing for *bhadoi* in progress. Sugarcane doing well. Fodder and water abundant. Prices stationary.
	35	Darbhanga	„ 17, '93	1·42	Weather—cloudy with high east wind. The rainfall of the week has facilitated cultivation of *bhadoi* crops. Paddy and indigo also much benefited by the rain. Prices remain stationary. Fodder and water abundant.
	36	Muzaffarpur	„ 17, '93	1·62	Weather—cloudy with east winds. Paddy, *makai* and *marua* are being sown. Standing crops doing well. Recent rain has done much good to crops. No disease among cattle. Supply of fodder and water sufficient.

	No.	District and date of return.		Rainfall at Sadar Station in inches.	Character of the weather and state and prospects of the crops.
BIHAR—*concld.*					
PATNA DIVISION—*concld.*	37	Saran	June 17, '93	1·33	Weather—east wind, cloudy and rainy. Standing crops benefited by the rainfall. *Cheena* being harvested in many places. *Bhadoi* sowings begun. Mango crop plentiful towards North-West. Fodder and water plentiful. Prices of common rice :— Srs. Sadar ... ... 13 } per rupee. Siwan ... ... 12 } Gopalganj ... ... 13 }
	38	Champaran	„ 17, '93	5·38	Weather—cool for the time of year. Paddy and *makai* being sown. *Cheena* has been reaped. Prices nearly stationary. Fodder and water sufficient.
ORISSA.					
ORISSA DIVN.	39	Cuttack	„ 17, '93	2·87	Weather—showery. Sowing of *beali* and *sarad* in progress. Supply of fodder and water sufficient. Prices of common rice :— Srs. C. Srs. C. Cuttack ... ... 10 8 to 13 2 } per rupee. Jajpur ... ... 16 0 to 18 6 } Kendrapara ... ... 14 0 to 18 6 } Banki ... ... 15 8 }
	40	Puri	„ 15, '93	1·30	Weather—cloudy with rain at intervals. Lands being cultivated for *sarad* crop and in places being sown. Miscellaneous crops doing well. Price of rice stationary.
	41	Balasore	„ 17, '93	4·56	Weather—very stormy. The country is thoroughly waterlogged by the heavy rainfall of the last month. Cultivation and sowings are impeded and rice seedlings much damaged. A good spell of dry weather is greatly wanted. Prices of rice :— Srs. Balasore ... ... 13 } per rupee. Bhadrak ... ... 15 }
CHOTA NAGPUR.					
South-West Frontier Agency.					
CHOTA NAGPUR DIVN.	42	Hazaribagh	June, 17, '93	1·83	Weather—seasonable : cloudy and showery. Prospects of sugarcane good. Mango indifferent. Ploughing and sowing in vigorous progress all over the district. Fodder and water sufficient. Prices of common rice :— Srs. Head-quarters ... ... 9 to 12 } per rupee. Giridi ... ... 9 to 12 }
	43	Lohardaga	„ 17, '93	3·00	Weather—rainy. Ploughing and sowing of winter rice continue... Common rice selling at 12 seers per rupee. Fodder and water sufficient.
	44	Palamau	„ 16, '93	0·66	Weather—unsettled. Rain in almost all parts of the district. *Bhadoi* ploughing in progress. Cattle-disease in some parts. Prices stationary. Fodder and water sufficient.
	45	Singhbhum	„ 17, '93	3·52	The rains have apparently set in. All crops in good condition. Prices stationary. No cattle-disease.
	46	Manbhum	„ 17, '93	2·19	Rains have apparently set in. A few days' warm dry weather wanted. Prospects so far fair. Prices stationary. Fodder and water-supply sufficient.

Published for general information.

CALCUTTA; REVENUE DEPT.,
The 20*th June*, 1893.

H. H. RISLEY,
Secy. to the Govt. of Bengal.

PRICES-CURRENT (*RETAIL*) OF FOOD-GRAINS, FIREWOOD AND SALT IN THE HEAD-QUARTERS STATION BAZARS OF THE DISTRICTS OF BENGAL DURING THE FORTNIGHT ENDING THE 15TH JUNE 1893.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the

QUANTITIES PER RUPEE IN

Division	Number.	DISTRICTS.	WHEAT. Present return.	WHEAT. Next preceding return.	WHEAT. Corresponding return of last year.	BARLEY. Present return.	BARLEY. Next preceding return.	BARLEY. Corresponding return of last year.	RICE, BEST SORT. Present return.	RICE, BEST SORT. Next preceding return.	RICE, BEST SORT. Corresponding return of last year.	RICE, COMMON. Present return.	RICE, COMMON. Next preceding return.	RICE, COMMON. Corresponding return of last year.	JOWAR OR CHOLUM (*Sorghum Vulgare.*) Present return.	JOWAR OR CHOLUM (*Sorghum Vulgare.*) Next preceding return.	JOWAR OR CHOLUM (*Sorghum Vulgare.*) Corresponding return of last year.
BENGAL.			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
BURDWAN DIVISION.	1	Burdwan .	13 8	11 1½	11 0¾	...	...	...	9 12	10 0	10 14	11 4	12 0	12 [illegible]	...	...	...
	2	Bankura .	13 5	13 5	10 0	18 0	18 0	...	10 0	10 0	11 0	11 0	10 14	13 8		...	...
	3	Birbhum ...	12 0	12 0	10 8	...	...	10 3	10 8	10 8	10 3	12 12	12 12	12 0	...	...	...
	4	Midnapore ...	11 0	11 0	11 0	...	...	...	10 0	10 0	11 0	11 14	11 5	13 0	...	...	...
	5	Hooghly ...	11 13	11 13	12 0	...	...	...	8 0	8 0	8 0	10 0	10 0	10 0	...	...	...
	6	Howrah ...	...	...	...	...	...	...	9 5	9 5	8 8	10 8	11 8	12 0	..	...	...
PRESIDENCY DIVISION.		Calcutta	13 4	13 4	11 8	17 12	17 12	15 8	8 3	8 3	7 14	10 10	10 10	10 11	20 0	20 0	15 2
	7	24-Parganas ...	11 0	12 0	11 4	20 0	18 0	16 0	8 0	8 0	8 0	11 0	12 0	12 0	17 0	16 0	16 0
	8	Nadia .	14 8	13 14	12 1	...	22 12	19 6	8 12	9 0	10 7½	11 0	11 0	11 12	...	...	...
	9	Khulna ...	...	...	...	...	...	...	10 10	10 10	10 12	12 14	12 14	13 0	...	...	...
	10	Jessore ..	10 0	11 4	10 0	...	...	...	9 8	10 0	10 0	11 0	12 0	12 12	...	...	...
	11	Murshidabad ...	13 0	13 0	12 0	...	...	...	10 0	10 0	9 0	11 4	11 8	12 4	...	...	...
CHITTAGONG DIVISION.	12	Chittagong ...	10 0	10 0	10 8	...	...	...	10 8	10 8	8 8	12 0	12 4	11 0	...	...	...
	13	Noakhali ...	...	...	...	...	...	...	9 13	10 0	10 0	11 8	11 0	11 8	...	...	...
	14	Tippera ...	11 0	11 0	12 0	...	...	...	8 0	8 4	10 0	10 12	10 12	13 0	...	...	...
	15	Chittagong Hill Tracts.*	...	...	...	...	...	...	...	...	...		8 14	9 12	...	...	...
DACCA DIVISION.	16	Dacca ...	12 0	12 0	10 8	...	..	...	10 8	10 0	10 0	11 0	10 8	13 0	...	...	...
	17	Faridpur ...	17 0	17 0	14 0	20 0	20 0	18 0	7 0	7 0	10 0	10 8	10 0	12 0	...	...	...
	18	Backergunge ...	...	...	...	...	...	...	9 9	9 9	7 4	10 0	10 0	11 0	...	...	...
	19	Mymensingh ...	9 8	9 8	9 0	...	...	...	10 0	10 0	10 0	11 0	11 0	13 0	...	...	...
RAJSHAHI DIVISION.	20	Dinajpur ...	13 3	14 3	10 13	20 0	20 0	16 0	9 6	9 14	9 8	12 0	10 12	11 0	...	...	...
	21	Rajshahi ...	13 8	14 4	12 12	24 0	24 0	19 8	9 12	9 12	9 12	10 14	10 14	11 4	...	...	...
	22	Rangpur	12 0	12 0	10 0	...	...	...	8 14	8 14	10 0	11 0	11 0	11 10	...	...	...

* Present return not received.

A In the subdivisions the retail prices of salt per rupee are:—Kalna 10 seers, Katwa 11½ seers, and Raniganj 10½ seers.
B At Vishnupur the retail price of salt is 11 seers per rupee.
C At Rampur Hát the retail price of salt is 11 seers per rupee.
D In the subdivisions the retail prices of salt per rupee are:—Contai 9 seers, Tamluk 11 seers, and Ghatal 10 seers 7 chitaks.
E In the subdivisions the retail prices of salt per rupee are:—Serampore (Bhaddreswar) 11½ seers and Jahanabad 10 seers 10 chitaks.
F At Ulubaria the retail price of salt is 11 seers per rupee.
G In the mufassal marts the retail prices of salt per rupee are:—Chetla Hát 11 seers 7 chitaks, Barasat 10 seers 10 chitaks, Magrahát 10 seers 10 chitaks, and Baduria 11 seers 7 chitaks.
H In the mufassal marts the retail prices of salt per rupee are:—Bahadurkhali 10½ seers, Chuadanga 10 seers, Meherpur 10½ seers, and Ranaghat 10½ seers.
I In the subdivisions the retail prices of salt per rupee are:—Bagerhat 8 seers and Satkhira 10 seers.

Head-quarters Station Bazars of the Districts of Bengal on the 15th June, 1893.

Indian-corn or Maize. (*Zea Mays.*) Present return.	Next preceding return.	Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus Indicus.*) Present return.	Next preceding return.	Corresponding return of last year.	Firewood. Present return.	Next preceding return.	Corresponding return of last year.	Salt. Present return.	Next preceding return.	Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt. Present return.	Next preceding return.	Corresponding return of last year.	Districts.	Number.	
															BENGAL.		
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
...	...	...	23 0	19 8	16 8	106 0	106 9	100 0	A 11 10	11 13	11 10	3 6 0	3 5 4	3 4 8	Burdwan	1	Burdwan Division.
17 0	17 0	...	11 0	12 0	17 0	320 0	320 0	280 0	B 10 8	11 0	10 0	3 13 0	3 10 0	4 0 0	Bankura.	2	
...	...	...	20 0	20 0	10 3	200 0	240 0	180 0	C 11 0	11 0	10 4	3 10 6	3 10 6	3 14 0	Birbhum.	3	
...	...	...	19 0	19 0	10 8	240 0	240 0	120 0	D 11 7	11 7	10 8	3 7 0	3 7 0	3 12 0	Midnapore.	4	
...	...	...	13 5	13 5	11 0	120 0	120 0	120 0	E 10 0	10 0	10 0	3 6 0	3 6 0	3 12 0	Hooghly.	5	
...	...	...	12 10	12 10	11 7	105 0	105 0	105 0	F 10 10	10 10	11 13	3 8 0	3 8 0	3 6 0	Howrah.	6	
20 0	20 0	...	20 0	20 0	15 8	85 0	85 0	85 0	10 7	10 7	11 4	3 13 0	3 13 0	3 4 6	Calcutta.		Presidency Division.
...	17 0	16 0	21 0	21 0	18 0	100 0	100 0	100 0	G 11 0	11 0	11 0	3 6 0	3 4 6	3 4 6	24-Parganas.	7	
...	...	...	23 12	22 3	17 8½	128 0	128 0	128 0	H 10 8	10 10	10 10½	3 12 0	3 8 0	3 8 0	Nadia.	8	
...	...	...	11 0	11 0	12 0	160 0	160 0	140 0	I 10 8	10 8	9 0	3 12 0	3 12 0	4 0 0	Khulna.	9	
...	...	...	20 0	20 0	18 0	120 0	120 0	130 0	J 10 0	9 14	9 2	3 10 0	3 10 0	3 10 0	Jessore.	10	
...	...	...	20 0	20 0	17 0	200 0	200 0	200 0	K 10 8	10 8	10 8	3 7 0	3 7 0	3 7 0	Murshidabad.	11	
...	...	...	...	...	...	106 0	106 0	110 0	L 10 0	9 0	9 0	4 0 0	3 14 0	4 4 0	Chittagong.	12	Chittagong Division.
...	...	...	...	...	...	...	...	...	M 9 6	10 0	8 0	4 0 0	3 14 0	4 6 0	Noakhali.	13	
...	...	...	11 4	12 0	8 0	...	...	...	N 10 13½	10 13½	10 0	3 12 0	3 12 0	3 14 0	Tippera.	14	
...	...	...	...	...	...		240 0	240 0		8 0	8 0		4 8 0	4 12 0	Chittagong Hill Tracts.	15	
...	...	...	19 0	19 0	15 0	120 0	120 0	120 0	O 10 0	10 0	10 0	3 9 0	3 9 0	3 11 0	Dacca.	16	Dacca Division.
...	...	...	...	...	...	...	..	...	P 10 4	10 12	10 0	3 14 0	3 12 0	4 0 0	Faridpur.	17	
Mus- 8 0	uri. 8 0	...	M- 10 8	ug. 10 10	...	80 0	80 0	80 0	Q 10 10	10 10	10 0	3 12 0	3 12 0	3 10 0	Baekergunge.	18	
...	...	...	13 0	13 0	13 0	120 0	120 0	120 0	R 10 0	10 0	10 0	4 0 0	4 0 0	3 15 0	Mymensingh.	19	
...	...	...	24 0	24 0	16 0	160 0	160 0	160 0	10 8	10 8	10 4	3 12 0	3 12 0	3 12 0	Dinajpur.	20	Rajshahi Division.
...	...	...	21 8	20 0	18 8	240 0	240 0	240 0	S 9 9	9 9	9 9	3 10 9	3 10 8	3 10 8	Rajshahi.	21	
...	...	...	8 0	8 8	9 0	120 0	160 0	80 0	T 8 8	8 8	10 0	4 0 0	4 0 0	4 0 0	Rangpur.	22	

J In the subdivisions the retail prices of salt per rupee are :—Jhenida 9 seers 9 chitaks, Magura 10 seers, Narail 9 seers 10 chitaks, and Bangaon 10 seers 11 chitaks.
K In the subdivisions the retail prices of salt per rupee are :—Kandi 11 seers, Jangipur 10½ seers.
L At Cox's Bazar the retail price of salt is 8 seers per rupee.
M At Fenny Hát the retail price of salt is 9 seers per rupee.
N In the subdivisions the retail prices of salt per rupee are :—Chandpur 9 seers and Brahmanbaria 9 seers 2 chitaks.
O In the mufassal marts the retail prices of salt per rupee are :—Madanganj 10 seers, Manikganj 9 seers 13 chitaks, Munshirhát 10 seers Mirkadim 10 seers.
P In the Madaripúr and Goalundo subdivisions the retail price of salt is 10 seers per rupee.
Q In the subdivisions the retail prices of salt per rupee are :—Pirojpur 10½ seers, Patuakhali 9 seers.
R In the Kagmari, Netrakona, Kishorganj, and Jamalpur marts the retail price of salt is 10 seers per rupee.
S In the subdivisions the retail prices of salt per rupee are :—Nator 9 seers and Naugaon 9 seers 9 chitaks.
T In the subdivisions the retail prices of salt per rupee are :—Gaibanda 10 seers, Kurigaon 8 seers.

PRICES-CURRENT (retail) of Food-grains, Firewood, and Salt in the Head-quarters

Number.		DISTRICTS.	QUANTITIES PER RUPEE IN — Wheat. Present return.	Wheat. Next preceding return.	Wheat. Corresponding return of last year.	Barley. Present return.	Barley. Next preceding return.	Barley. Corresponding return of last year.	Rice, best sort. Present return.	Rice, best sort. Next preceding return.	Rice, best sort. Corresponding return of last year.	Rice, common. Present return.	Rice, common. Next preceding return.	Rice, common. Corresponding return of last year.	Jowar or Cholum. (Sorghum Vulgare.) Present return.	Jowar or Cholum. Next preceding return.	Jowar or Cholum. Corresponding return of last year.
BENGAL—*continued.*			S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.
Rajshahi Division—*concld.*	23	Bogra ...	10 15	12 0	12 0	...	...	...	9 9	9 0	9 12	12 0	12 0	11 4	...	...	...
	24	Pabna ..	17 10	18 0	13 8	22 8	24 0	...	6 0	6 0	6 12	11 10	11 4	12 12	...	...	...
	25	Darjeeling ..	8 0	9 0	7 0	9 0	10 0	8 0	5 0	5 0	5 0	9 8	10 0	9 0	...	...	...
	26	Jalpaiguri	12 0	11 0	11 0	16 0	13 0	16 0	8 8	9 8	6 8	12 0	12 0	10 0	...	...	...
BIHAR.																	
Bhagalpur Division.	27	Monghyr ...	14 8 to 16 2	14 0 to 16 0	13 8	21 0 to 23 0	21 0 to 23 0	16 0	8 0 to 10 0	8 0 to 10 0	9 5	12 0 to 13 8	12 0 to 13 0	10 12	17 8	17 8	...
	28	Bhagalpur ...	15 2	15 2	13 14	20 3	18 15	16 6	11 14	12 10	10 1	13 14	14 8	11 6	..	[illegible]	...
	29	Purnea (Kasba)*	14 0	13 0	12 0	...	...	...	10 0	11 0	10 0	12 0	13 0	12 0	.	...	...
	30	Malda (English Bazar).	14 0	14 0	13 0	...	...	...	10 0	10 0	10 8	12 8	12 8	12 0	...	...	...
	31	Sonthal Parganas.	11 0	11 8	11 0	...	...	...	11 0	11 8	9 0	14 0	14 8	11 4	...	...	...
Patna Division.	32	Patna ...	16 0 / 14 0	Red. 15 8 / White. 13 4	15 0 / 13 12	19 0	21 0	19 8	10 0	10 0	9 8	15 8	15 8	12 8	23 0	23 8	20 0
	33	Gaya ...	14 0	15 0	13 0	20 0	20 0	18 0	9 8	9 8	9 0	13 4	13 4	11 12	20 0	19 0	17 8
	34	Shahabad ...	13 0	13 0	13 8	18 0	18 0	15 12	8 0	8 0	9 0	13 0	13 4	12 0	...	...	...
	35	Darbhanga ...	13 3	13 3	13 3	18 11	20 6	18 2	11 0	11 0	10 0	14 0	14 0	12 0	...	...	...
	36	Muzaffarpur ...	14 0	14 0	13 0	19 0	20 0	18 0	8 0	8 0	9 0	13 0	14 0	11 8	.	...	...
	37	Saran ...	14 0	14 8	13 8	20 8	20 8	19 4	9 0	10 0	8 8	13 4	13 0	11 2	...	...	...
	38	Champaran ...	16 0	13 0	12 8	22 8	22 8	17 0	8 8	8 8	9 0	13 8	14 8 to 15 0	12 8	...	...	...
ORISSA.																	
Orissa Division.	39	Cuttack ...	13 2	13 2	9 3	...	...	...	10 8	10 8	8 3	13 2	13 13	10 8	...	..	...
	40	Puri ...	10 8	10 8	8 2	...	...	...	8 0	9 3	9 3	13 2	15 0	11 13	.	...	...
	41	Balasore ...	11 0	11 0	10 12	10 0	10 0	10 0	10 0	10 0	10 0	13 0	14 0	13 0	...	...	...
CHOTA NAGPUR.																	
Chota Nagpur Division.	42	Hazaribagh ...	12 0	12 0	12 0	16 0	16 0	16 0	7 0	7 0	8 0	12 0	12 0	12	...	...	...
	43	Lohardaga ...	11 8 / 9 0 to 10 0	Red. 10 0 / White. 7 0 to 8 0	11 0 / 8 4 to 9 8	16 0	14 0 to 16 0	11 0	10 0 to 10 8	10 0 to 11 0	12 0	12 0 to 13 0	12 0 to 13 0	13 0 to 15 0	...	...	...
	44	Palamau ...	11 10	14 1	13 8	20 4	23 1	16 14	11 4	11 4	12 6	13 8	13 8	13 8	...	...	...
	45	Singhbhum ...	10 0	10 0	14 0	...	...	...	8 0	8 0	13 0	10 0	10 0	16 0	...	...	...
	46	Manbhum	13 0	13 0	11 8	...	16 0	...	11 0	8 8 to 9 0	11 0	12 0 to 13 0	11 0 to 13 8	15 0	...	...	...

U At Sirajganj the retail price of salt is 11¼ seers per rupee.
V At Alipur the retail price of salt is 8 seers per rupee.
W In the Begusarai and Jamui subdivisions the retail price of salt is 10 seers per rupee.
X In the Banka, Supaul and Madhipura subdivisions the retail price of salt is 10 seers per rupee.
Y In the subdivisions the retail prices of salt per rupee are—Kishanganj 10½ seers and Araria 10 seers.
Z In the subdivisions the retail prices of salt per rupee are :—Deoghur 10½ seers, Godda 9 seers, Jamtara 9 seers, Pakur 10½ seers, and Rajmahal 10 seers.
a In the subdivisions the retail prices of salt per rupee are :—Barh 11 seers, Bihar 10¼ seers, and Dinapore 9¾ seers.
b In the subdivisions the retail prices of salt per rupee are :—Jahanabad 10 seers, Aurangabad 9¾ seers, and Nawada 9 seers.

CALCUTTA,

The 20th June, 1893.

Station Bazars of the Districts of Bengal on the 15th June, 1893—(concluded).

Indian-corn or Maize. (*Zea Mays.*) Present return.	Indian-corn: Next preceding return.	Indian-corn: Corresponding return of last year.	Arhar or Thur, Cadjan Pea. (*Cajanus indicus.*) Present return.	Arhar: Next preceding return.	Arhar: Corresponding return of last year.	Firewood. Present return.	Firewood: Next preceding return.	Firewood: Corresponding return of last year.	Salt. Present return.	Salt: Next preceding return.	Salt: Corresponding return of last year.	Wholesale prices per maund of 40 seers. Salt. Present return.	Wholesale Salt: Next preceding return.	Wholesale Salt: Corresponding return of last year.	Districts.	Number.	Division
S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	S. Ch.	Rs. a. p.	Rs. a. p.	Rs. a. p.			
															BENGAL—continued.		
...	...	...	...	...	...	90 0	90 0	90 0	8 0	9 4	9 9	4 10 8	4 2 8	3 14 8	Bogra.	23	Rajshahi Division—contd.
...	...	...	22 8	22 8	18 0	200 0	200 0	200 0	(U) 9 12	10 8	9 12	3 10 0	3 9 6	3 12 0	Pabna.	24	
11 0	11 0	10 0	8 0	8 0	8 0	120 0	120 0	120 0	8 0	8 0	8 0	4 10 0	4 10 0	4 12 0	Darjeeling.	25	
...	...	...	9 0	10 0	8 0	200 0	200 0	160 0	(V) 10 0	10 0	10 0	4 0 0	4 0 0	4 0 0	Jalpaiguri.	26	
															BIHAR.		
21 0 to 23 0	21 0 to 23 0	15 0	19 0 to 21 0	19 0 to 21 0	16 8	160 0	160 0	160 0	(W) 10 8 to 11 0	10 8 to 11 0	10 10	3 7 0	3 7 6	3 14 0	Monghyr.	27	Bhagalpur Division.
22 11	22 11	15 12	20 3	20 3	17 10	126 4	126 4	164 8	(X) 10 11	10 11	10 11	3 9 6	3 12 0	3 12 0	Bhagalpur.	28	
...	...	...	16 0	14 0	13 0	320 0	320 0	320 0	(Y) 10 0	10 0	11 0	3 10 0	3 10 0	3 10 0	Purnea.	29	
...	...	20 0	11 0	11 0	...	160 0	160 0	120 0	10 0	9 8	10 0	4 0 0	...	3 12 0	Malda.	30	
19 0	20 0	12 0	23 0	23 8	15 0	200 0	200 0	200 0	(Z) 10 8	10 8	10 0	3 10 3	3 10 3	3 10 3	Sonthal Parganas.	31	
21 0	21 0	18 0	23 0	23 0	22 0	130 0	130 0	130 0	(a) 11 4	11 0	10 8	3 10 0	3 10 0	3 12 0	Patna.	32	Patna Division.
...	...	...	20 0	19 0	19 0	160 0	120 0	160 0	(b) 9 12	9 12	10 0	3 13 0	3 13 0	3 13 0	Gaya.	33	
20 0	20 0	16 0	20 0	20 0	18 8	160 0	160 0	110 0	(c) 10 0	10 8	11 0	4 0 0	3 13 0	3 10 0	Shahabad.	34	
20 12	20 4	17 0	21 8	21 8	19 0	176 0	176 0	168 0	(d) 10 4	10 4	10 4	3 13 0	3 14 0	3 8 0	Darbhanga.	35	
19 0	19 0	17 0	21 0	20 0	18 0	160 0	160 0	160 0	(e) 11 0	11 0	10 8	3 10 0	3 10 0	3 11 6	Muzaffarpur.	36	
19 8	19 12	18 0	21 8	22 0	20 4	180 0	210 0	160 0	(f) 10 4	10 4	10 8	3 12 0	3 12 3	3 12 0	Saran.	37	
20 4	20 8	17 0	20 0	20 8	19 0	160 0	160 0	160 0	(g) 10 8	10 8	10 8	3 13 0	3 13 0	3 12 0	Champaran.	38	
															ORISSA.		
...	...	...	18 6	18 6	13 2	80 0	80 0	80 0	(h) 10 12	10 12	9 0	3 8 0	3 18 0	4 6 0	Cuttack.	39	Orissa Division.
...	...	...	17 2	15 12	13 13	80 0	80 0	80 0	11 0	10 10	11 8	3 8 0	3 10 0	3 8 0	Puri.	40	
...	...	...	10 12	10 12	10 12	160 0	160 0	160 0	(i) 11 0	11 0	11 0	3 10 0	3 6 0	3 10 0	Balasore.	41	
															CHOTA NAGPUR.		
16 0	15 8	16 0	16 0	17 0	14 8	240 0	210 0	240 0	(j) 9 0	9 0	9 0	4 8 0	4 2 0	4 0 0	Hazaribagh.	42	Chota Nagpur Division.
16 0	18 0	17 0	Big. 13 0; Small. 19 0	Big. 13 0; Small. 16 0	Big. 12 0; Small. 15 0	160 0	140 0	140 0	9 4	9 0	9 0	4 2 0	4 3 0	4 4 0	Lohardaga.	43	
21 15	23 10	20 4	33 10	30 6	16 14	...	...	200 0	8 7	8 7	7 14	...	...	...	Palamau.	44	
...	...	...	13 0	13 0	14 0	100 0	100 0	160 0	9 0	9 0	9 0	4 6 0	4 6 0	4 6 0	Singhbhum.	45	
18 0	18 0	...	17 0	18 0	15 0	...	...	...	(k) 10 10	10 10	9 14	3 11 0	3 11 0	3 14 0	Manbhum.	46	

c In the subdivisions the retail prices of salt per rupee are:—Buxar 10 seers, Sasaram 10¼ seers, and Bhabhua 9¾ seers.
d In the subdivisions the retail prices of salt per rupee are:—Madhubani 11 seers and Samastipur 10 seers.
e In the subdivisions the retail prices of salt per rupee are:—Sitamarhi 11 seers and Hajipur 10½ seers.
f At Siwan the retail price of salt is 11 seers 5 chitaks per rupee.
g At Bettiah the retail price of salt is 10 seers per rupee.
h In the subdivisions the retail prices of salt per rupee are:—Jajpur 8 seers, Kendrapara 9 seers, and Banki 11½ seers.
i At Bhadrak the retail price of salt is 10 seers per rupee.
j At Giridih the retail price of salt is 11 seers per rupee.
k At Gobindpur the retail price of salt is 11 seers per rupee.

Published for general information.

H. H. RISLEY,
Secretary to the Govt. of Bengal.

PRICES-CURRENT (wholesale) of Food-grains, Firewood, and Salt

Number.	MARTS.	WHEAT.			BARLEY.			RICE, BEST SORT.			RICE COMMON.		
		Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.
		R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.
1	Calcutta ...	3 0 0	3 0 0	3 3 3	2 4 6	2 4 0	2 4 7	4 14 0	4 14 0	4 14 4	3 12 0	3 12 0	3 7 3
2	Sirajganj ...	2 12 0	2 10 0	3 1 0	...	...	...	6 5 0	6 0 0	5 8 0	4 0 0	3 12 0	3 5 0
3	Dacca ...	3 4 0	3 4 0	3 12 0	...	...	...	3 12 0	4 0 0	4 0 0	3 8 0	3 12 0	3 0 0
4	Narayanganj	...	...	...	...	...	...	4 0 0	4 4 0	3 8 0	3 10 0	4 0 0	3 2 0
5	Chittagong	4 0 0	4 0 0	3 12 0	...	...	...	3 12 0	3 8 0	4 8 0	3 4 0	3 1 0	3 8 0
6	Patna ...	2 8 0 2 14 0	Red. 2 9 3 White. 3 0 0	2 10 0 2 11 9	[illegible] 1 6	1 14 6	2 0 6	4 0 0	4 0 0	4 3 4	2 9 9	2 9 9	3 2 0
7	Balasore ...	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 12 0	3 0 0	2 13 0	3 0 0
8	Puri ...	3 12 0	3 12 0	4 13 0	...	...	...	5 0 0	4 4 0	4 5 0	3 0 0	2 10 0	3 6 0
9	Cuttack ...	3 0 0	3 0 0	4 1 0	...	...	...	3 10 0	3 10 0	4 14 0	3 0 0	2 14 0	3 12 0

CALCUTTA,
The 20th June, 1893.

in the undermentioned Marts of Bengal on the 15th June, 1893.

Gram, Chana, Chhola, Kadalay or Sunaga. (*Cicer Arietinum.*)			Indian-corn or Maize. (*Zea Mays.*)			Arhar or thur, Cadjan Pea. (*Cajanus indicus.*)			Firewood.			Salt.			Marts.
Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	Present return.	Next preceding return.	Corresponding return of last year.	
R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	R. A. P.	
2 8 0	2 8 0	2 7 4	2 0 0	2 0 0	...	2 0 0	2 0 0	2 5 3	0 7 0	0 7 0	0 6 0	3 13 0	3 13 0	3 4 6	Calcutta.
3 0 0	3 0 0	2 8 0	...	...	...	...	...	...	0 6 6	0 6 6	8 0	3 8 0	3 8 0	3 8 0	Sirajganj.
2 12 0	2 12 0	2 12 0	...	...	...	2 1 0	2 1 0	2 10 0	0 5 0	0 5 0	0 5 0	3 9 0	3 9 0	3 11 0	Dacca.
3 8 0	3 8 0	3 12 0	...	...	...	3 4 0	3 4 0	4 8 0	0 6 0	0 6 0	0 8 0	2 10 0	3 10 0	4 0 0	Narayanganj.
3 10 0	3 8 0	3 6 0	...	...	...	...	...	...	0 6 0	0 6 0	0 5 0	4 0 0	3 14 0	4 4 0	Chittagong.
1 14 6	1 13 0	2 1 6	1 14 6	1 14 6	2 4 0	1 11 9	1 11 9	1 13 0	0 5 0	0 5 0	0 5 0	3 10 0	3 10 0	3 10 0	Patna.
2 14 0	2 14 0	3 0 0	...	...	...	3 10 0	3 10 0	...	...	...	...	3 10 0	3 6 0	3 10 0	Balasore.
2 5 0	2 5 0	2 15 0	...	...	...	2 5 0	2 8 0	2 15 0	0 8 0	0 8 0	0 8 0	3 8 0	3 10 0	3 8 0	Puri.
2 0 0	(Kalai.) 2 0 0	2 12 0	...	...	...	2 2 0	2 2 0	3 0 0	0 8 0	0 8 0	0 8 0	3 8 0	3 8 0	4 6 0	Cuttack.

Published for general information.

H. H. RISLEY,
Secretary to the Govt. of Bengal.

Meteorological Report of the Province of Bengal

Meteorological Division.	District.	Representative station.	Station Observations. Air Pressure.			Wind.		Temperature.						
			Mean barometric height, 8 A.M., reduced to 32°.	Mean reduced to sea-level and constant gravity, lat. 45°.	Variation from mean.	Prevailing direction.	Mean wind velocity.	Highest.	Date.	Lowest.	Date.	Mean maximum temperature.	Mean minimum temperature.	Mean daily temperature.
Orissa.	Puri	Puri ...	29·627	29·582	—	Variable	309	91·7	12 & 13 June	76·6	17th June	89·1	79·9	84·5
		Gopalpore ...	29·611	29·572	+·045	SWly	429	91·7	14th „	75·8	16th „	88·3	78·3	83·4
		False Point ..	29·644	29·607	+·078	SSE	367	90·0	13th „	75·1	14th „	89·5	78·4	83·5
	Cuttack	Cuttack ...	29·559	29·581	+·070	Sly	89	95·1	12 & 13 „	75·8	12th „	91·7	78·7	85·2
	Balasore	Balasore ...	29·614	29·616	+·113	SWly	168	91·4	12th „	72·8	12th „	88·0	77·1	82·6
South-West Bengal.	Midnapore	Midnapore ..	29·548	29·643	+·133	SEly	115	93·3	12th „	72·2	12th „	89·4	77·4	83·4
	24-Parganas	Calcutta ..	29·679	29·646	+·142	Variable	89	91·1	12 & 15 „	76·7	17th „	89·6	78·3	84·0
		Saugor Island	29·656	29·625	+·118	SEly	350	90·2	11 & 12 „	78·0	17th „	89·2	79·9	84·6
	Howrah													
	Hooghly													
	Nadia	Krishnagar ...	29·661	29·656	+·155	SEly	146	94·8	13th „	76·2	12 & 14 „	92·5	77·8	85·2
	Khulna													
	Jessore	Jessore ...	29·687	29·666	+·157	SSE	110	93·5	12th „	76·9	17th „	91·4	79·3	85·3
	Burdwan ...	Burdwan ..	29·608	29·654	+·151	Ely	107	92·6	14th „	73·2	12th „	91·3	78·6	85·0
		Raniganj ...	29·360	29·644	+·114	SEly	89	93·7	12 & 14 „	?	?	91·8	?	?
	Bankura	Bankura ..	29·379	29·627	+·113	SEly	114	94·1	12th „	72·1	12th „	90·4	77·0	83·7
	Birbhum													
	Murshidabad	Berhampore...	29·644	29·639	+·118	SE	79	94·2	12th „	74·8	12th „	90·8	77·9	84·4
North Bengal.	Pabna	Sirajganj .	29·689	29·685	+·150	SEly	64	91·1	14 & 15 „	73·7	13th „	88·5	77·0	82·8
	Bogra	Bogra .	29·663	29·676	+·164	SE	71	91·2	16th „	73·2	13th „	88·9	76·3	82·6
	Rajshahi	Rampur Boalia.	29·641	29·660	+·160	SE	123	91·1	11 & 15 „	73·2	11th „	89·5	76·4	83·0
	Malda	Malda ..	29·635	29·667	—	SE	69	93·6	16th „	75·5	11 & 15 „	89·8	77·4	83·6
	Dinajpur	Dinajpur ...	29·618	29·695	+·149	NE	92	91·6	16th „	72·7	12th „	86·8	77·1	82·0
	Rangpur	Rangpur ..	29·631	29·709	+·149	NEly	76	91·3	16th „	71·7	11, 12 & 13. „	86·9	75·0	80·9
	Jalpaiguri	Jalpaiguri .	29·478	29·717	+·103	Ely	66	91·4	14th „	72·6	11th „	87·0	73·8	80·4
	Kuch Bihar													
	Darjeeling	Darjeeling ...	22·961	—	+·097	SEly	87	65·1	14th „	53·1	12th „	63·0	54·0	58·6
	Sikkim	Gnatong ..	19·113*	—	—	NWly	69	54·4	14th „	33·1	12 & 16 „	50·6	34·1	42·4
East Bengal.	Chittagong	Chittagong ...	29·680	29·714	+·131	Ely	85	92·2	15th „	75·1	15th „	89·3	77·2	83·3
	Chittagong Hill Tracts	Demagiri ...						Observations not received.						
	Backergunge	Barisal ...	29·723	29·681	+·139	Ely	73	92·3	15th June	70·9	14th „	89·2	77·4	83·3
	Noakhali	Noakhali ...	29·711	29·701	+·134	Ely	105	91·5	15th „	75·8	15th „	87·9	77·6	82·8
	Faridpur	Faridpur ...	29·660*	29·663*	+·117*	SEly	219	90·5	11 & 12 „	75·4	17th „	88·9	79·0*	83·9*
	Dacca	Dacca ...	29·713	29·681	+·130	SEly	125	92·1	15th „	77·2	15th „	90·2	78·6	84·4
	Tippera . ..	Comilla ...	29·717	29·700	+·140	E	106	94·3	15th „	73·8	15th „	89·6	76·0	82·8
	Mymensingh ...	Mymensingh	29·692	29·703	+·146	ESE	118	91·2	14th „	74·6	13th „	87·7	77·2	82·5
North Bihar.	Purnea	Purnea .	29·597	29·676	+·158	ENE & Calm	60	93·2	14 & 16 „	75·2	11th „	90·1	76·6	83·3
	Bhagalpur	Bhagalpur ...	29·541	29·654	+·161	NEly	71	94·2	16th „	74·0	12th „	90·7	77·1	84·0
	Darbhanga	Darbhanga ..	29·538	29·656	+·147	ESE	187	94·0	11th „	74·7	12th „	90·7	77·6	84·2
	Muzaffarpur	Muzaffarpur	29·521	29·651	—	ESE	222	97·7	11th „	75·2	12th „	93·8	77·6	85·7
	Champaran	Motihari ...	29·466	29·647	+·150	ENE	179	96·2	11th „	72·8	12th „	89·2	75·9	82·6
	Saran	Chapra ...	29·499	29·632	+·150	ESE	179	100·3	11th „	74·6	12th „	93·2	77·2	85·2
South Bihar.	Shahabad	Dehri ...	29·291	29·592	+·116	Ely	235	102·9	14th „	73·0	14 & 16 „	98·7	77·6	88·2
		Buxar ...	29·417	29·609	+·126	E	260	101·0	11th „	76·3	12th „	96·1	78·6	87·4
		Arrah ..	29·475	29·615	+·145	E	108	100·4	11th „	70·5	12th „	95·8	79·0	87·4
	Gaya	Gaya ..	29·290	29·615	+·139	E	176	107·6	14th „	76·3	17th „	100·2	78·8	89·5
	Patna	Bankipore ...	29·434	29·628	+·136	E	199	100·0	11th „	75·7	12th „	94·9	77·7	86·3
	Monghyr													
	Sonthal Parganas ..	Naya Dumka	29·195	29·630	+·152	SEly	127	91·6	12, 14, 15 „	74·3	12th „	90·0	76·5	83·3
Chota Nagpur.	Hazaribagh	Hazaribagh	27·677	29·617	+·110	ESE	261	93·2	11th „	71·8	12th „	87·8	72·3	80·1
	Lohardaga	Ranchi ..	27·556	29·612	+·108	SEly	209	93·0	12th „	70·4	11 & 17 „	87·0	71·1	79·1
	Palamau	Daltonganj	28·890	29·561	—	SEly	156	106·3	12th „	77·0	13th „	99·6	80·6	90·1
	Singhbhum	Chaibassa	28·908	29·611	+·137	SEly	60	97·3	12th „	75·2	13th „	91·1	77·0	84·0
	Manbhum													
Assam.	Sibsagar	Sibsagar	29·464	29·753	+·143	NEly		92·6	14th „	70·4	17th „	88·0	75·3	81·7
	Goalpara ...	Dhubri	29·637	29·706	+·155	Ely	90	89·2	16th „	72·3	11th „	84·2	75·5	79·9
	Cachar . ..	Silchar ..	29·077	29·732	+·135	Calm		93·5	13 & 14 „	74·3	11 & 17 „	90·8	75·5	83·2

* Mean of 6 days.

Explanation.—Summary.—The normal means of air pressure and temperature are the arithmetical average or means of the reading during the same period
The *humidity* of the atmosphere is expressed at percentage, saturated air being presented by 100. A clear sky is denoted by 0 and an overcast sky by 01
rainfall the normal mean are the numerical means or average of the rainfall in that district determined from the returns sent in by the subdivisional station
district, *i.e.*, from total rainfall at the subdivisional stations in the district sending in returns divided by the number of stations. A rainy day is one of

for the week ending Saturday, the 17th of June 1893.

Variation from normal mean.	Mean 8 A.M. temperature.	Average humidity at 8 A.M.	Average cloud amount at 8 A.M.	Rainfall of week at observing station.	DISTRICT OBSERVATIONS. — Of week. — Mean for district.	Of week. — Normal mean.	Of week. — Average number of rainy days.	Of week. — Normal number of rainy days.	Rainfall. — Since 1st of month. — Mean for district.	Since 1st of month. — Normal mean.	Since 1st of month. — Variation.	Since 16th May 1893. — Mean for district.	Since 16th May 1893. — Normal mean.	Since 16th May 1893. — Variation.	District.
—	83·2	81	7·0	1·58		1·60		2·25		2·90			4·59		Puri.
—1·4	82·8	85	4·9	5·77											
—2·8	84·2	82	8·6	2·20											
—3·2	83·5	78	7·0	2·66		1·82		2·41		3·41			5·32		Cuttack.
—3·9	81·1	90	4·4	4·27		1·61		2·22		3·38			5·88		Balasore.
—4·9	82·5	84	5·3	2·46	2·95	1·96	3·75	2·45	3·70	4·45	—0·75	16·39	6·39	+10·00	Midnapore.
—1·7	82·9	83	7·6	1·39	2·51	2·32	3·00	2·77	3·37	5·20	—1·83	12·89	7·70	+5·19	24-Parganas.
—2·4	83·3	86	9·4	2·34											
					1·54	2·12	3·50	2·83	2·13	4·78	—2·65	11·62	7·08	+4·54	Howrah.
					2·68	2·28	3 31	2·64	3·29	5·03	—1·74	13·03	7·40	+5·63	Hooghly.
—1·5	83·5	81	7·1	3·31	2·00	2·59	2·60	2·73	4·42	5·72	—1·30	10·50	9·05	+1·45	Nadia.
					1·43	3·25	3·00	3·35	4·60	6·96	—2·36	14·73	9·54	+5·19	Khulna.
—0·2	83·4	88	7·6	1·68	1·45	3·35	2·60	3·17	2·76	6·89	—4 13	11·06	10·07	+0·99	Jessore.
—2·3	82·6	82	7·9	2·73	2·47	2·19	3·25	2·38	3·65	4·49	—0·84	13·33	6·94	+6·39	Burdwan.
?	80·8	89	2·0	4·28											
—4·4	82·2	83	7·1	3 70	3·30	2·33	5·00	3·10	5·46	4·82	+0·64	13·47	6·61	+6·86	Bankura.
					3·47	2·95	4·33	2·60	5·40	5·12	+0·28	10·37	6·95	+3·42	Birbhum.
—1·5	82·0	90	7·3	5·41	3·66	2·36	4·67	2·68	7·16	4·70	+2·46	12·35	7·62	+4·73	Murshidabad.
—0·1	82·0	89	6·6	2·62	2·05	2·80	3·00	3·20	4·64	6·50	—1·86	16·73	10·15	+6·58	Pabna.
—0·5	82·1	88	6·1	4·55	3·69	3·28	3 50	3·20	5·39	7·46	—2·07	12·51	11·05	+0·86	Bogra.
—1·0	83·4	87	4·4	3·38	3·96	2·59	3·66	3·06	5·89	5·55	+0·34	13·36	8·77	+4·59	Rajshahi.
—	81·3	91	8·0	4·36	3·41	2·80	5·00	2·69	4·58	5·03	—0·45	8·56	7·45	+1·11	Malda.
—1·5	79·2	90	7·4	4·64	4·59	3·57	4·60	2·99	6·17	7·02	—0·85	10·17	10·63	—0·46	Dinajpur.
—1·5	79·1	89	3·4	9·39	7·42	6·11	4·50	3·85	11·96	11·67	+0·29	16·12	18·54	—2·42	Rangpur.
—1·2	77·6	90	8·0	4·69	4·24	8·00	6·00	4·58	12·59	15·45	—2·86	16·87	22·50	—5·63	Jalpaiguri.
					6·51	7·72	5·50	4·43	16·28	16·07	+0·21	20·55	24·53	—3·98	Kuch Bihar.
—1·9	57·9	97	9·6	2·10	3·94	7·30	5·00	3·76	10·64	12·84	—2·20	15·99	19·24	—3·25	Darjeeling.
—	45·4	91	8·1	4·27											Sikkim.
+1·9	82·3	85	8·1	1·64		7·87		4·34		15·80			20·61		Chittagong.
					5·12	5·22	5·00	4·80	8·74	11·09	—2·35	20·63	15 25	+14·38	Chittagong Hill Tracts.
+0·2	83·1	86	9·9	2·86	2·24	4·51	3·50	4·13	5·81	10·11	—4·30	19·93	13·75	+6·18	Backergunge.
+0·8	82·8	84	3·1	3·31		7·45		4·11		15·54			19·83		Noakhali.
+0·8	82·2	93	4·3	0·77	1·77	3·18	3·00	3·58	4·21	7·30	—3·09	16·38	11·37	+5·01	Faridpur.
+0·4	82·8	88	8·3	0·69	0·89	3·86	2·50	3·70	2·43	7·84	—5·41	18·39	11·25	—0·46	Dacca.
+0·6	81·3	91	6·3	1·95	3·09	5·18	3·50	3·91	7·36	10·10	—2·74	16·40	13·95	+2·45	Tippera.
+1·2	81·3	88	5·6	4·56	4·74	5·37	3·80	3·96	8·81	10·75	—1·94	18·19	15·35	+2·84	Mymensingh.
—1·9	80·7	86	3·7	2·19		3·75		2·91		6·14			9 20		Purnea.
—3·0	82·1	87	8·7	1·82	1·92	2·27	2·75	2·18	2·86	3·45	—0·59	4·45	5·06	—0·61	Bhagalpur.
—2·5	82·3	84	6·1	1·42	1·01	2·23	2·33	2·02	1·39	3·14	—1·75	2·10	4·41	—2·31	Darbhanga.
—	81·9	86	5·7	1·62	1·99	2·09	2·67	1·76	2·45	3·27	—0·82	2·98	4·19	—1·21	Muzaffarpur.
—4·8	80·7	85	6·6	5·38	3·68	1·84	3·50	1·90	4·88	3·09	+1·79	6·52	4·45	+2·07	Champaran.
—4·9	83·5	88	7·7	1·33	1·55	1·36	3·33	1·52	1·92	2·25	—0·33	2·80	3·31	—0·51	Sarah.
—1·6	84·4	74	2·9	1·16											
—4·1	83·7	75	6·4	0·13		1 21		1·45		1·52			2·36		Shahabad.
—4·4	83·8	80	2·3	0·63											
—1·2	83·4	88	4·3	1·65	1·13	1·68	2·25	1·61	2·46	2·22	+0·24	3·77	3·56	+0·21	Gaya.
—3·5	83·7	81	7·0	1·36	1·65	1·51	2·00	1·55	3·27	2·00	+1·27	3·72	3·40	+0·32	Patna.
					2·37	1·43	3·00	1·68	3·05	2·29	+0·76	4·15	3·67	+0 48	Monghyr.
—4·5	81·8	83	4·9	4·95	3·91	2·19	5·17	2·51	3·70	3·96	—0·26		6·06		Sonthal Parganas.
—5·4	76·9	85	9·3	2·23		2·04		2·54		3·21			5·08		Hazaribagh.
—6·3	75·9	84	6·7	3·00		1·75		2·79		2·79			4·78		Lohardaga.
—	86·5	67	0	0·63	3·52	1·42		1·75		2·13			3·19		Palamau.
—6·0	80·5	83	7·0	3·52		1·90	4·00	3·20		3·31			5·78		Singhbhum.
					2·47	1·81	4·50	2·35	3·36	3·31	+0·05	9 34	4·79	+4·55	Manbhum.
—1·7	78·5	94	8·6	3·66											Assam.
—2·6	78·1	91	8·9	6·43											
+0·5	80·9	88	8·6	3·66											

for the last ten years. The variations are *negative* when the mean for the week is less than the corresponding normal mean, and *positive* when greater. The numbers denoting cloud amount represents the part of the sky covered the whole sky being denoted by 10. Under the head District observations of for the period in question during the past ten years. The means of the district are the numerical average of the rainfall returned received in the which at least a tenth of an inch fell.

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 17th of June 1893.

Meteorological Division.	District.	Station.	RAINFALL. Sunday, 11th	Monday, 12th.	Tuesday, 13th.	Wednesday, 14th.	Thursday, 15th.	Friday, 16th.	Saturday, 17th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th May 1893.	Average rainfall from 16th May to date.
ORISSA ..	Puri ...	Puri ...	..	..	...	0·56	0·74	0·28	...	3	1·58	1·42	1·58	2·50	19·75	3·96
		Khurda ...	..	0·10	0·10	0·16	0·80	0·60				1·75		3·02		5·12
		Banpur ...	...	..	..	0·13	2·46	1·20				1·90		3·60		4·43
		False Point ...	...	...	...	0·55	0·70	0·38	0·57	4	2·20	1·22	2·20	2·47	42·63	4·82
		Gop										?		?		?
		Satpara ...	...	...	1·26	0·13	2·98					?		?		?
		Pipli ...	..	...	0·88	0·17	0·40	0·75				?		?		?
		Ranpur ...	...	...	1·24	1·31	0·32	2·04								
	Cuttack ...	Jagatsingpore	...	1·10	0·36		0·30					1·60		2·25		3·64
		Banki .	...	..	0·42	0·60	1·54					1·86		3·69		4·64
		Cuttack ...	..	0·02	...	0·08						2·46		4·27		6·91
		Kendrapara ...	...	0·03	.	0·34	1·07	0·35	0·04	3	1·83	1·96	2·30	3·65	37·92	5·65
		Jajpur ...	1·62	0·19	0·11	0·23	1·40	1·18	0·17	7	4·90	1·20	5·37	3·18	33·21	5·60
		Dharmsala ...	0·37			0·29	0·50	0·53				?		?		?
		Salipore ...										?		?		?
		Pal Lahara ...										?		?		?
	Balasore ...	*Akhyapada* ...	...	0·55	...	0·21	1·76	0·74	0·25	5	3·51	?	4·44	?		?
		Chandbali ...	...	...	...	0·85	0·54	0·40	...	3	1·79	1·58	2·39	3·08	16·59	5·50
		Bhadrak ...	...	0·42	...	0·57	2·62	0·42	0·03	4	4·06	1·45	5·42	3·37	28·23	6·40
		Soro ...	1·30	.	...	2·40	0·71	0·41	.	4	4·82	1·13	4·93	2·41	23·87	5·37
		Balasore ..	...	2·15	...	0·22	1·14	0·72	0·33	5	4·56	1·73	5·15	3·25	22·97	5·94
		Jellasore ...										1·43		3·56		5·13
		Baripodah .										2·35		4·62		6·72
SOUTH-WEST BENGAL.	Midnapore	Contai ...	...	0·94	...	0·06	1·20	0·54	0·39	4	3·33	1·87	3·54	4·21	20·89	6·28
		Tamluk ...	...	0·09	...	...	1·50	0·41	1·17	3	3·17	1·57	3·77	3·75	15·22	6·02
		Midnapore ...	...	0·62	...	...	0·32	0·70	0·80	4	2·44	2·00	4·26	4·30	11·75	6·14
		Ghatal ...	...	0·20	...	...	0·86	0·29	1·50	4	2·85	2·41	3·18	5·53	17·65	7·15
		Kukrahaty ..	..	0·05	...	...	2·04	0·50	1·10	3	3·69	?	4·72	?	14·24	?
		Garhbeta ...	.	1·38	...	...	0·16	0·93	2·05	4	4·52	?	6·28	?	16·28	?
		Panskura ...	..	0·60	...	...	0·50	0·82	0·75	4	2·67	?	2·90	?	12·34	?
		Dantoon ...	...	1·18	...	...	0·69	0·90				?		?		?
	24-Parganas ...	Saugor Island	..	0·05	...	0·09	0·67	0·56	0·97	3	2·34	2·03	2·43	4·31	15·73	6·82
		Diamond Harbour ...	...	...	..	...	1·70	0·54	1·80	3	4·04	1·76	5·08	3·95	14·16	6·09
		Canning Town	...	..	...	1·35	0·28	0·52	2·29	4	4·44	?	5·95	?	18·88	?
		Alipore (Observatory.)	..	...	...	0·07	0·18	0·48	0·68	3	1·39	2·16	1·63	5·77	13·59	7·55
		Barrackpore...	...	...	...	...	0·45	1·54	0·85	3	2·84	2·59	4·09	5·98	12·48	8·09
		Dum-Dum ...	...	...	...	...	1·67	0·36	1·03	3	3·26	2·62	3·26	5·31	12·38	8·02
		Barasat .	..	...	...	...	0·99	0·98	1·12	3	3·09	2·17	4·12	5·05	11·10	7·72
		Basirhat ...	.	..	0·11	...	0·16	0·41	1·08	4	1·76	2·92	3·37	6·04	11·41	9·69
	Howrah ...	Howrah	..	...	...	...	1·03	0·91	0·25	3	2·19	2·55	2·72	5·12	12·56	7·27
		Mohesreka ...	...	0·13	...	...	0·32	0·27	0·16	4	0·88	1·68	1·52	4·41	10·67	6·85
		Uluberia ...	..	..	...	0·06	0·28	0·20	1·26	3	1·80	?	2·13	.	12·31	?
	Hooghly ...	Serampore ...	..	...	...	...	0·15	1·13	0·82	3	2·10	2·43	3·33	5·62	13·01	7·58
		Hooghly ...	...	...	...	0·53	0·15	0·52	1·31	4	2·51	2·31	3·10	4·92	9·67	7·38
		Jahanabad .	...	1·18	...	..	0·06	1·23	0·96	3	3·43	2·10	3·43	4·55	16·54	7·22
	Nadia ...	Ranaghat .	...	...	2·15	.	...	0·43	0·68	3	3·26	2·62	3·73	5·61	12·07	8·32
		Krishnagar ...	...	...	0·01	2·56	0·11	0·09	0·59	3	3·31	2·15	4·84	4·92	12·42	7·53
		Chuadanga ...	...	...	...	...	..	0·68	1·05	2	1·73	2·93	4·88	5·95	11·13	10·15
		Meherpore ...	...	...	...	0·11	..	...	0·30	2	0·41	2·83	4·62	5·68	10·06	8·71
		Kushtia	...	0·25	0·22	0·08	..	0·05	0·68	3	1·28	2·42	4·02	6·46	13·40	10·42
	Khulna ...	Satkhira .	0·28	0·15	0·05	...	0·08	...	0·40	3	0·96	3·06	4·00	6·84	10·61	8·96
		Bagerhat .	...	...	...	..	0·03	0·31	1·39	2	1·73	3·36	6·13	7·39	18·86	10·55
		Khulna .	...	0·39	...	0·26	.	0·43	0·52	4	1·60	3·32	3·64	6·66	14·73	9·42
		Nakipur ...	...	...	...	0·50	0·80	0·37	1·36	4	3·03	?	3·73	?	8·55	?
		Rampal ...	..	0·50	...							?		?		?
	Jessore ...	Narail .	...	...	..	...	...	0·12	0·47	2	0·59	3·06	1·50	6·43	7·92	9·28
		Jessore ...	0·13	...	0·18	...	...	0·73	0·64	4	1·68	4·07	3·91	7·54	13·10	10·08
		Jhenidah ...	0·18	0·06	0·05	...	...	0·12	2·08	3	2·49	3·69	2·95	7·91	11·87	11·28
		Magura ..	...	...	1·17	0·04	...	...	0·36	2	1·61	3·45	3·67	6·97	14·87	10·90
		Bangaon ...	...	...	...	...	..	0·17	0·72	2	0·89	2·58	1·74	5·61	7·47	7·98
	Burdwan ..	Kalna ..	..	...	...	...	..	1·50	0·50	2	2·00	2·72	2·10	5·09	10·87	7·31
		Burdwan ...	0·06	1·94	...	...	0·05	0·36	0·33	3	2·73	1·48	3·25	3·33	17·65	6·11
		Katwa .	...	0·12	...	...	0·32	0·07	0·35	3	0·86	2·36	1·55	5·67	8·27	8·33
		Raniganj ...	0·71	1·01	...	...	0·59	0·27	1·70	5	4·28	1·78	7·70	3·11	12·21	5·22
		Mankur ...	...	1·68	...	0·46	1·65	0·25	0·31	5	4·35	?	5·16	?	13·95	?
	Bankura .	Bankura ...	1·33	1·08	...	...	0·29	0·20	0·80	5	3·70	2·04	4·27	4·65	11·23	6·70
		Vishnupur ...	0·16	1·57	...	0·10	0·13	0·30	1·75	6	4·01	2·28	5·82	5·28	16·21	6·96
		Maliara ..	0·55	1·21	...	...	0·25	0·17	1·01	4	2·69	2·23	8·03	4·65	12·57	6·20
		Khatra ...	0·29	0·32	.	...	0·60	0·52	1·30	5	3·03	2·76	3·68	4·68	13·82	6·51
		Indas ...	0·51	1·05	..	...	0·35	0·54	1·10	5	3·55	?	5·91	?	18·43	?
		Kotalpur ...	..	0·42	.	...	...	0·35	1·65	3	2·42	?	4·89	?	13·29	?
		Onda ...	1·40	...	0·53	0·42	0·30	0·70	...	5	3·35	?	4·29	?	12·24	?
		Gangajalghati	0·12	0·95	..	...	0·29	0·40	1·70	5	3·46	?	9·22	?	16·00	?
		Raipur ...	...	0·80	..	...	0·95	0·55	0·48	4	2·78	?	4·72	?	16·16	?
		Sonamukhi ...	...	0·98	...	...	1·12	0·50	1·04	4	3·94	?	5·41	?	14·78	?
	Birbhum ...	Suri ...	...	0·48	...	0·34	2·88	0·31	0·22	5	4·23	2·61	6·83	4·69	11·26	6·53
		Hetampore ...	0·07	0·75	...	2·50	...	0·50	0·51	4	4·33	3·38	5·93	5·63	11·93	7·31
		Rampur Hat...	...	0·37	...	..	0·51	0·52	0·45	4	1·85	2·87	3·45	5·05	8·46	6·96
		Bolpur ..	...	0·85	.	0·16	1·24	...	0·40	4	2·65	?	2·96	?	10·47	?
		Murarai ...	0·48	...	...	...	1·00	0·72	0·80	4	3·00	?	3·38	?	11·08	?
	Murshidabad	Kandi ...	...	0·45	...	...	0·95	0·65	0·58	4	2·63	2·63	4·00	5·05	8·86	7·50
		Berhampore...	..	4·04	...	...	1·01	0·23	0·13	4	5·41	2·91	7·89	5·29	14·10	8·21
		Lalbagh ...	0·23	1·58	...	0·68	0·42	0·07	0·46	5	3·44	2·03	7·61	4·70	13·72	7·82
		Azimganj ...	...	0·32	...	0·20	1·61	0·20	0·55	5	2·87	2·01	7·00	4·55	13·13	7·45
		Jangipur ...	0·92	0·54	0·35	...	2·38	0·47	0·37	6	5·03	1·71	9·74	3·55	14·21	6·39
		Lalgola ..	1·03	...	...	...	0·25	0·70	0·60	4	2·58	2·83	6·67	5·03	10·06	8·32
		Akhriganj ...	3·66	0·33	...	0·25	0·03	...	...	3	4·27	?	6·03	?	13·51	?
		Patkabari	...	0·39	...	0·20	0·50	0·63	0·10	5	1·70	?		?		?
NORTH BENGAL.	Pabna ...	Pabna .	...	.	0·02	...	...	0·06	0·49	2	1·47	2·65	3·38	6·52	14·58	9·97
		Sirajganj ...	1·64	0·26	0·41	...	0·18	...	0·13	4	2·62	2·95	5·89	6·48	18·85	10·31
	Bogra ...	Sherepore .	0·20	0·60	...	...	...	...	0·50	3	1·30	2·95	2·15	6·72	9·62	11·46
		Nowkhilla .	3·95	1·85	...	...	...	...	0·86	3	6·66	3·61	8·49	8·18	14·61	11·44
		Bogra	2·80	0·15	..	1·15	...	...	0·45	4	4·55	3·72	6·40	8·17	15·86	12·73
		Panchbibi ...	0·02	0·55	0·45	...	0·06	0·34	0·84	4	2·26	2·82	4·54	6·77	9·95	10·97
	Rajshahi ...	Boalia ...	2·26	0·12	...	0·30	...	0·90	0·47	5	4·05	2·02	7·41	5·30	12·67	8·23
		Nator ...	...	0·90	...	0·44	0·03	..	0·98	3	2·35	2·96	4·40	5·45	15·14	8·86
		Naugaon ...	...	2·45	...	...	...	2·40	0·62	3	5·47	2·78	5·77	5·79	12·27	9·22
		Lalpore ..	0·42	..	0·10	...	...	0·22	0·70	4	1·44	?	1·96	?		?
		Manda ...	0·74	...	0·24	0·70	...	0·75	2·70	5	5·13	?		?		?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 17th of June 1893—contd.

Meteorological Division.	District.	Station.	Rainfall.							Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rain fall since 16th May 1893.	Average rainfall from 16th May to date.
			Sunday, 11th.	Monday, 12th.	Tuesday, 13th.	Wednesday, 14th.	Thursday, 15th.	Friday, 16th.	Saturday, 17th.							
NORTH BENGAL—concld.	Malda ...	Malda ...	1·70	0·18	...	1·35	0·65	0·29	0·19	6	4·36	2·83	5·13	5·13	11·23	7·34
		Chanchal ..	0·06	0·07	...	0·53	0·16	0·83	0·81	4	2·46	2·76	4·04	4·91	5·88	7·55
		Gajol .	...	..	...	0·91	0·30					?		?		?
		Sibganj ...	0·27	1·55	...	...	0·35	...	1·25	4	3·42	?	5·09	?	9·70	?
	Dinajpur ...	Mohadebpore	...	1·28	...	...	...	1·76	0·79	3	3·83	3·30	5·24	7·85	11·02	10·86
		Churaman ...	0·34	0·55	...	0·74	0·86	1·83	0·78	6	5·10	2·68	5·85	6·52	9·54	8·71
		Raiganj ...	...	0·30	..	...	0·54	1·79	1·50	4	4·13	3·38	7·40	6·12	8·73	9·53
		Dinajpur ...	0·52	3·18	0·09	...	0·24	0·26	1·24	5	5·53	5·08	6·75	8·48	11·88	12·94
		Balurghat ...	0·78	0·09	...	1·25	1·34	0·20	0·69	5	4·35	2·89	6·04	6·36	10·13	11·06
		Thakurgaon ...	4·48	2·42	...	...	0·76	1·58	0·43	5	9·67	?	15·13	?	15·86	?
	Rangpur ...	Bhawanigunge (*Gyabanda*)	1·29	0·90	1·47	...	...	0·17	0·70	5	4·53	4·41	6·14	9·36	11·90	14·27
		Rangpur ...	1·92	6·22	0·61	...	...	0·61	0·03	4	9·39	5·72	14·73	10·57	18·20	17·25
		Peerganj ...	2·08	5·57	0·25	...	...	...	1·06	4	8·96	?	13·54	?	?	?
		Kurigaon ...	3·71	4·69	0·02	...	...	0·20	...	3	8·62	6·60	13·68	14·07	20·45	21·05
		Gobindgunge	1·12	1·60	0·24	0·36	...	0·23	0·41	6	3·96	?	7·32	?	14·05	?
		Bagdogra (*Nilphamari*)	3·41	0·74	0·10	...	1·24	0·15	1·50	6	7·14	7·71	12·08	12·65	13·94	20·66
		Ulipore ...	1·30	5·69	...	...	...	...	...	2	6·99	?	10·57	?	14·04	?
		Sundergunge...	1·20	1·30	0·50	...	...	...	...	3	3·00	?	4·13	?	10·05	?
	Jalpaiguri ...	Jalpaiguri ...	0·82	0·19	0·44	0·14	0·11	2·53	0·01	6	4·24	8·00	12·59	15·45	16·87	22·50
		Alipore Duar	0·98	...	...	1·39	0·31	0·57	0·44	5	3·69	?	13·89	?	19·43	?
		Fallacotta	1·22	0·45	...	2·35	0·19	1·73	...	5	5·94	?	13·31	?	17·44	?
		Debiganj ...	2·26	2·43	...	0·06	0·54	0·57	0·19	5	6·05	?	24·39	?	26·28	?
		Bhagatpore (Nagrakatta)	0·26	...	...	3·90	0·11	1·03	1·36	5	5·66	?	21·23	?	40·94	?
	Kuch Bihar...	Dinhatta ...	2·88	0·76	0·55	...	0·50	0·24	1·16	6	6·09	7·86	17·22	16·55	24·58	25·63
		Kuch Bihar ...	3·75	0·47	0·64	...	1·40	1·80	0·31	6	8·46	9·29	15·69	20·21	20·50	28·66
		Mekliganj ...	3·93	1·02	...	0·18	0·49	1·30	0·19	6	7·11	6·66	16·27	13·19	17·74	21·25
		Mathabhanga	2·13	0·32	...	...	0·76	1·10	0·06	4	4·37	7·08	15·91	14·32	19·34	22·58
	Darjeeling ...	Buxa ...	0·13	0·03	0·07	3·03	0·99	0·74	1·08	5	6·07	11·63	19·29	21·54	28·90	34·91
		Siliguri ...	1·72	0·11	0·50	0·51	0·60	1·27	1·48	7	6·19	6·71	13·85	11·85	23·78	17·49
		Darjeeling ...	0·89	0·07	...	0·21	...	0·81	0·12	4	2·10	6·23	4·86	10·53	6·33	14·67
		Kalimpong ...	0·33	...	...	0·14	...	0·67	0·24	4	1·38	4·61	4·52	7·39	6·89	9·86
		Kurseong ..	0·58	0·02	0·24	1·80	0·09	0·67	0·65	5	4·05	?	9·34	?	18·94	?
		Pedong ...	0·25	...	...	0·12	0·07	0·26	0·06	3	0·76	?	1·32	?	6·01	?
EAST BENGAL	Chittagong ...	Cox's Bazar ..	...	...	0·03	...	...	0·20	0·60	2	0·83	9·25	3·90	17·55	33·81	22·69
		Chittagong ...	...	...	...	0·01	0·66	0·11				6·49		14·04		18·52
		Kutubdia ...										?		?		?
		Satkania ...	0·45	...	...	0·45	1·34	..	0·09	3	2·33	?		?		?
		Kodala ...										?		?		?
		Fenua ...	....	...	...	0·95	0·85					?		?		?
		Mirsarai ...	...	...	...	...	0·20					?		?		?
		Chandpur ...	...	...	...	...	0·85	...	0·23			?		?		?
	Chittagong Hill Tracts.	Rangamati ...	...	..	0·14	0·22	3·06	1·45	0·25	5	5·12	5·22	8·74	11·09	29·63	15·25
		Bundarban ...	0·13	0·02	0·97	...	2·69					?		?		?
	Backergunge	Patuakhali ...	0·88	...	...	0·32	0·06	0·40	0·71	4	2·37	5·73	5·52	12·72	22·43	16·74
		Pirojpur ...	..	0·17	...	...	0·09	0·09	1·81	2	2·16	3·24	4·95	7·69	20·10	11·26
		Barisal ...	0·42	0·63	...	0·60	...	0·35	0·62	5	2·62	3·67	7·75	8·20	20·92	12·04
		Gournaddi ..	...	0·06	...	0·43	...	0·54				?		?		?
		Bhola ...	...	...	...	0·43	...	0·18	1·21	3	1·79	5·40	4·98	11·59	16·22	14·91
		Daulatkhan ...	...	1·11	...	0·75	0·29	0·22	1·37	5	3·74	?	7·70	?	22·38	?
		Bauphal ...	...	...	...	0·37	...	0·17	3·13	3	3·67	?	4·79	?	17·16	?
	Noakhali ...	Noakhali ..	0·18	0·10	...	...	0·69	0·92	1·42	5	3·31	5·99	7·51	13·35	18·31	17·71
		Fenny ...	0·52	...	...	...	0·15					8·91		17·72		91·93
		Harishpore ...	0·27									?		?		?
		Ramganj ...	1·62	...	...	0·67						?		?		?
	Faridpur ...	Madaripur ...	...	...	...	0·98	...	0·73	0·56	3	2·27	3·08	3·40	7·32	14·15	11·49
		Faridpur ...	...	...	...	0·31	0·10	0·27	...	3	0·77	3·07	4·08	7·58	18·05	12·12
		Goalundo .	...	...	1·50	0·73	...	...	0·15	3	2·38	3·39	5·25	7·00	18·33	10·51
	Dacca .	Munshiganj ...	0·04	...	...	0·28	0·33	...	0·29	3	0·94	4·85	2·19	9·43	9·02	13·38
		Dacca ...	...	0·18	...	0·07	...	...	0·30	2	0·55	3·57	1·16	7·69	10·07	11·51
		Narayanganj...	0·53	...	...	0·21	0·76	...	0·32	4	1·82	4·49	3·87	7·12	11·25	10·53
		Manikganj ...	...	0·16	...	...	...	..	0·09	1	0·25	2·52	2·49	5·86	11·22	9·58
		Joydebpore ...	...	0·06	...	...	0·03	0·27	0·12	2	0·50	?	0·92	?	10·85	?
	Hill Tippera	Agartola ...	...	1·69	...	0·82	1·32	...	0·62	4	4·45	4·75	9·65	9·10	18·81	13·63
	Tippera ..	Comilla ...	0·70	0·05	...	0·02	0·28	0·03	0·80	3	1·86	6·08	5·40	11·76	16·37	15·83
		Chandpore ...	...	0·70	...	2·20	0·12	0·40	0·76	5	4·18	4·43	9·79	9·43	17·02	12·35
		Brahmanbaria	...	...	...	...	1·65	...	0·22	2	1·87	5·50	3·30	10·09	12·08	14·57
		Ramchandrapore , ...	...	...	...	0·09	...	...	0·04	1	0·13	?	1·43	?	6·72	?
		Nasirnagar ..	...	2·05	...	1·10	0·75					?		?		?
		Daudkandi ...	...	0·25	...	1·25	...	0·95	1·05	4	3·50	?	4·75	?	10·60	?
		Kasba ...	...	...	...	1·08	0·15	...	0·25	3	1·48	?	6·64	?	13·39	?
		Laksham ...	1·86	...	...	...	...	0·75	1·70	3	4·31	?	7·88	?	17·15	?
	Mymensingh..	Kishorganj ...	1·47	2·48	...	...	0·22	0·22	...	4	4·30	6·86	8·15	12·60	20·44	17·20
		Atia (*Tangail*)	0·28	...	...	...	...	...	0·85	2	1·13	3·80	2·32	7·81	17·12	11·27
		Mymensingh ...	1·24	0·75	1·03	0·14	...	0·12	1·28	6	4·56	5·40	9·47	11·68	16·82	17·23
		Jamalpur ...	6·39	0·01	0·64	...	...	...	0·81	4	8·75	4·43	12·04	8·73	16·49	12·69
		Netrakona ...	3·42	...	0·35	...	...	...	1·11	3	4·88	6·37	10·50	12·88	18·5	18·38
		Subornakhally	5·50	0·02	0·50	0·52	...	...	0·23	4	6·77	?	9·77	?	19·83	?
		Durgapore ...	5·00	0·25	...	...	...	3·40	0·50	4	9·15	?	16·30	?	22·65	?
		Sherepore Town	6·31	0·70	0·50	...	...	...	1·40	4	9·00	?	10·81	?	16·52	?
		Dewanganj ...	5·35	...	...	...	...	0·50	1·38	3	7·15	?	15·85	?		?
NORTH BIHAR	Purnea ...	Kishanganj ...	1·14	1·56	0·16	...	0·32	0·57	0·81	6	4·56	4·35	11·22	7·38	11·28	11·03
		Araria ...	0·17	0·25	...	...	...	1·60	0·40	4	2·42	3·46	9·86	5·30	10·16	8·55
		Purnea ...	...	0·04	...	...	0·21	1·30	0·64	3	2·19	3·43	3·61	5·72	3·73	8·20
		Gondwara (Korah) ...	0·54	...	1·67	...	1·24	0·35	1·14	5	4·94	?	11·90	?	13·51	?
		Barsoe ...	0·27	...	0·20	0·40	3·70	0·80	1·60	6	6·97	?	8·02	?	9·37	?
		Forbesganj ...	...	...	...	...	0·74	0·40	0·25	3	1·39	?	6·48	?	6·71	?
		Kaliaganj ...	...	1·90	...	...	...	2·50	0·50	3	4·90	?		?		?
	Bhagalpur ...	Madhipura ...	...	0·11	...	...	...	...	0·20	2	0·31	2·63	0·06	3·06	2·32	5·95
		Bongaon (Sufabad).	1·50									?		?		?
		Supaul ...	...	...	...	...	...	0·38	...	1	0·38	3·20	2·11	4·37	2·75	6·46
		Protabganj .	...	...	...	...	...	1·18	...	1	1·18	?	1·97	?	1·97	?
		Bhagalpur	...	0·31	...	0·04	0·06	0·46	0·95	3	0·82	1·95	2·59	3·13	4·07	4·67
		Banka ...	...	0·41	0·59	2·20	...	0·66	1·32	5	5·18	1·29	6·08	2·70	8·66	4·22
		Colgong ...	...	1·98	...	...	0·42	0·39	0·89	4	3·68	?	4·99	?	5·54	?
	Darbhanga ...	Tajpur ..	...	0·45	...	...	...	0·42	...	2	0·87	1·89	1·47	2·58	2·02	3·38
		Darbhanga ...	0·16	0·55	...	0·37	0·02	0·32	...	4	1·42	2·29	1·65	3·14	2·53	4·38
		Madhubani ...	0·49	...	0·08	...	0·09	0·02	...	1	0·74	2·51	1·06	3·70	1·69	5·28
		Bahera .	...	0·40	...	...	...	...	...	1	0·40	?	0·40	?	1·70	?
		Roshera ...	...	0·76	...	...	...	0·21	0·32	3	1·29	?	1·79	?	1·79	?

Statement of Rainfall in Bengal for the week ending Saturday (8 a.m.), the 17th of June 1893—concld.

Meteorological Division.	District.	Station.	Rainfall. Sunday, 11th.	Monday, 12th.	Tuesday, 13th.	Wednesday, 14th.	Thursday, 15th.	Friday, 16th.	Saturday, 17th.	Total number of rainy days.	Rainfall of week.	Average rainfall of week.	Total rainfall since 1st of month.	Average total rainfall from 1st of month.	Total rainfall since 16th May 1893.	Average rainfall from 16th May.
NORTH BIHAR —concluded.	Muzaffarpur...	Sitamarhi ...	1·95	0·24	...	0·29	...	...	0·07	3	2·55	2·83	3·10	3·88	3·97	5·23
		Muzaffarpur	...	0·55	...	0·94	...	0·02	0·02	2	1·53	1·68	1·53	2·43	2·05	3·95
		Hajipur ...	...	0·16	...	1·53	...	0·18	0·02	3	1·89	1·75	2·73	2·18	3·01	3·38
		Paru	...	0·43	1·82							?		?		?
		Mahwa (Chitwarra.)										?		?		?
		Sirhar ...	1·50	0·85								?		?		?
		Pupri ...										?		?		?
	Champaran ...	Motihari ...	1·12	2·82	...	1·19	0·23	0·02	...	4	5·38	1·69	6·10	2·89	7·91	4·34
		Bettiah ..	0·50	0·28	...	1·08	0·05	0·06	...	3	1·97	1·98	3·65	3·28	5·11	4·52
		Bagaha ...		0·63	...	2·52	...	0·02	...	2	3·17	?	7·00	?	8·95	?
		Burhurwa ...	0·43	0·55	...	1·12	0·08	...	...	3	2·48	?	2·72	?	3·41	?
	Saran ...	Gopalganj ...	0·41	0·28	...	1·36	..	...	0·02	3	2·07	1·03	2·18	2·25	3·00	3·41
		Siwan ...	0·60	0·55	...	...	0·11	...	...	3	1·26	1·74	1·80	2·67	2·78	3·71
		Chapra ...	0·26	0·59	...	0·27	...	0·39	...	4	1·33	1·39	1·80	1·82	2·66	2·79
		Sreepore ...										?		?		?
SOUTH BIHAR	Shahabad ...	Buxar ...	...	...	...	...	...	0·02	0·11	1	0·13	1·10	0·69	1·36	0·99	2·02
		Dehri ...	...	...	...	0·22	...	0·24	...	2	1·16	1·20	3·79	1·32	4·07	2·49
		Bhabhua ...	...	0·08	...	0·04	...	0·04				1·04		1·39		1·98
		Sasaram ...										1·16		1·47		2·15
		Arrah ...	...	...	...	...	0·68	0·04	0·17	2	0·89	1·53	1·43	2·04	3·97	3·17
		Mohanea ...	...	...	...	0·09	..	..	...	Nil	0·09	?		?		?
		Khiri ...	...	0·03	...	...	0·70	...	...	2	0·73	?	0·73	?	0·87	?
		Ageaon ...										?		?		?
		Ramagar ...	...	...	...	...	...	..	...	Nil	Nil	?	1·88	?	1·88	?
		Koath ...	...	...	0·64	...	...	0·40	...	2	1·04	?	3·40	?	3·40	?
		Sikroul ...										?		?		?
		Bassowan ...	0·42	...	...	...	...	0·13	...	2	0·55	?	0·97	?	0·97	?
		Monaharpur	...	...	...	...	...	1·35	...	1	1·35	?		?		?
	Gaya ...	Aurangabad ...	...	...	...	...	...	0·15	...	1	0·15	1·76	2·29	2·27	2·81	3·57
		Gaya ...	...	..	..	..	0·72	0·93	...	2	1·65	2·20	2·93	2·67	3·96	4·04
		Nawadah ...	...	0·68	0·10	0·12	0·02	0·24	...	4	1·16	1·21	2·16	1·77	4·31	3·21
		Jahanabad ...	...	0·99	...	...	...	0·58	...	2	1·57	1·55	2·45	2·15	3·98	3·39
		Arwal ..	...	...	0·06	...	...	0·16	...	1	0·22	?	0·22	?	2·99	?
		Daudnagar ...	...	...	...	...	...	0·12	...	1	0·12	?	1·88	?	1·88	?
		Sherghati ..	...	..	0·12							?		?		?
		Rajauli ...	...	...	...	...	...	...	0·70	1	0·70	?		?		?
		Pakri Barawan	...	1·00	...	1·19						?		?		?
	Patna ...	Patna ..	...	...	...	1·27	...	0·09	..	1	1·36	1·73	2·26	2·32	2·32	3·92
		Dinapore ...	...	...	..	0·11	0·05	0·07	0·02	1	0·25	1·65	2·43	1·97	3·09	3·17
		Bihar ...	..	...	...	3·48	...	0·41	0·48	3	4·37	1·47	5·24	1·97	5·64	3·39
		Barh ...	0·31	...	...	0·14	...	0·16	...	3	0·61	1·19	3·12	1·73	3·78	3·09
		Bickram ...	0·25	0·25	...	..	...	...	..	2	0·50	?	2·37	?	3·54	?
		Hilsa .	...	...	...	0·42	...	0·16	0·14	3	0·72	?	0·72	?		?
	Monghyr ...	Begusarai ...	0·28	0·16	...	2·21	...	0·64	0·57	5	3·86	1·63	5·84	2·13	5·95	3·71
		Monghyr ...	...	...	...	..	...	0·53	1·46	2	1·99	1·44	3·83	2·52	3·83	4·19
		Jamui .	...	...	...	0·12	...	...	1·14	2	1·26	1·23	2·47	1·93	2·66	3·17
		Goari .	...	1·22	..	...	...	0·06	1·53	3	2·71	?	2·71	?	2·71	?
		Shaikpura ...	...	...	0·30	..	...	...	2·90	2	3·20	?	4·30	?	4·30	?
		Chahai Bamda	0·06	1·81	...	0·90	0·23	0·55	0·83	5	4·38	?	8·37	?	10·23	?
		Chupreon ...	0·21	0·50	...	...	..	..	..	2	0·71	?		?		?
	Sonthal Parganas.	Rajmahal ...	0·44	0·15	...	...	0·59	0·30	0·18	5	1·63	2·28	2·06	4·07	5·95	6·65
		Godda .	0·90	0·60	0·33	0·77	0·39	0·50	1·00	7	4·40	1·34	7·02	3·05		4·76
		Pakour ...	..	0·46	0·98	0·76	0·15	0·67	1·08	6	4·10	2·77	4·99	5·07	8·70	7·88
		Naya Dumka	0·29	0·48	0·01	...	1·10	0·43	2·73	5	4·95	2·25	6·64	3·99	11·30	5·99
		Deoghur .	0·14	2·45	0·05	0·08	0·09	0·06	1·17	3	4·04	2·15	6·48	3·56	11·25	5·25
		Jamtara ...	0·09	0·42	..	0·29	2·24	0·33	0·92	5	4·29	2·36	4·90	4·02	11·51	5·78
		Belbodda ...	0·55	...	...	...	1·50	0·42	1·20	4	3·67	?	5·24	?	7·00	?
		Nanihat ...	...	...	...	...	0·20	0·54	2·37	3	3·11	?		?		?
CHOTA NAGPUR.	Hazaribagh ...	Pachamba (Giridih). ...	0·16	0·25	0·29	1·83	2·12	0·11	1·83	7	6·59	2·02	7·99	3·47	11·33	4·89
		Hazaribagh ..	...	0·12	1·29	0·02	0·12	0·08	0·60	4	2·23	1·79	7·16	2·91	9·90	4·39
		Seintaguran ...										2·27		3·61		5·82
		Mahudi Hills										2·44		3·54		6·12
		Jhumra Hill										1·68		2·54		4·19
		Barhi ...	...	0·37	...	0·47	...	...	0·30	3	1·14	?	4·90	?	8·13	?
		Chatra ...	..	...	0·53	...	0·03	0·34	0·10	3	1·00	?	3·71	?	4·72	?
		Karagdeha ..	0·37	...	...	0·02	0·39	0·37	1·05	4	2·20	?	4·39	?	4·62	?
		Ramgar ...	...	...	...	...	1·11	0·65				?		?		?
	Lohardaga ...	Lohardaga ...	...	...	0·77	1·56	0·16	1·07				1·59		2·03		4·10
		Ranchi ...	...	..	0·64	0·22	0·20	0·57	1·47	5	3·10	1·99	7·26	3·54	10·17	5·44
		Silli ...	...	0·68	0·45		0·60	0·45				?		?		?
	Palamau ...	Palamau (Daltanganj).	...	...	0·22	...	0·06	0·35	...			1·42		2·13		3·19
		Lalumath ...	...	...	0·45	0·20	...	0·13				?		?		?
		Husainabad	...	...	0·57	...	...	0·64	0·20	3	1·41	?	5·77	?	6·49	?
		Garhwa .	...	0·47								?		?		?
	Singhbhum ...	Chaibassa ..	...	...	1·66	...	0·21	0·32	1·33	4	3·52	1·90	3·68	3·31	10·60	5·78
		Chakardharpur.	0·01	0·40	...	0·15	0·48	0·39	0·63	6	2·06	?	3·70	?	7·95	?
		Ghatsila ...	0·28	...	2·60	...	...	1·50	0·60	4	4·98	?	6·18	?	4·30	?
		Baharagura	...	...	...	...	0·64					?		?		?
		Gailkeira	...	...	0·07	...	0·20	0·50	0·54	3	1·31	?	1·91	?	10·29	
		Kalikapur ...	0·89	...	...	...	0·91	0·78	0·16	4	2·74	?	6·24	?	13·65	
	Manbhum ...	Purulia ...	0·75	0·18	...	0·29	0·70	0·36	5	2·19	2·21	3·27	3·62	9·61	5·48
		Gobindpur ..	0·68	0·54	...	1·07	0·49	0·12	0·89	6	3·77	1·40	4·46	2·99	10·08	4·10
		Raghunathpore.	...	0·32	...	...	0·75	0·15	...	3	1·22	?	3·18	?	7·64	?
		Barahabhum	0·74	...	...	...	0·52	1·40	1·10	4	3·76	?	6·26	?	13·41	?
		Jhalda ...	...	1·77	0·17	0·29	0·37	1·60	0·07	5	4·17	?	5·82		9·95	
		Chas ...	...	...	1·00	0·93	0·10	0·42	0·85	5	3·30	?	3·80	?	7·87	?
		Pandra ...	0·03	0·03	1·02	...	0·13	0·04	0·90	3	2·15	?	5·87	?	12·41	?

Explanation.—... indicates that no rain has fallen. If the return for any day has not been received, the corresponding space is left blank. If any of the returns are wanting, the corresponding spaces in the total rainfall columns are left blank. With reference to the column of rainy days, the definition of a rainy day is when at least 0·1 inches of rain has fallen.

CALCUTTA, *the 20th June 1893.*

SUMMARY OF THE METEOROLOGICAL AND RAINFALL OBSERVATIONS TAKEN IN BENGAL FOR THE WEEK ENDING 8 A.M., SATURDAY, THE 17TH JUNE 1893.

THE most noticeable feature of the weather during the past week is the recommencement of south-west monsoon conditions. This was brought about by a disturbance which had been forming for some days during the previous week in the south of the Bay, and which at the beginning of the present week was probably causing squally weather in the extreme south. The depression steadily developed, wind velocity increased daily at Diamond Island, but pressure changes were very small at all the coast stations. The depth of the depression and the intensity of the disturbance were to a large extent due to the very high and increasing pressure in Bengal and the north of the Bay, and the effect of this was seen in the rapidity with which the disturbance moderated when the high pressure began to give way. On the 12th the low pressure area covered the greater part of the Bay, and within that area readings were below 29·65 inches, but at the coast stations there was no defect. On the following day the distribution was almost the same, there being a slight fall in the south of the Bay and a slow increase in the north, but on the 14th the fall became brisk in Madras and the Circars, and the depression was shown as over the west of the Bay. This was followed on the 15th by a very rapid fall in the Circars, and some time in the night of the 15th the depression crossed the coast between Coconada and Vizagapatam. By the time the centre reached the coast there was every sign that the depression was becoming more diffused and at the same time filling up. Under these conditions the stormy weather moderated very rapidly, but for two or three days afterwards strong winds and a rough sea prevailed along the west coast as far south as Masulipatam.

While the depression was still over the sea, showery weather was being experienced in many parts of Bengal. But this rainfall was caused by local thunderstorms and was consequently scattered and irregular. On the 13th in Orissa, and on the 13th and 14th in most of the other districts, there was a marked falling off in the rainfall, the showers being neither so heavy nor so general, but after the depression crossed the coast, and winds became more southerly, ordinary monsoon weather became general in all districts except North Bihar, where only scattered showers were received up to the end of the week. During the first two days southerly winds prevailed in Lower Bengal, but as the depression developed, these southerly directions changed to east, and the circulation in Bengal formed part of the cyclonic system in connection with the depression.

It is remarkable that the setting in of the monsoon weather in Bengal should have become established at a time when pressure was considerably above the normal in all districts. Throughout the week there was a large excess in places, and at one time it was almost as much as a quarter of an inch.

Pressure.—As just stated, pressure readings were above the normal throughout the week, and steadily increased till the last two days, when they fell moderately fast. Means are everywhere above the normal by amounts between ·1 inch and ·15 inch except in Orissa, where excess is less than ·1 inch.

Temperature.—Owing to the cloudy weather which was fairly general, temperature was below the normal in all districts except East Bengal and latterly part of North Bengal, where there was a small excess. The largest defect was in Chota Nagpur, where it was steadily 5° or more, and from there it diminished in all directions. The means for the large divisions are below the normal by amounts ranging from 1° in North Bengal to 5·9° in Chota Nagpur, except in East Bengal, where there is excess of nearly 1°.

Rainfall.—As the depression never was near the province, rainfall during the week was fairly evenly distributed. Though occurring in most districts as local showers, the amounts were at times rather heavy, and only two districts have received less than their normal falls. These are East Bengal and North Bihar; the defect in the latter is only a fifth of an inch, but in East Bengal it is as much as 2·99 inches. The two districts which were most under the influence of the disturbance are Orissa and Chota Nagpur, where there has been excess of 1·07 inch and 1·54 inches respectively. In South-West Bengal, North Bengal and South Bihar the falls are almost normal.

The following table gives the summary of the temperature and rainfall data of each of the seven meteorological divisions of the province for the week ending Saturday, the 17th of June 1893:—

Meteorological Divisions.	Temperature.						Rainfall.									
	Highest observed during week.	Lowest observed during week.	Averages for week.			Average mean of week above or below normal mean of week.	Of week.			Rainy days.			Since 1st of month.		Since 16th May 1893.	
			Of highest of each day.	Of lowest of each day.	Of mean for each day.		Average.	Normal average.	Variation.	Average number in week.	Normal average number in week.	Variation.	Average.	Normal average.	Average.	Normal average.
Orissa	95·1	72·8	89·1	78·5	83·8	—2·8	2·75	1·68	+1·07	3·62	2·30	+1·32	3·28	3·26	18·13	5·86
South-West Bengal ...	94·8	72·1	90·7	78·3	84·5	—2·4	2·56	2·51	+0·05	3·51	2·78	+0·73	3·32	5·29	12·74	7·84
North Bengal	93·6	71·7	88·2	76·1	82·2	—1·0	4·82	4·51	+0·31	4·76	3·45	+1·31	8·61	9·24	13·90	14·24
East Bengal	94·3	70·9	89·0	77·6	83·3	+0·8	2·59	5·58	—2·99	3·57	3·97	—0·40	5·81	10·93	17·80	15·03
North Bihar	100·3	72·8	91·3	77·0	84·2	—3·4	2·06	2·28	—0·22	2·95	2·06	+0·89	3·43	3·48	4·42	5·19
South Bihar	107·6	73·0	95·9	78·0	87·0	—3·2	2·10	1·65	+0·45	2·99	1·77	+1·22	3·66	2·54	5·26	3·99
Chota Nagpur	97·3*	70·4*	88·6*	73·5*	81·1*	—5·9*	3·41	1·87	+1·54	4·86	2·54	+2·32	4·63	3·06	9·28	4·86
Assam	93·5	70·4	87·7	75·5	81·6	—1·3										

* Daltonganj not included.

Meteorological Office, Bengal,
The 20th June 1893.

C. Little,
Offg. Meteorological Reporter to the Govt. of Bengal.

Results of the Barometrical and Thermometrical Observations taken at the Meteorological Office, Chowringhee, from 11th to 17th June 1893.

Month.	Date.	Pressure at 10 A.M. corrected and reduced to 32° Faht.	Temperature.						Hygrometry.			Rainfall, past 24 hours.
			Daily mean.	Maximum.	Range.	Minimum.	Dry bulb at 10 A.M.	Wet bulb at 10 A.M.	Vavour tension at 10 A.M.	Dew point at 10 A.M.	Humidity at 10 A.M.	
1893.		Inches.	°	°	°	°	°	°	Inches.	°	%	Inches.
June ...	11th ...	29·697	86·9	94·0	14·2	79·8	89·6	82·0	·992	79·0	71	...
,, ...	12th ...	·710	85·7	94·0	16·7	77·3	89·6	82·5	1·016	79·7	73	...
,, ...	13th ...	·783	86·7	94·0	14·7	79·3	89·6	79·5	·873	75·1	63	...
,, ...	14th ...	·749	86·4	93·0	13·2	79·8	89·1	81·5	·975	78·4	71	...
,, ...	15th ...	·678	84·7	91·0	12·7	78·3	85·6	81·5	1·022	79·9	84	0·46
,, ...	16th ...	·631	85·3	93·0	15·4	77·6	86·1	79·5	·920	76·7	74	1·15
,, ...	17th ...	·634	81·1	85·9	9·6	76·3	77·6	76·5	·900	76·0	95	0·67

	Inches.
The mean 10 A.M. pressure of the seven days	29·690
	°
The mean temperature of the seven days	85·3
The extreme variation of temperature	17·7
The maximum temperature	94·0
	%
The mean 10 A.M. relative humidity of the seven days	76
	Inches.
The total fall of rain from 11th to 17th June 1893	2·28

The daily mean temperatures are the crude means of maximum and minimum temperatures.

J. H. Gilliland,
For Meteorological Reporter to the Govt. of India.

Meteorological Office, India,
The 19th June 1893.

Results of the Meteorological Observations taken at the Alipore Observatory from 11th to 17th June 1893.

Month.	Date.	Maximum in sun.	Number of hours of bright sunshine.	Mean pressure barometer at 32° Faht.	Temperature. Mean.	Maximum.	Range.	Minimum.	Hygrometry. Mean wet bulb.	Vapour tension.	Dew point.	Humidity.	Wind. Prevailing direction.	Miles recorded.	Rain.	Weather.
		°		Inches.	°	°	°	°	°	Inches	°	%			Inches.	
June	11th	151·0	9·8	29·654	86·5	91·0	10·8	80·2	80·5	0·963	78·1	77	SSW ...	120	Nil	Partially cloudy.
"	12th	157·4	7·2	·660	84·8	90·7	13·6	77·1	79·7	·948	77·6	80	SSW and calm ...	44	"	Partially cloudy, t.
"	13th	154·3	5·4	·701	84·3	90·6	12·0	78·6	80·1	·970	78·3	83	SSE and calm ...	33	0·07	Chiefly cloudy, ●, g, t, d.
"	14th	149·6	3·8	·702	83·7	91·1	11·7	79·4	80·0	·976	78·5	85	E and SSE ...	87	0·18	Chiefly cloudy, ●, g, d, t, p, <.
"	15th	149·4	0·9	·646	82·7	90·0	11·8	78·2	79·6	·972	78·4	87	E and ESE ...	113	0·35	Cloudy, ●, g, p, t, <.
"	16th	135·1	1·1	·580	81·0	83·4	5·7	77·7	78·9	·962	78·1	91	ESE and SSE ...	88	0·37	Cloudy, ●, g, d, p, t.
"	17th	117·6	Nil	·574	80·2	82·9	6·7	76·2	78·5	·952	77·7	92	SSE ...	58	0·74	Cloudy, ●, g, d, p.

	Inches.
The mean pressure of the seven days	29·645
The average pressure of the corresponding period for 24 years, Surveyor-General's Office	29·541
	Hours.
The total number of hours of bright sunshine	28·2
The maximum possible number of hours of sunshine	94·2
	°
The mean temperature of the seven days	83·3
The average temperature of the corresponding period for 24 years, Surveyor-General's Office	84·7
The extreme variation of temperature	14·9
The maximum temperature	91·1
	Miles.
The highest velocity of the wind in one hour	13
	lbs.
The highest pressure of wind on one square foot	?
	%
The mean relative humidity	85
The average relative humidity of the corresponding period for 24 years, Surveyor-General's Office	82
	Inches.
The total fall of rain from 11th to 17th June 1893	1·71
The average fall of the corresponding period for 24 years, Surveyor-General's Office	3·23
The total fall from 1st January to 17th June 1893	26·08
The average fall of the corresponding period for 24 years, Surveyor-General's Office	15·90

The mean pressure, temperature, &c., are deduced from the traces of the Barograph and Thermograph.

The maximum and minimum temperatures are obtained from self-registering thermometers. All the thermometers are verified and the readings have been corrected to a standard constructed and verified at the Kew Observatory. They are exposed under a thatched shed open at the sides and are suspended four feet above the ground.

The barometer readings are corrected approximately to those of the standard, Newman's No. 86, formerly at the Surveyor-General's Office.

The hygrometric elements are obtained from Tables III, IV, and V of the official tables computed in the Meteorological Office, and based on Regnault's modifications of August's formula.

The directions and the movement of the wind are taken from the trace of a Beckley's anemograph.

The mouth of the rain-gauge is one foot above the ground.

●, overcast ; g, gloomy ; d, drizzling rain ; p, passing temporary showers ; t, thunder ; <, lightning.

METEOROLOGICAL OFFICE, GOVT. OF INDIA;
Calcutta, the 19th June 1893.

J. H. GILLILAND,
For Meteorological Reporter to the Govt. of India.

IRRIGATION DEPARTMENT, BENGAL.

Abstract statement showing Tollage on Canals in Bengal classed as Major Works for the month of April 1893, as compared with that of the corresponding month of the previous year.

Canals.	Tollage, 1893-94. During the month.			Tollage, 1893-94. To end of the month.			Tollage, 1892-93. During the month.			Tollage, 1892-93. To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Orissa Circle.												
Taldanda Canal System	73	5	6	73	5	6	3,422	7	7	3,422	7	7
Kendrapara ditto	8,944	12	2	8,944	12	2	2,552	2	8	2,552	2	8
High Level, Range I	1,374	8	3	1,374	8	3	783	10	9	783	10	9
Ditto, " II	271	11	0	271	11	0	170	4	3	170	4	3
Ditto, " III	149	12	6	149	12	6	79	13	6	79	13	6
Jajpur Canal ...	23	13	10	23	13	10	11	2	0	11	2	0
Total Orissa Circle ...	10,837	15	3	10,837	15	3	7,019	8	9	7,019	8	9
South-Western Circle.												
Midnapore Canal ...	8,630	4	0	8,630	4	0	7,692	14	6	7,692	14	6
Hijili Tidal Canal ...	5,808	0	9	5,808	0	9	6,795	5	6	6,795	5	6
Total South-Western Circle	14,438	4	9	14,438	4	9	14,488	4	0	14,488	4	0
Sone Circle.												
Patna Canal System ...	3,381	11	3	3,381	11	3	150	0	0	150	0	0
Arrah ditto ...	3,082	11	0	3,082	11	0	4,116	9	9	4,116	9	9
Buxar ditto ...	1,211	13	9	1,211	13	9	1,651	12	3	1,651	12	3
Total Sone Circle ...	7,676	4	0	7,676	4	0	5,918	6	0	5,918	6	0
GRAND TOTAL ...	32,952	8	0	32,952	8	0	27,426	2	9	27,426	2	9

Government Transport Service.

Canal.	Tollage, 1893-94. During the month. Passengers.	Goods.	Total receipts.	Tollage, 1893-94. To end of the month. Passengers.	Goods.	Total receipts.	Tollage, 1892-93. During the month. Passengers.	Goods.	Total receipts.	Tollage, 1892-93. To end of the month. Passengers.	Goods.	Total receipts.
Orissa Circle.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.	No.	Mds.	Rs. A. P.
High Level ...	1,403	1,540	1,656 14 3	1,403	1,540	1,656 14 3	497	655	543 5 0	497	655	543 5 0
Total Orissa Circle	1,403	1,540	1,656 14 3	1,403	1,540	1,656 14 3	497	655	543 5 0	497	655	543 5 0

Total Navigation Receipts.

Canals.	Earnings, 1893-94. During the month.			Earnings, 1893-94. To end of the month.			Earnings, 1892-93. During the month.			Earnings, 1892-93. To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Orissa Canals ...	12,494	13	6	12,494	13	6	7,562	13	9	7,562	13	9
Midnapore Canal ...	8,630	4	0	8,630	4	0	7,692	14	6	7,692	14	6
Hijili Tidal Canal ...	5,808	0	9	5,808	0	9	6,795	5	6	6,795	5	6
Sone Canals ...	7,676	4	0	7,676	4	0	5,918	6	0	5,918	6	0
Total ...	34,609	6	3	34,609	6	3	27,969	7	9	27,969	7	9

CALCUTTA,
The 19th June 1893.

G. C. MACONCHY,
Under-Secy. to the Govt. of Bengal.

IRRIGATION DEPARTMENT, BENGAL.

Abstract statement showing Tollage on Canals in Bengal classed as Minor Works and Navigation for the month of April 1893, as compared with that of the corresponding month of the previous year.

Canals.	Tollage, 1893-94. During the month.			Tollage, 1893-94. To end of the month.			Tollage, 1892-93. During the month.			Tollage, 1892-93. To end of the month.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Calcutta and Eastern Canals.	20,523	4	0	20,523	4	0	18,105	4	9	18,105	4	9
Tolly's Nala ...	5,966	10	6	5,966	10	6	5,591	15	9	5,591	15	9
Total ...	26,489	14	6	26,489	14	6	23,697	4	6	23,697	4	6
Orissa Coast Canal ...	7,153	14	6	7,153	14	6	5,703	4	9	5,703	4	9
Nadia Rivers ...	7,266	3	0	7,266	3	0	5,925	6	6	5,925	6	6
Grand Total ...	40,910	0	0	40,910	0	0	35,325	15	9	35,325	15	9

Calcutta,
The 19th June 1893.

G. C. Maconchy,
Under-Secy. to the Govt. of Bengal.

CIRCULAR AND EASTERN CANALS.

Approximate return of traffic for the week ending Saturday, the 17th June 1893, as compared with the corresponding week of the previous year.

Nature of Cargo.	Week ending Saturday, the 17th June 1893. Number of boats.	Weight of cargo.	Tollage.	Week ending Saturday, the 18th June 1892. Number of boats.	Weight of cargo.	Tollage.
	No.	Mds.	Rs.	No.	Mds.	Rs.
Rice and paddy	234	45,250	693	128	34,590	536
Jute	8	5,400	65	7	1,370	14
Firewood	95	54,475	772	62	26,650	419
Other articles	853	2,15,390	2,933	813	2,38,150	3,036
Total ...	1,190	3,20,515	4,463	1,010	3,00,760	4,005

Weekly Return of Traffic Receipts on Indian Railways.

EAST INDIAN RAILWAY.

Approximate Return of Traffic for week ended 10th June 1893, on 1,610½ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	325,640	2,94,760 8 0	28,37,748 30	7,34,884 5 0	19,035 6 0	10,48,680 3 0	73,584½	127,086¼	200,670¾
Or per mile of railway ...	......	183 0 5	......	456 4 11	11 13 1	651 2 5	......	......	......
For previous 22 weeks of half-year ...	6,451,384	69,83,321 9 0	6,76,44,783 20	1,55,02,803 15 0	4,48,722 12 0	2,29,34,848 4 0	1,696,766¾	2,615,735½	4,312,502
Total for 23 weeks ...	6,777,024	72,78,082 1 0	7,04,82,532 10	1,62,37,688 4 0	4,67,758 2 0	2,39,83,528 7 0	1,770,351¼	2,742,821½	4,513,172¾
Comparison.									
Total for corresponding week of previous year ...	320,161	2,88,603 1 0	27,14,092 10	6,73,654 15 1	17,138 9 3	9,79,396 9 4	74,761	121,234	195,995
Per mile of railway corresponding week of previous year ...	......	179 3 3	......	418 4 7	10 10 3	608 2 1	......	......	......
Total for corresponding 23⅞ weeks of previous year ...	6,861,373	72,18,190 1 1	7,01,14,769 0	1,70,65,945 0 0	4,62,511 13 1	2,47,46,646 14 2	1,796,017	2,827,578	4,623,595

TARKESSUR BRANCH RAILWAY.

Approximate Return of Traffic for week ended 10th June 1893, on 22¼ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	20,708	5,376 0 0	7,525 0	281 11 0	7 0 0	5,664 11 0	869	99	968
Or per mile of railway ...	......	241 9 11	......	12 10 7	0 5 0	254 9 6	......	......	......
For previous 22 weeks of half-year ...	*505,165	*1,32,117 13 0	†2,53,459 10	†8,707 15 0	‡246 0 0	1,41,071 12 0	19,611	2,329	21,940
Total for 23 weeks ...	525,873	1,37,493 13 0	2,60,984 10	8,989 10 0	253 0 0	1,46,735 7 0	20,480	2,428	22,908
Comparison.									
Total for corresponding week of previous year ...	22,383½	5,763 1 7	10,431 20	387 3 0	7 7 9	6,157 12 4	873	95	968
Per mile of railway corresponding week of previous year	......	259 0 3	......	17 6 5	0 5 5	276 12 1	......	......	......
Total for corresponding 23⅞ weeks of previous year ...	525,753½	1,35,564 0 1	4,30,185 10	13,826 1 3	270 3 3	1,49,660 4 7	20,612	2,697	23,309

* Added number of passengers 2,170 and Rs. 673 }
† Do. Mds. 639 and " 7 } on account of difference between the approximate and audited figures for the week ended 6th May 1893.
‡ Deducted " 6 }

DELHI-UMBALLA-KALKA RAILWAY.

Approximate Return of Traffic for week ended 10th June 1893, on 161⅜ miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated).	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Coaching receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs. A. P.	Mds. s.	Rs. A. P.	Rs. A. P.	Rs. A. P.			
Total traffic for the week ...	19,318	12,436 0 0	52,023 0	8,918 9 0	48 0 0	21,402 9 0	6,096	2,689¼	8,785¼
Or per mile of railway ...	......	77 0 10	......	55 4 1	0 4 9	132 9 8	......	......	......
For previous 22 weeks of half-year ...	*416,681	*3,09,059 13 0	†15,53,122 30	†2,00,423 12 0	‡1,121 0 0	5,10,604 9 0	125,004⅝	71,989	*196,993⅝
Total for 23 weeks ...	435,999	3,21,495 13 0	16,05,145 30	2,09,342 5 0	1,169 0 0	5,32,007 2 0	131,100⅝	74,678¼	205,779⅞
Comparison.									
Total for corresponding week of previous year ...	16,169½	11,680 0 5	33,292 20	7,419 9 0	76 0 9	19,175 10 2	6,911	3,137	10,048
Per mile of railway corresponding week of previous year	......	72 5 11	......	45 15 6	0 7 6	118 12 11	......	......	......
Total for corresponding 23⅞ weeks of previous year ...	391,381½	3,04,638 3 5	10,03,631 30	1,89,989 13 2	1,665 0 0	4,96,323 0 7	147,673	52,294	199,967

* Deducted number of passengers 161 and Rs. 37 }
† Added Mds. 61,549 and " 1,069 } on account of difference between the approximate and audited figures for the week ended 6th May 1893.
‡ Deducted " 6 }

BENGAL AND NORTH-WESTERN RAILWAY.

(INCLUDES THE TIRHUT STATE-RAILWAY.)

Approximate return of traffic for the week ending 10th June 1893, on 756 miles open.

	Coaching Traffic.		Merchandise and Mineral Traffic.		Other earnings (estimated), including steam-boat.	Total earnings.	Traffic Train-miles run.		
	Number of passengers.	Receipts.	Weight carried.	Receipts.			Coaching.	Merchandise.	Total.
		Rs.	Mds.	Rs.	Rs.	Rs.			
Total traffic for the week on 756 miles open	105,700	39,010	4,90,050	74,030	12,500	1,25,540	13,089	18,724	31,813
Or per mile of railway	139·81	51·60	648·21	97·92	16·54	166·06	......	......	......
For previous 22 weeks of half-year*	2,210,811	9,37,744	1,06,20,215	5,32,812	2,85,598	27,56,154	299,079	428,201	727,280
Total for 23 weeks ...	2,316,511	9,76,754	1,11,10,265	6,06,842	2,98,098	28,81,694	312,168	446,925	759,093
COMPARISON.									
Total for corresponding week of previous year on 755 miles open	96,362	37,873	4,63,647	53,511	−18,652†	72,732	13,426	22,857	36,283
Per mile of corresponding week of previous year	127·63	50·16	614·10	70·87	−24·70	96·33	......	......	......
Total to corresponding date of previous year	2,221,572	9,68,345	94,96,651	4,20,402	2,88,760	26,77,516	283,323	496,312	779,635

* Includes audited figures up to 22nd April 1893.
† Decrease due to the adjustment of Rs. 29,090-1-0, rebate on traffic *via* Digha being credited to working expenses.

DARJEELING-HIMALAYAN RAILWAY COMPANY, LIMITED.

	Rs.	A.	P.
Approximate earnings for the week ending 3rd June 1893	11,502	0	0
Corresponding period of 1892	10,810	14	6
Decrease	691	1	6
Receipts per mile for the week ending 3rd June 1893	225	8	6
Corresponding period of 1892	211	15	8
Decrease	13	8	10
Receipts from 1st January to 3rd June 1893...	2,61,359	0	0
Corresponding period of 1892	2,64,156	0	0
Decrease	2,797	0	0

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